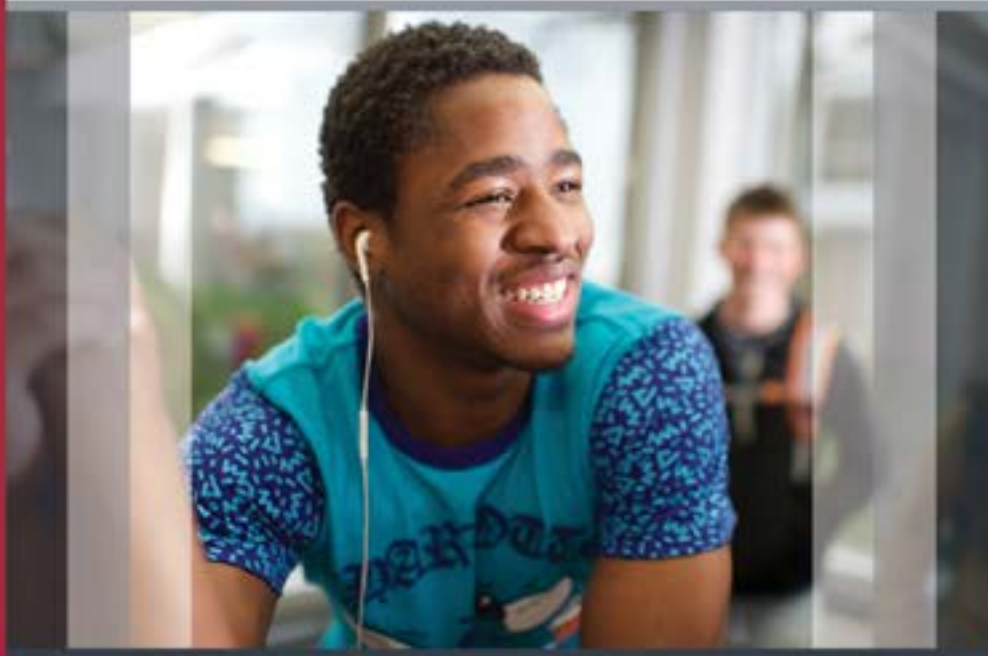




RIDGEWATER
COLLEGE



Make it YOUR time at the Ridge!

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Ranked #1 MN Community College 2020 & 2021, *niche.com*

2021-2022 CATALOG

Table of Contents

3	Mission, Vision, President's Welcome
4	Phone Directory
5	General Information and Policies
10	Academic Standards and Financial Aid
15	Student Services
25	Transferring Credits
27	Student Life
29	Programs of Study
36	List of Programs
94	Course Descriptions
162	Customized Training & Continuing Education
169	Index

PRESIDENT'S WELCOME

It is my pleasure to welcome you to Ridgewater College. As part of the Minnesota State system, with campuses in Hutchinson and Willmar, Ridgewater College has been serving the citizens of Central Minnesota since 1961. Our mission is dedicated to helping every individual achieve their full potential, enriching their lives through personalized and relevant education in an accessible, supportive, and inclusive environment.



Dr. Craig Johnson

As the needs of our communities have changed, we have grown and adapted to meet those needs. We are updating our facilities and equipment, exploring new degree offerings and expanding our partnership efforts with business and industry – all in keeping with a commitment to continuous improvement in everything we do. Our faculty and staff are dedicated to helping you pursue and achieve your educational goals. Whether your goal is general education leading to a four-year degree, a specific occupational program leading to a job, or a customized training course to improve your job skills, I hope you will consider attending Ridgewater College.

This catalog is your guide to exploring what Ridgewater College can do for you, but I'd also encourage you to visit both of our campuses, talk to faculty and students, talk to counselors and advisors, tour the facilities and get a taste of life at Ridgewater College. There is no better way to get to know the faculty, staff and students of Ridgewater College than by spending some time on campus. On behalf of the entire Ridgewater College community, I wish you success in the pursuit of your education and career goals, and we look forward to serving you.

VISION

Ridgewater College is a student-centered educational leader focused on innovation, excellence and affordability.

MISSION

Ridgewater College empowers diverse learners to reach their full potential and enrich their lives through personalized and relevant education in an accessible, supportive, and inclusive environment.

GUIDING PRINCIPLES

- **Enterprising** - We are future-focused, and change-oriented, developing creative solutions to challenges that maximize our institutional system and local resources
- **Empowerment** - We develop and empower employees to make decisions to best serve students and stakeholders
- **Excellence** - We strive to exceed expectations in all that we do
- **Diversity, Equity, and Inclusion** - We seek to understand and appreciate the needs and experiences of every individual and actively work to provide genuine opportunities for everyone to succeed and participate in college activities and processes
- **Trust and Respect** - We are committed to developing a culture based in processes and behavior that create trust and respect among all stakeholders
- **Collaboration** - We connect and work together to achieve common goals while respecting needs and interests of stakeholders
- **Curiosity and Creativity** - We constantly strive to understand, learn, change, and improve
- **Accountability** - As individuals and groups, we willingly accept and take ownership of our successes and failures

ACCREDITATION

Ridgewater College is accredited by the Higher Learning Commission.

Higher Learning Commission
230 S LaSalle Street, Suite 7-500
Chicago, IL 60604-1411
800-621-7440
www.hlcommission.org

PHONE DIRECTORY

Department	Willmar	Hutchinson
Toll Free	800-722-1151	800-722-1151
General Information	320-222-5200	320-234-8500
Academic Support Staff	320-222-5261	320-234-8636
Admissions	320-222-5976	320-234-8501
Bookstore	320-222-5590	320-234-8524
Business Office	320-222-5641	320-234-8528
Career Services	320-222-6066	320-222-6066
Customized Training & Continuing Education	320-222-6064	320-234-8538
Disability Services	320-222-8040	320-234-8650
Fax	320-222-5212	320-234-8512
Financial Aid	320-222-7488	320-222-7488
Human Resources	320-222-6075	320-222-6075
Library	320-222-7538	320-234-8566
Records	320-222-5971	320-222-5971
Registration	320-222-5971	320-222-5971
Student Life	320-222-5643	320-222-8562
Student Services	320-222-5971	320-222-5971
Transcript Evaluation	320-222-5215	320-222-5215
Veterans Resources	320-222-5634	320-222-5634

ALTERNATIVE FORMAT

This document is available in alternative formats to individuals with disabilities upon request by calling 800-722-1151. Consumers with hearing or speech disabilities may contact us via their preferred Telecommunications Service.

CATALOG DISCLAIMER

NOTE: Every effort has been made to ensure the accuracy of the material contained within this publication as of the date of publication. Also note that due to the global COVID-19 pandemic, some adjustments have been made to some processes and delivery of services, activities, and courses to provide a safe college experience. However, all policies, procedures, academic schedules, and fees are subject to change at any time by appropriate action of the faculty, the College administration, Minnesota State Board of Trustees or the Minnesota Legislature without prior notification. The provisions of this catalog do not constitute a contract between the student and the College. The information in this catalog is for use as college guidelines and is subject to change at any time.

For the most current information, refer to the Ridgewater website at www.ridgewater.edu.

GENERAL INFORMATION AND POLICIES

DISCRIMINATION AND HARASSMENT

Ridgewater College is committed to fostering an environment of nondiscrimination and non harassment. 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, or membership or activity in a local commission as defined by law.

Harassment of an individual or group on the basis of race, sex, color, creed, religion, age, national origin, disability, marital status, status with regard to public assistance, sexual orientation, or membership or activity in a local commission has no place in a learning or work environment and is prohibited. Sexual violence has no place in a learning or work environment. Further, the Minnesota State Colleges and Universities System shall work to eliminate violence in all its forms. Physical contact by designated System, college, and university staff members may be appropriate if necessary to avoid physical harm to persons or property.

No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving federal financial assistance.

The college receives federal financial assistance. In order to continue receiving such assistance, the college must comply with Title IX. In addition to the sanction of non-receipt of federal funds, the Board of Regents is of the general view that discrimination on the basis of sex in any education program or activity of this college is not to be permitted.

To obtain more information or to view the full policy, contact Jay Morrison at 320-222-8040 or visit <https://minnstate.edu/system/equity/about/faq/index.html>.

EQUAL OPPORTUNITY AND NONDISCRIMINATION POLICY

Ridgewater College is committed to a policy of nondiscrimination. We acknowledge and adhere to the definitions and processes described in Minnesota State Policy 1B.1 - "Equal Opportunity and Nondiscrimination in Employment and Education" and Minnesota State Procedure 1B1.1 - "Report/Complaint of Discrimination/Harassment Investigation and Resolution."

Ridgewater College's designated officer per these documents is Jay Morrison. He has an office in the Student Services Office area on the Willmar Campus and will make himself available as needed to employees and students at the Hutchinson Campus. He can be reached by phone at 320-222-8040 or by email at jay.morrison@ridgewater.edu.

ADMISSION GUIDELINES

COLLEGE ADMISSION

Ridgewater College follows an open-door admission policy per Minnesota State Policy 3.4 and Minnesota State Procedure 3.41 - Undergraduate Admissions. Any resident who has graduated from an accredited high school or who has successfully completed a General Education Development Examination (GED) is eligible for college admission.

Persons applying to enroll at Ridgewater College must submit the following to the Ridgewater College Admissions Office:

- Completed admission application at <https://www.ridgewater.edu/admission-aid/apply/>
- High school and/or college transcripts or GED certificate
- Additional admission requirements which apply to some programs

Admission to the college does not automatically qualify a student for all courses and curricula of the college; some course offerings have special prerequisites and requirements. Lack of English skills will not be a barrier to admission or participation. In order to eliminate barriers we work with students individually and make appropriate referrals to campus or community services to ensure successful participation.

INTERNATIONAL STUDENTS

1. Complete international student application; submit copies of high school transcripts.
2. Satisfy the English proficiency requirements through one of the following:
 - a. TOELF score of 500 (paper-based), 173 (computer-based), or 61 (internet-based)
 - b. Complete ELS level 109
 - c. Successfully complete the equivalent of one semester of freshman English with a "C" or better at an accredited United States college or university.
3. Provide two letters of recommendation from people who will endorse the student as a good citizen who would benefit from a college experience. Examples are former teachers, friends, and public officials.
4. Submit detailed financial information, including certified verification of funds available to cover one year of academic and personal expenses. See application packet for current amount required. This amount must have been in existence for six months.
5. Provide written proof of immunization against measles, rubella, mumps, diphtheria, and tetanus.
6. International students who have attended any non-U.S. colleges or universities may have transfer credit that will apply to specific requirements of their program of enrollment at Ridgewater

College. These students should provide an original transcript and an English translation (if applicable) for each institution to the Ridgewater College Admissions Office. Additionally, they should submit these documents for a Catalog Match Evaluation to Education Credential Evaluators, Inc. (ECE) in Milwaukee, Wisconsin, directing one copy to be sent to the Ridgewater College Transcript Evaluator.

PSEO STUDENTS

LIBERAL ARTS/GENERAL EDUCATION STUDENT APPLICATION CRITERIA:

Students applying for Liberal Arts and Sciences coursework must meet admission requirements. Seniors must rank in the top one-half or 50th percentile of their high school class or have a 2.5 cumulative GPA. Juniors must rank in the top one-third or 67th percentile of their high school class or have a 3.0 cumulative GPA. Students must demonstrate readiness for college level coursework to be eligible to enroll.

TECHNICAL STUDENT APPLICATION CRITERIA:

Students applying for technical course work will be required to demonstrate that they have the ability to successfully complete college coursework at a C level or higher. The following criteria will be reviewed before an admission decision is determined: high school coursework, GPA, class rank, and college readiness placement. Students applying for technical course work who meet admission requirements will be accepted after October 1st for Spring Semester and February 1st for Fall Semester on a space available basis. Students who seek a change of program from technical to liberal arts and sciences or the reverse must meet the stated criteria (stated above) at the time the request is made.

OPTION FOR HIGH SCHOOL SOPHOMORES CRITERIA:

Students who are in the 10th grade who have attained a passing reading score on the 8th grade Minnesota Comprehensive Assessment in reading, and/or meet any other course prerequisites or course enrollment standards established by the College, including but not limited to assessment test scores, program admission, or other requirements, may enroll in one (1) career or technical education course at Ridgewater College. If the student received a grade of C or better in the course, the student shall be allowed to take additional career or technical education courses in subsequent terms.

Students should complete the online application at <https://www.ridgewater.edu/admission-aid/pseo-post-secondary-enrollment-options/application-process/>.

VETERANS

Because certain veterans and their children may be eligible for benefits under the GI BILL® and other laws, all veterans, war orphans, and children of disabled veterans must notify the VA Certifying Official of their status at the time of their application if they wish to qualify. Veterans are eligible to receive transfer credit for military course completions based on American Council on Education (ACE) guidelines. Veterans should have an official transcript sent from their branch of the service to the Ridgewater College Admissions Office on their campus of enrollment.

RETURNING/RE-ADMIT STUDENTS

Students applying for re-admission shall meet the Admission Policy requirements in place at the time of reapplication. If it has been more than seven years since the last date of attendance, or an original file doesn't exist, returning students may be asked to submit application materials. Refer the website for more details at www.ridgewater.edu.

TRANSFER STUDENTS

Students transferring to Ridgewater College after attending one or more other colleges should have an official transcript sent from each institution to the Admissions Office of the campus of Ridgewater College at which they are enrolling. Students who have attended another Minnesota State campus can simply notify the Admissions Office and Ridgewater will be able to access the transcript. Transcripts will be evaluated for specific course equivalents and transferable elective credit so students can be appropriately advised on course enrollment and receive transfer credit for priority registration. Refer to the website for more details.

ARTICULATED COLLEGE CREDIT

Ridgewater College has entered into written agreements with secondary schools which provide students the opportunity to receive college credit for selected high school courses. Students who are accepted and enrolled at Ridgewater College may receive college credit toward the appropriate associate's degree, diploma, or certificate program. Articulated College Credit will only be awarded for college courses listed on the certificate if it is a requirement or approved elective in the student's declared program of study. During the admissions process, students should present the Articulated College Credit Certificate to the registrar along with an official high school transcript. For more information, contact Jodi Jordon at 320-222-6072 or Kelli Kienitz at 320-222- 5215 or your program instructor(s).

SENIOR CITIZENS

Minnesota residents 62 years of age or older prior to the start of the semester in which a course is pursued or a person receiving a railroad retirement annuity who has reached 60 years of age prior to the start of the semester in which a course is pursued may enroll in credit

courses on a space available basis. The senior citizen rate applies only to students who are not collecting financial aid. An administrative fee of \$20 per credit for credit courses will be charged to a senior citizen enrolled for credit. A senior citizen who wishes to take a course but not receive credit may “audit” a credit-based course at no charge. A student wishing to audit a class must declare this intention at the time of registration. In either situation, the student will be assessed mandatory parking and statewide student association fees. The student will also be responsible for purchasing books and course materials. A senior citizen may register for a course the day after the first class session is held if there is space available in the course. A senior citizen who wishes to guarantee his/her enrollment in a course may register earlier but will be required to pay full tuition and fees. If a senior citizen guarantees enrollment by registering early, he/she will not be allowed to utilize the tuition benefit for that course at a later date.

A senior citizen may also enroll without payment of tuition and activity fees in non-credit courses, except those courses designed and offered specifically and exclusively for senior citizens. A senior citizen enrolled in a non-credit course must pay for any materials, personal property or service charges for the course. Apply [here](#).

A senior citizen enrolled in closed enrollment contract training or a professional continuing education program is not eligible for these benefits.

VETERANS BENEFIT INFORMATION

The US Department of Veterans Affairs Form 22-1990, which is the Application for Education Benefits, should be filled out by the veterans benefit recipient immediately after being accepted at the college.

The 22-1990 form can be completed by contacting your local veterans service officer or the college Counseling/Admissions Services. Because certain veterans and their children may be eligible for benefits under the GI BILL® and other laws, all veterans, war orphans, and children of disabled veterans must notify the Admissions Office of their status at the time of their application. (For more information on these benefits, see Financial Aid.)

If advanced payment is selected, the US Department of Veterans Affairs Form 22-1999, Enrollment Certification, needs to be signed and dated by the student and then filled out and signed by the certifying official of the campus. The 22-1999 form needs to be sent at least 30 days before classes begin, but no more than 120 days in advance.

Once a student receiving benefits is attending classes, he/she should report any change in student load, address, marital status, dependency, etc., to the Counseling Office. It is also the student's responsibility to bring a copy of the DD-214 for his/her student file.

Veterans needing assistance should contact our [Veterans Resource Center](#) at 320-222-5634.

CLASSIFICATION OF STUDENT STATUS

Full Time: A student carrying at least 12 credits is considered full time. The recommended average load is 15 credits per semester to complete a two-year diploma or degree in two years. Students taking over 18 credits per semester must obtain a signature of approval from a counselor. Fifteen credits is considered full time for Minnesota state grants for financial aid recipients.

Part Time: A student enrolled in at least one course for credit and carrying fewer than 12 credits is considered part time.

Freshman/First Year: A student who has completed fewer than 30 semester credits is considered a freshman. In certain programs, completion of all first-year courses or department approval is necessary before a student can begin sophomore or second-year program work.

Sophomore/Second Year: A student who has completed 30 or more semester credits and is working toward the completion of two years of college is considered a sophomore.

Visiting Students: Minnesota State allows students who are currently admitted at another system college or university to enroll as a visiting student. A visiting student shall not be required to submit an application for admission to Ridgewater College, and is not a candidate for a degree, diploma or certificate at Ridgewater College. A visiting student may enroll for a maximum of 18 credits per semester at Ridgewater College, provided that the student's total number of enrolled credits at all system colleges and universities shall not exceed 22 in any semester per Minnesota State policy. Financial aid is not available to visiting students, but may be available at the college or university they are accepted to. Minnesota State allows students who are not currently admitted as a student at any system college or university to enroll for a maximum of 18 credits per semester at Ridgewater College without submitting a Registration as Visiting Student - Not admitted to another Minnesota State College or University.

Visiting Student Provisions

- Visiting students shall satisfy Ridgewater College course prerequisites.
- Visiting students who have an enrollment hold due to conduct or satisfactory academic progress must submit an appeal following the Ridgewater College Satisfactory Academic Progress Policy.
- Students who have an enrollment hold from another system college or university due to outstanding financial obligations will be denied enrollment at Ridgewater College.

Visiting Student registration window will be published online at www.ridgewater.edu. Ridgewater College may limit enrollment of visiting students in high-demand courses.

CREDIT BY EXAMINATION – PRIOR LEARNING EXPERIENCE

Ridgewater College acknowledges and adheres to the definitions and processes described in Minnesota State Policy 3.35 - "Credit for Prior Learning" (<http://www.minnstate.edu/board/policy/335.html>) and Minnesota State Procedure 3.35.1 - "Credit for Prior Learning" (<http://www.minnstate.edu/board/procedure/335p1.html>).

Ridgewater College recognizes that some students will have had life, occupational or vocational experiences which have given them knowledge in subject field areas sufficient to warrant college credit. The following guidelines govern credit by examination/prior learning experience at Ridgewater College.

1. For associate degrees and diplomas requiring 60 credits or more, a maximum of 20 credits may be earned through credit by examination/prior learning experience. For other certificates and diplomas, one-third of the required course load may be earned through credit by examination/prior learning experience.
2. Credit by examination/prior learning experience may not be included in residence requirements.
3. Credit awarded will be noted in the transfer section of the official transcript.
4. Students may not repeat examinations, enroll, or receive credit in a lower sequential course.

NOTE: Other colleges may have different criteria for awarding credit for these experiences and a new evaluation with different results may occur upon transfer. Financial aid is not available for test-out credits.

Ridgewater College permits students to receive credit by examination/prior learning experience in five ways:

1. COLLEGE LEVEL EXAMINATION PROGRAM (CLEP) - A student may take a college-level examination in a specific subject area and receive credit for the equivalent Ridgewater College courses. Acceptable subject areas with CLEP exams and their equivalents are available from the Registrar's Office. Passing scores are determined by the mean score achieved by students in a national norm sample who earned a grade of "C" in a regular college course. A fee is charged for a CLEP examination.

2. ADVANCED PLACEMENT (AP) - A student who has scored 3, 4, or 5 on an Advanced Placement Program examination will receive credit for an equivalent or elective Ridgewater College course. Credit equivalencies and credits awarded are available in the Registrar's Office.

3. COURSE TEST-OUT - A student may request to challenge a course. Following permission from the instructor and the appropriate Dean of Instruction, the student makes appropriate arrangements with the instructor. A fee is payable prior to completing the exam.

- a. A student may attempt a test-out of a particular course only once within a twelve-month period.
- b. The test-out option is not available to students who want to test-out of a course they have failed, received an N/C (no

credit), or in which they wish to improve their course grade.

- c. The test-out option is not available in all courses.
- d. Tests are course-specific examinations designed by the appropriate college faculty member and reflect the objectives of the course. A grade of "C" or better will be recorded as a PASS grade.
- e. Students may not test out of a course in which they are enrolled past the fifth day of the term.

4. PRIOR LEARNING EXPERIENCE - Students may make application to use prior experiential learning for transfer toward course credits. The learning may result from a variety of experiences: college classroom, work experience, internships, library, or life experience. These experiences must be:

- recent and relevant, and
 - of sufficient length with verified satisfactory performance.
- Please contact the Registrar if you wish to obtain further details. A non-refundable fee will be charged for each credit.

5. MILITARY EXPERIENCE CREDIT - Credit shall be granted for veteran's military training and service in compliance with Subd. 2 of Minnesota Statute 197.775- "Higher Education Fairness" (<https://www.revisor.mn.gov/statutes/?id=197.775>) according to the standards and equivalencies of the American Council on Education. A student must present evidence of satisfactory completion of such education to the Transcript Evaluator. The credits awarded are entered on the student's transcript without grades. When necessary, the Transcript Evaluator should consult with departments and/or disciplines regarding transferability of military credits.

INTERACTIVE TELEVISION NETWORKS

Ridgewater College is part of two interactive telecommunication networks, the Central Minnesota Distance Learning Network (CMDLN) and the Southwest/West Central Higher Education Organization for Telecommunications (SHOT). Through a fiber-optic cable interconnect among 11 colleges and universities, two-way interactive audio and video courses, seminars and meetings are conducted daily and on weekends to increase learning opportunities for the citizens of central and southwestern Minnesota. Interactive television allows students and clients to:

- take courses at convenient times
- share in the expanded programming and expertise of many different colleges and universities
- take courses and seminars close to home rather than traveling to a distant site
- participate in a variety of unique programs offered by member schools

Southwest Minnesota State University is the hub of the SHOT system. St. Cloud Community & Technical College is the hub of the CMDLN system, and because of its connection to St. Paul College, can uplink courses and seminars through MnSAT, a cooperative satellite uplink owned by Minnesota State and the World Trade Center.

BACKGROUND CHECKS FOR STUDENTS & FACULTY IN CLINICAL PLACEMENTS

Minnesota law requires that any person who provides services that involve direct contact with patients and residents in a healthcare facility licensed by the Minnesota Department of Health have a background check conducted by the State. Ridgewater College participates in the process by supplying and requesting students to complete the background check forms. The college sends completed forms to the Department of Human Services. An individual who is disqualified from having direct patient contact as a result of the background study, and whose disqualification is not set aside by the Commissioner of Health, will not be permitted to participate in a clinical placement in a Minnesota licensed healthcare facility. Failure to participate in a clinical placement required by the academic program could result in ineligibility to qualify for a degree in this program.

The following programs require background checks:

1. Early Childhood Education
2. Emergency Medical Technician
3. Health Information Technician
4. Massage Therapy
5. Medical Assistant
6. Medical Coding Specialist
7. Nursing
8. Nursing Assistant
9. Paramedic

See your faculty advisor, program director, or the Dean of Instruction for additional information.

FIREARMS, POSSESSION OR CARRY OF

In accordance with the Minnesota Citizens' Personal Protection Act of 2003, Minnesota Statutes Section 624.714, and other applicable law, Ridgewater College restricts the possession or carry of firearms as outlined below in Minnesota State College and University Board Policy 5.21.

PART 1: PURPOSE AND SCOPE

The purpose of this policy is to establish restrictions on possession or carry of firearms applicable to the Minnesota State Colleges and Universities System, in accordance with the Minnesota Citizens' Personal Protection Act of 2003, Minnesota Statutes Section 624.714, and other applicable law.

PART 2: DEFINITIONS

Subpart A - Employee: "Employee" means any individual employed by Minnesota State Colleges and Universities, its colleges and universities and the Office of the Chancellor, including student employees.

Subpart B - Firearm: "Firearm" means a gun, whether loaded or

unloaded, that discharges shot or a projectile by means of an explosive, a gas, or compressed air.

Subpart C - Pistol: "Pistol" means a weapon as defined in Minnesota Statutes Section 624.712, Subd. 2.

Subpart D - Student: "Student" means an individual who is: registered to take or is taking one or more courses, classes, or seminars, credit or noncredit, at any System college or university; or between terms of a continuing course of study at the college or university, such as summer break between spring and fall academic terms; or expelled or suspended from enrollment as a student at the college or university, during the pendency of any adjudication of the student disciplinary action.

Subpart E - System Property: "System property" means the facilities and land owned, leased, or under the primary control of Minnesota State Colleges and Universities, its Board of Trustees, Office of the Chancellor, colleges, and universities.

Subpart F - Visitor: "Visitor" means any person who is on System property, but does not include (1) an employee of the Minnesota State Colleges and Universities acting in the course and scope of their employment; or (2) a student, when that student is on System property.

PART 3: GENERAL

No person is permitted to carry or possess a firearm on System property except as provided in this policy.

Subpart A - Employee:

1. **PROHIBITION:** Employees are prohibited from possessing or carrying a firearm while acting in the course and scope of their employment, either on or off System property, regardless of whether the employee has a permit to carry a firearm, except as otherwise provided in this policy.

2. **LICENSED PEACE OFFICERS:** Subpart 3.A.1 does not apply to employees who are licensed peace officers under Minnesota Statutes Section 626.84, Subd. 1(c), when assigned by the college or university to public safety duties.

3. **EMPLOYEE REPORTING RESPONSIBILITY:** An employee with a reasonable basis for believing an individual is in possession of or carrying a firearm in violation of this policy has a responsibility to report the suspected act in a timely manner, unless doing so would subject the employee or others to physical harm. Reports should be made to the Dean of Students. This policy shall not prohibit prompt notification to appropriate law enforcement authorities when an immediate threat to personal safety exists. Employees shall not make reports of a suspected violation knowing they are false or in reckless disregard of the truth.

Subpart B - Students:

1. **PROHIBITION:** Students are prohibited from possessing or carrying a firearm while on System property, regardless of whether the student has a permit to carry a firearm, except as otherwise provided in this policy.
2. **LICENSED PEACE OFFICERS:** This policy does not apply to students who are licensed peace officers under Minnesota Statutes Section 626.84, Sub. 1(c).

Subpart C - Visitors:

1. **PROHIBITION:** Visitors are prohibited from possessing or carrying a firearm while on System property, except as otherwise

provided in this policy.

2. **LICENSED PEACE OFFICERS:** This policy does not apply to visitors who are licensed peace officers under Minnesota Statutes Section 626.84, Sub. 1(c).

PART 4 - EXCEPTIONS:

Subpart A - Parking Areas: This policy does not prohibit the lawful possession or carry of firearms in a parking area or parking facility.

Subpart B - Authorized Uses: This policy does not prohibit:

1. Lawful possession or carry related to an academic use at a campus shooting range, such as law enforcement programs, approved in writing by the college or university president; or
2. Transport of an unloaded firearm directly between a parking area or parking facility and the location authorized for its use, or transport of an unloaded firearm directly between a parking area or parking facility and a storage facility provided by the college or university.
3. Possession or carry of a pistol by a visitor who has a lawful permit to carry a pistol pursuant to Minnesota Statutes Section 624.714, Subd. 1a.

Nothing in this policy requires a college or university to provide storage facilities for employees' or students' weapons.

PART 5 - STORAGE IN STATE VEHICLES PROHIBITED:

No vehicle owned, leased, or otherwise under the control of the System shall be used to store or carry a firearm, except as authorized for purposes under part 4.B.1.

PART 6 - VIOLATIONS:

Violations of this policy by students or employees are misconduct subject to discipline, up to and including expulsion or termination.

PART 7 - REFERRAL TO LAW ENFORCEMENT:

Minnesota State Colleges and Universities may refer suspected violations of law to appropriate law enforcement authorities, and provide access to investigative or other data as permitted by law.

ACADEMIC STANDARDS & FINANCIAL AID

Ridgewater College seeks to provide all students the opportunity to continue their education. With the help of federal grants, matching state funds and community assistance, a wide range of programs and scholarships are available to the student who qualifies.

Students must complete the FREE APPLICATION FOR FEDERAL STUDENT AID (FAFSA) each year they seek financial assistance. The FAFSA can be completed online at www.FAFSA.ed.gov.

REINSTATEMENT OF FINANCIAL AID

A student who has been suspended from Ridgewater College may receive financial aid if he/she is reinstated according to the college's satisfactory academic progress policy.

GRANTS

CARES ACT FUNDING

The Coronavirus Aid, Relief, and Economic Security (CARES) Act provides funds to Ridgewater College for emergency financial aid grants to students for cost of attendance expenses related to the disruption of campus operations due to coronavirus (such as food, housing, course materials, technology, health care, and child care).

FEDERAL PELL GRANT

The Pell Grant is a program of student financial aid authorized by Title IV, Part A, of Educational Amendments of 1991. This program provides for grants for all eligible students to assist them in meeting educational costs.

FEDERAL SUPPLEMENTARY EDUCATIONAL OPPORTUNITY GRANT

Supplementary Educational Ridgewater College Opportunity Grants are available to undergraduate students with exceptional financial need.

CHARLES AND ELLORA ALLISS EDUCATION FOUNDATION GRANTS - (TWO-YEAR COLLEGE OPPORTUNITY GRANT)

Eligibility Requirements

This grant is available to students with financial need who are attending Minnesota State colleges, and who are enrolled part time or full time in AA, AS, AAS, AFA, diplomas, certificates and MinnState courses designed to transfer to baccalaureate programs. Awards are for an amount between \$350-\$21,100 per year, which may be renewable but not automatically.

- Must be enrolled part- or full-time (see above)
- Must have not have already earned a baccalaureate degree.
- Must have completed a FAFSA for the current school year OR be a MN DREAM ACT student.
- Must intend to transfer and/or pursue a 4-year degree at Ridgewater or another institution

Application Process

Students shall complete the required Application and Degree Completion Form prior to registration to apply.

Grant Administration

- A grant shall be for one semester only. To renew an award for a subsequent semester, the student must reapply and meet all eligibility criteria. Alliss Grants may be used for spring, summer or fall semesters.
- Alliss Grant awards shall be processed and coordinated with the College's normal financial aid process, and may be used to meet

remaining need after the student has received Pell and/or MN state grants.

- Alliss Grant awards shall be applied directly to student accounts along with other financial aid for the semester for which they are awarded.

MINNESOTA STATE GRANT PROGRAM

Minnesota residents who have not completed the equivalent of four years of postsecondary education may be eligible for this grant program. Awards are based on financial need. Note that it is awarded according to credit level and direct costs.

MINNESOTA GI BILL

The Minnesota GI Bill program was established in 2007 to provide postsecondary financial assistance to eligible Minnesota veterans who served on or after September 11, 2001. Full-time undergraduate or graduate students may be eligible to receive up to \$1,000 per semester or term, and part-time students may be eligible to receive up to \$500 per semester or term.

STATE INDIAN SCHOLARSHIP PROGRAM

This award is based on financial need. Requirements: one-fourth or more Indian ancestry, resident of Minnesota, member of recognized Indian tribe, high school graduate or have GED, ability to benefit from advanced education and approved by Minnesota Indian Scholarship Committee.

VETERAN'S EDUCATIONAL BENEFITS (FEDERAL)

Certain veterans and their children are eligible for educational benefits under the GI Bill and other laws. A child of a veteran who has been disabled, who has died in service, or who has died of a service-connected disability may be entitled to education benefits. These tax-free benefits vary depending upon the number of hours the student is enrolled and the number of dependents. For further information, contact the Veteran's Administration at 1-800-827-1000 or the Veteran's Service Officer in your area. Students receiving veteran's benefits must also contact the Financial Aid Office at the time of acceptance of those benefits.

LOANS

GENERAL DIRECT LOAN INFORMATION

For general loan information refer to [Federal Student Aid](#), an office of the U.S. Department of Education.

PRIVATE LOANS

Ridgewater College recognizes that not all students will be able to meet the financial requirements of paying for an education on their own, even with the assistance of traditional financial aid resources. We cannot recommend a loan program or lender for you; however, we can provide you with the information you will need to borrow wisely.

EMPLOYMENT

FEDERAL AND STATE WORK STUDY PROGRAM

This program is designed to provide work and income for qualified students in need of financial assistance while attending Ridgewater College. Students generally work on campus in a variety of positions or off campus for non-profit organizations.

STUDENT HELP

Student Help employment provides money to students who are not able to arrange for adequate financial assistance in any other manner, and at the same time, provides needed help to the administration, faculty, and staff.

RIDGEWATER COLLEGE FOUNDATION SCHOLARSHIP PROGRAM

The Ridgewater College Foundation awards scholarships each year with funds provided by donations from community organizations, businesses and individuals. It is intended that these scholarships assist with tuition expenses to help keep Ridgewater College affordable and accessible to all students who wish to receive post-secondary education. Scholarship criteria varies. Some recognize academic success, others leadership skills, and some potential for success. Many are linked to a specific program or department. Financial need may be a consideration. Application deadlines are November 1 and June 1. For more information, contact the Foundation Office at 320-222-6095 or go to www.ridgewater.edu/scholarships.

FINANCIAL AID CONSIDERATIONS

1. Maximum Time Frame – Students may receive financial aid up to a maximum of 150% of the program's credits. Credits transferred from other institutions toward a certificate or degree may be counted in this number.
2. Financial aid will only be disbursed following the college drop/add period for the semester/summer session.
3. Ridgewater College reserves the right to withhold aid from any student, at any time, who demonstrates an attendance pattern that abuses the receipt of financial aid; for example, a student who withdraws from all classes two consecutive semesters, or a student who has previously attended two or more institutions and has not progressed satisfactorily, or a student who does not appear to be pursuing degree/certificate completion, etc.
4. Developmental coursework (below 100 level) will be included under this policy with a limit of 30 semester credits or its equivalent normally being allowed.

TUITION PAYMENT OPTIONS

Option 1: Financial aid recipients: Your financial aid will be applied to your account during the second week of each semester. Charges not covered by financial aid must be paid in full by the posted tuition due date.

Option 2: To help you meet your education expenses, Ridgewater

College offers Nelnet as a convenient budget plan. This is not a loan program. You have no debt, there are no interest or finance charges assessed, and there is no credit check. The cost to budget your interest-free monthly payment plan is a \$24.00 per semester non-refundable enrollment fee. You may budget your tuition and fees in the following ways:

A. Payments may be made by automatic bank payment (ACH) directly from either your checking or savings account.

B. Or payment may be automatically charged to the credit card you designate. To access the Nelnet payment plan, go to the Ridgewater College website at <https://www.ridgewater.edu/admission-aid/tuition-and-fees/paying-tuition/>

NOTE: You will not be permitted to register for subsequent semesters until your account is paid in full.

LATE FEE: A \$50.00 late fee will be applied to all delinquent accounts 30 days after the published due date.

OTHER FEES AND SPECIAL COSTS

Some technical programs may have additional tool/book requirements ranging from \$250 to \$1200. Some programs also charge a per-

sonal property fee which may range from \$30 to \$165 per year. Please check with the Admissions Office for individual program details.

RECIPROCITY

Special agreements have been reached between various states allowing students to pay tuition rates which are less than the non-resident rates. The arrangements are called reciprocity agreements. There are currently reciprocity agreements between Minnesota and Wisconsin, North Dakota, South Dakota, and Manitoba. There is also the Midwest Student Exchange program with Kansas, Michigan, Missouri and Nebraska.

Students from states covered by reciprocity agreements must apply to their home state. Applications are available from the Ridgewater College Admissions Office. Once the home state has processed the application, the College will be notified. Students with approved reciprocity agreements will be charged the reciprocity rate for their state of residence.

WHAT KIND OF FEDERAL STUDENT LOANS ARE AVAILABLE?

FEDERAL LOAN PROGRAM	PROGRAM DETAILS	ANNUAL AWARD (SUBJECT TO CHANGE)
DIRECT SUBSIDIZED LOANS	<ul style="list-style-type: none"> For undergraduate students with financial need For loans first disbursed on or after July 1, 2019, and before July 1, 2020, the interest rate is 4.53%. You're not usually charged interest on the loan during certain periods, such as when you're in school at least half-time The U.S. Department of Education (ED) is the lender; payment is owed to ED. 	<p>Up to \$5,500 depending on grade level and dependency status</p> <p>For total lifetime limit, go to StudentAid.gov/sub-unsub</p>
DIRECT UNSUBSIDIZED LOANS	<ul style="list-style-type: none"> For undergraduate, graduate, and professional degree students; financial need isn't required For loans first disbursed on or after July 1, 2019, and before July 1, 2020, the interest rate is <ul style="list-style-type: none"> - 4.53% for loans made to undergraduate students, and - 6.08% for loans made to graduate and professional degree students You are responsible for paying the interest during all periods ED is the lender; payment is owed to ED. 	<p>Up to \$20,500 (less any subsidized amounts received for same period) depending on grade level and dependency status</p> <p>For total lifetime limit, go to StudentAid.gov/sub-unsub</p>
Direct PLUS Loans	<ul style="list-style-type: none"> For parents who are borrowing money to pay for their dependent undergraduate child's education, and for graduate or professional degree students; financial need isn't required Interest rates: Effective July 1, 2020 - 5.30%. Effective July 1, 2021 - 6.28% You must not have an adverse credit history (unless you meet certain additional eligibility requirements) ED is the lender; payment is owed to ED 	<p>Loan Limit - No annual maximum. Parent may borrow up to full cost of student's education less any other financial aid the student receives</p>

* Learn about dependency status at [StudentAid.gov/dependency](https://studentaid.gov/dependency).

**Learn about PLUS loans and adverse credit at [StudentAid.gov/plus](https://studentaid.gov/plus).

Note: Find interest rates of loans disbursed before July 1, 2019, at [StudentAid.gov/interest](https://studentaid.gov/interest).

For more information on loans, visit <https://studentaid.gov/understand-aid/types/loans>. Find this fact sheet at <https://studentaid.gov/resources>.

NON-RESIDENT TUITION

If a student lives in a state that has a reciprocity agreement with Minnesota, tuition and fees will be based on the student's home state reciprocity agreement. Students should contact the Admissions Office for further information. Ridgewater College allows students who reside in states that do not have reciprocity agreements with the state of Minnesota to pay in-state tuition rates.

DISCLOSURE STATEMENT

All costs are approximate and may be amended at any time. This publication is intended as an informational source only. Changes may be made as needed at the discretion of Ridgewater College. Actual costs may vary due to fee structure, state guidelines, or policy changes. For more information, please call the Business Office at the campus you plan to attend. The phone numbers are listed in the front of your catalog.

REGISTRATION CANCELLATION FOR NON-PAYMENT

Tuition and fees for any semester must be paid in full by the posted tuition due date. Paid in full is defined as having made full payment, enrollment in an approved payment plan, a completed and filed financial aid application, or payment by third party. Students not meeting at least one of these criteria may be cancelled or dropped from all classes. It is still the responsibility of the student to drop any classes they don't intend to stay enrolled in.

To avoid being cancelled/dropped, students must meet one of the following requirements:

1. Paid tuition in full.
2. Have paid 15% of tuition and fees due or made a \$300 down payment towards tuition and fees, whichever is less.
3. Have applied for financial aid and an Institutional Student Information Record (ISIR) has been received by the College.
4. Have submitted a Third Party Billing Authorization to the Business Office.
5. Have enrolled in Post-Secondary Enrollment Options (PSEO) program.
6. Established a NelNet payment plan on eService.
7. Have completed and signed a VA deferment form.
8. Have contacted the Business Office and completed a special deferment plan.

POLICY ON DROPPING CREDITS AND TUITION CHARGES

At Ridgewater College the act of registration is considered an acknowledgment on the part of the student that s/he will attend and pay for the registered course(s). Any drop or withdrawal request must be processed within the established time lines, and payment will be

required for all courses that remain on a student's schedule past the drop/add deadline.

What does this mean?

1. If a student is registered for a class after the drop/add deadline s/he will be expected to attend and pay for the course.
2. If a student withdraws from a class after the drop/add deadline, s/he is still responsible to pay for it.
3. If a student does not attend a class for which s/he is registered, the student will receive the earned grade (probably a failing grade).
4. If a student does not pay for the courses for which s/he is registered:
 - a. s/he may not register for any subsequent terms.
 - b. s/he may not receive a transcript.
 - c. his/her debt will be sent to a collection agency.

If you are registered for courses and decide not to attend, you must drop the classes prior to the add/drop deadline by:

1. Accessing the following website: www.ridgewater.edu
 - a. Under Logins, select eServices
 - b. Log in with your StarID and password
 - c. Click on Courses & Registration then View/Modify Class Schedule
 - d. Click on the drop icon next to the course you wish to drop

OR

2. Contacting the Registration Office to request an adjustment to your schedule at 1-800-722-1151 or 320-222-5971.

REMEMBER: Dropping your classes is your responsibility. Do not ask your instructors or counselors to do this for you. You may want to visit with them prior to taking this action, but dropping your classes is your responsibility.

REFUND OF TUITION AND FEES FOR TOTAL WITHDRAWALS

A student who receives confirmation of total withdrawal from the Records and Registration Office is eligible for a refund according to the following schedule. Refund checks generally take two to three weeks to process and return to the student. The effective date of a drop or total withdrawal is the date the request is received by the Records and Registration Office.

WITHDRAWAL PERIOD REFUND

For fall and spring terms:

1st through 5th business day of the term	100%
6th through 10th business day of the term	75%
11th through 15th business day of the term	50%
16th through 20th business day of the term	25%
After 20th business day of the term	0%

For summer term and other terms at least three weeks but less than ten weeks in length:

1st through 5th business day of the term	100%
6th through 10th business day of the term	50%
After the 10th business day of the term	0%

The refund schedule is based on the policy adopted by the Minnesota State Board of Trustees. This policy can be found online at <https://www.minnstate.edu/board/policy/512.html>.

A financial aid recipient who completely withdraws from a term prior to the 60% point of that term is subject to the return of federal aid not earned, as well as the refund calculation for the Minnesota State Grant and the SELF Loan. Examples of both calculations are available from the Financial Aid Office at the student's request.

The responsibility to repay unearned federal aid is shared by the College and the student in proportion to the aid each is assumed to possess. The College's and student's shares of the unearned aid are allocated among the following financial aid programs in the following order: Federal Unsubsidized Stafford Loan, Federal Subsidized Stafford Loan, Federal Perkins Loan, PLUS Loan, Federal Pell Grant, and Federal SEOG. NOTE: The College's share will be allocated before the student's share. Any remaining unearned aid is the responsibility of the student. The unearned aid must be collected from the student and subsequently allocated among the federal aid programs in the order indicated above.

The College will calculate and return its share of unearned federal funds no later than thirty days after it determines that the student withdrew. A student will return his/her share of unearned aid attributable to a loan under the terms and conditions of the promissory note. The College may allow a student to repay unearned aid attributable to a grant under a payment arrangement satisfactory to the College. This applies when a student withdraws from the College or it is determined that s/he is no longer in attendance.

WAIVERS

The President or designee may waive amounts due to the college for the following reasons:

- death of a student
- extreme medical reasons preventing the student from completing the term successfully (typically the withdrawal option would be used for medical situations).
- college error
- course conditions (a course condition exists when the location or timing of the course results in the student not being able to use the service intended by a fee)
- natural disasters or other situations beyond the control of the campus

A student interested in pursuing a waiver must complete a student petition form which includes the request, the rationale and supporting documentation. The completed form must be submitted to the waiver authority, currently the Dean of Students. It is important to

note that these are rare and the college always examines the totality of the situation, i.e., amount of financial aid received, overage check(s) sent to student, federal and state regulations, etc.

REGISTRATION ADJUSTMENT

A registration adjustment is an addition, deletion or change made to a student's course schedule. Registration adjustments include, but are not limited to:

- dropping and/or adding a single course
- withdrawing from a single course
- withdrawing from all courses

It is the student's responsibility to initiate drops or withdrawals.

A student who stops attending a course prior to the completion of the semester without following the College policy and procedures will receive the earned grade for the course and will be charged all appropriate fees. Such students will be denied any refund and may be deprived of future acceptance at other academic institutions. Failure to attend class does not in itself constitute cancellation. The College reserves the right to drop a student from a course.

DROPPING AND/OR ADDING COURSES

Students may add courses through the online registration process through the first five (5) business days of fall and spring terms and for the first three (3) business days of summer term. Business days are defined as Monday through Friday, excluding posted holidays. For any course that does not begin the first week of the semester, a student must add the course within one business day following the first day of the course. Any exceptions must be approved in writing by the instructor and the appropriate instructional Dean and processed through the Registrar's Office. Tuition must be paid by the tuition due date.

Students may add courses at any time during the semester if the course has not started and there are openings in the course.

For courses that start the first week of the semester, a student may drop these courses through the first five (5) business days of that semester to receive a tuition adjustment. For courses that do not start the first week of the semester, a student has the right to attend one class and still retain the right to drop the course. The drop must be accomplished within one business day following the first day of the course. Students may drop courses through the online registration process. Courses dropped within the drop/add period do not appear on the transcript.

For flex lab and independent study courses, students have the first five (5) business days of the semester or the first five (5) days after registration (whichever is later) to drop the course. The registration date counts as the first day, and days are counted as business days, not calendar days or scheduled class days. For online and blended courses, the first day of class is the posted start date of the course or the semester.

WITHDRAWING FROM A SINGLE COURSE

After the drop period of a term has elapsed, a student has the right to withdraw from a course through the online eService's process. The final date for official course withdrawal shall be the date on which eighty percent (80%) of the days in the academic semester have elapsed. For courses not on a standard academic semester schedule, the final date for official course withdrawal shall be established as the date on which eighty percent (80%) of the instructional days for the course have elapsed. Withdrawal dates for each course can be viewed in the online course schedule.

Students withdrawing during the withdrawal period receive a transcript symbol of "W" on their transcript. While a "W" has no impact on the GPA calculation, it has a negative impact on percentage of completion used to evaluate Satisfactory Academic Progress for both academic and financial aid purposes. In addition, withdrawing from courses may have tuition and financial aid implications.

Beginning with the sixth (6) business day of the semester, there will be no refund for withdrawals from individual courses. Refunds will only be given for total withdrawals (i.e., withdrawing from all courses) according to the refund schedule.

NOTE: Although the student has the right to withdraw, it is the College's expectation that a student desiring to do so will discuss course withdrawal with the relevant instructor(s) and their academic advisor or counselor prior to withdrawing. At the discretion of the instructor, a student may forfeit the right to withdraw from any course in which the student has received a failing grade due to academic dishonesty. A student may not withdraw from any course that is completed or for which an earned grade has been assigned by the instructor.

After the withdrawal period has elapsed, a student with documented extenuating circumstances must have his/her withdrawal approved by the instructor and the appropriate Instructional Dean. The supporting documentation should be forwarded with the late withdrawal request to be included in the student's file. This can be done by submitting a registration adjustment form and marking "grade change" on the form or via email from a Ridgewater College email account.

WITHDRAWING FROM ALL COURSES

A student may initiate a complete withdrawal from all courses by meeting with a counselor and completing the required forms in the Counseling Office, as long as the withdrawal period for any of the student's courses has not elapsed. The student will receive a "W" with no designation as to passing or failing the courses. A student may not withdraw from any course which is completed or for which an earned grade has been assigned by the instructor.

STUDENT SERVICES

Student Services include a variety of campus-based activities designed to assist potential and current students in gathering information, making decisions about their lives, and implementing plans for their future. Student Services staff facilitate success for people from an early informational stage to beyond graduation.

Goals of Ridgewater College Student Services Department:

Mission and Vision: To provide a system of support to students in their pursuit of their educational goals.

1. **Customer Service:** to serve the needs of all callers, visitors, staff, faculty and students in the quickest, most friendly and assistive way possible. We will support, empower and challenge students as they explore, discover, and create their own identities. We will strive to provide the best cultural environment possible for every student, staff and faculty member on our campuses.
2. **Recruitment:** to recruit students who reflect our communities' diversity.
3. **Matriculation:** to admit, assess, advise and place students in classes that optimize their chances to achieve their educational goals.
4. **Retention:** to offer quality efforts and support services which encourage and empower students to complete their educational goals.
5. **Communities:** to participate in our communities to whatever extent possible to positively reflect on Ridgewater College and to encourage community participation and awareness in Ridgewater College.

COUNSELING SERVICES

The College is sincerely interested in the success of its students. The entire counseling program places emphasis on students' growth and independence through an increasing knowledge of themselves and of opportunities available for education, careers, and personal development.

Objectives

- Assist students in acquiring information and developing attitudes, insights and understanding about themselves and their environment, which are necessary for maximum growth and development.
- Inform students of educational opportunities to assist them in making appropriate educational choices.
- Assist new and potential students to experience successful entry into the college.
- Serve as consultants to members of the faculty and administration, as part of the educational team.
- Provide an effective communication program with area high schools and surrounding communities.
- Provide help to students needing assistance by referral to the Academic Support Centers. This may include tutoring services, evaluations where needed, and other study skills.

Services Provided

Student Services can provide information and services in each of the following areas: transfer, records, occupational, educational and community information, short-term personal counseling, career assessment, job placement (in school and out), course placement testing, and career guidance counseling to students.

Assistance is available to all students regarding concerns such as child care, transportation, finances, etc. Students may work with the counselor of their choice. There is no charge for their services.

CAREER SERVICES

Ridgewater College has built a strong reputation for educating and assisting our graduates in finding related employment. Ridgewater has a job placement rate of 91%, with many technical programs at a 100% placement rate.

Students and graduates who are registered with www.collegecentral.com/ridgewater have access to all employment opportunities that are posted directly to Ridgewater College by employers looking to fill their employment needs.

ACADEMIC ASSISTANCE

Academic Support Centers are located on both the Willmar and Hutchinson campuses in the Library. The Academic Support Centers provide a variety of academic services for students including assistance with basic communication, math and computer skills, coordination of study groups, peer tutoring, small group and one-on-one assistance for some classes, and assistance with program study skills. Whether you're looking for a little help with an assignment you don't quite understand, or need more extended help with a class, please stop by and talk with our staff to see if we can help support your academic success. There is no cost for services provided. The centers are open on class days during fall and spring semesters.

Due to COVID-19 guidelines, some or all tutoring services are available online. For links, schedules, and tutor information, please access the college website (Ridgewater.edu), click Student Services & Activities, then Academic Support Center. Online tutoring is also offered 24/7 via tutor.com.

DISABILITY SERVICES

Ridgewater College offers support services to qualified individuals with documented disabilities. Students must disclose and request services through the Disability Services Office. Accommodations/services are coordinated based on documented need.

TRIO - STUDENT SUPPORT SERVICES

The TRIO - Student Support Services Office serves Ridgewater College students who have a serious commitment to academic excellence. Students are eligible for the program if they are a citizen or

permanent resident of the United States; officially admitted to Ridgewater College; in need of academic support; and either a first-generation college student (neither parent nor guardian has completed a four-year degree), a low-income student, and/or a student with a documented disability.

PROGRAMS & SERVICES

Natural Resources Academy - Selected new students have the opportunity to attend a summer academy and take a 4-credit Biology 1510 course tuition-free before fall semester classes begin. Summer academy coursework and workshops assist participants in acclimating to their new college environment.

Academic Advising - A program advisor is assigned to work individually with students to help develop an academic plan and assist them in achieving good grades. The assigned advisor also monitors the student's academic progress while enrolled at Ridgewater College.

Group Study Opportunities - Timely intervention programs in the form of group study opportunities are available to all program participants directly through the TRIO program or referral to other college departments.

Transfer to Four-Year College - Students of the TRIO program have the opportunity to tour four-year colleges within the state of Minnesota. Advisors also discuss transfer opportunities and work with transfer schools to ensure a smooth transition for participants who transfer from Ridgewater College with an Associate's degree.

Workshops, Cultural Events and Other Services - Throughout the school year, workshops are offered on relevant subjects to students of the program. Cultural events, field trips, and presentations are also offered. In addition, the TRIO program offers participants access to a dedicated computer lab and a short-term laptop and graphic calculator loan program.

How to Apply for TRIO - Applicants must be enrolled or accepted for enrollment at Ridgewater College in an Associate in Arts, Associate in Science, or Associate in Applied Science program. Call 320-222-8075 to receive an application or just stop by the TRIO - Student Support Services Office in Room A144 (Willmar) or Room 105 (Hutchinson). Return the completed application to the TRIO - Student Support Services Office and provide necessary proof of eligibility. The TRIO program is provided by a grant funded by the U.S. Department of Education TRIO Programs.

INTERNATIONAL TRAVEL

Ridgewater College offers students the opportunity to travel to other countries with college credit. Various departments will offer such courses during spring break or summer school.

BOOKSTORES

A bookstore is located on each Ridgewater College campus. The Bookstore is the place to purchase all the items needed to begin your classes. This includes books, tools, supplies, clothing and other school-related items. The Bookstore also offers books for rent and many e-book options. Students may also purchase snacks and beverages, postage stamps, greeting cards, software and some electronics at the Bookstore.

The bookstores are open every day that classes are in session as well as some evenings. Bookstore hours are posted on each campus. The Bookstore is open to students, faculty, and the general public.

Students that have met one of the tuition and fee payment requirements and are registered for at least one Ridgewater credit may charge up to \$1,000 for required books and classroom kits (clothing and food are not included). Students with existing financial aid funds (grants, loans, agency or PSEO) may use available funds, after tuition and fees have been deducted, to charge textbooks. A picture I.D. is required when paying with check or credit card and for all financial aid transactions. Students may also purchase books and clothing online at www.ridgewaterbookstore.com. Students ordering books online have the option of paying with credit card or financial aid funds. Books can be picked up at the Bookstore or shipped UPS.

At the end of each semester, the Bookstore offers a “book buy back” where students can sell their books back to the Bookstore for cash. This allows the Bookstore to then offer the book used for students in the next semester. Rented textbooks must be returned to the Bookstore at the end of the semester and cannot be sold at the book buy back.

Textbook Refund Policy

- A receipt must be presented for all refunds or exchanges
- New books must be in good condition, free from any writing, highlighting, or creases.
- Shrink-wrapped items that are opened are nonreturnable.
- Special orders are non-returnable.
- Refunds will be allowed within the first five days of the semester.
- Textbooks purchased after the refund deadlines or for short length classes are refundable for up to 48 hours if they have not been used by the customer.

LIBRARY

The Ridgewater College libraries (Willmar and Hutchinson campuses) hold a print collection of over 50,000 volumes including 100,000 electronic books, more than 250 unique journals and magazines, and a wide variety of materials available in many formats. The library collections are searched through the PALS online catalog. Additionally, via Resource Sharing, materials from the collections of 125+ libraries in Minnesota are available through the state-supported Minitex program. Many databases provide citations or articles from magazines journals and newspapers, books, and a variety of other published sources you can rely on for your academic projects. Within

each library, computers are available to students for research and study. Reference services are provided to students individually, through library instruction in the classroom, and in-library orientation sessions by the professional librarian. A professional librarian is also available 24/7 through the AskMN chat service.

The Willmar campus library is housed in the center of the library building while the Hutchinson campus library is in the northwest corner of the main building (Room 130). Many services are also available online at <https://www.ridgewater.edu/library/>.

PEER TUTORING PROGRAM

The Peer Tutor program gives students who are successfully achieving in a given subject the opportunity to help other students who are having difficulty. The Peer Tutors assist students with knowledge and skill in the needed areas.

If you would like to request a tutor, assistance may be obtained from the Peer Tutoring coordinators. On the Willmar campus, please contact Audrey VanBeck at 320-222-5263. On the Hutchinson campus, contact Terry Grinde at 320-234-8650.

ASSESSMENT FOR COURSE PLACEMENT

As part of its commitment to student success and in accordance with Minnesota State Policy 3.3, Ridgewater College has developed a process to assess the reading and mathematics skills of new students, to develop minimum assessment standards for access to the college-level curriculum, and to maintain a set of developmental education courses to bring students with inadequate skills to the minimum standard.

Adherence to this policy offers many benefits to students:

1. Supports student access and success by ensuring they have to develop skills to compete in the college-level curriculum;
2. Increases success in college-level courses, resulting in improvement in persistence and graduation rates;
3. Eases transfer among Minnesota State institutions since a single, portable assessment method will be in place at all Minnesota State institutions;
4. Assures that the integrity of the college-level curriculum can be maintained by ensuring students enrolled in courses have achieved the prerequisite academic skill levels;
5. Allows development of seamless and successful transitions from high school to college. Explicit benchmarks for college readiness can be connected to high school graduation standards.

Ridgewater College requires all incoming students to complete the Accuplacer Test - a student assessment that includes basic measures of reading comprehension and mathematics unless they meet the exemption criteria. The College will use the minimum course placement scores required by Minnesota State Board Policy 3.3.

The College also uses a set of screening questions to identify

students with possible English as a Second Language (ESL) needs. If identified by the screening process, these students are asked to complete the ESL Accuplacer assessments for appropriate placement into English 1210.

The incoming student assessment shall not be used to make decisions related to college admission.

Students with Disabilities

Accommodations for individuals with documented disabilities are available with advanced notice to the Disability Services Office.

Minimum Standards for Access to College-Level Courses

Students who score below Ridgewater College's minimum test standards must successfully complete appropriate developmental education through courses or other means before enrolling in selected college-level courses. Retesting is allowed under certain circumstances (see Ridgewater College Test Center Procedures).

Students placed into developmental mathematics by their math placement score who think the placement is incorrect are encouraged to retake the math portion of the Accuplacer placement exam. They may also request an exemption by contacting an unlimited full-time mathematics faculty member, who may perform an assessment of skills depending on their mathematics placement score.

Criteria for Student Exemptions and Course Placements using Multiple Measures

Students may be exempt from all or part of the incoming student assessment based on the following criteria:

1. Documentation of reading comprehension Accuplacer test scores taken with five (5) years, inclusive of the current calendar year and mathematics Accuplacer test scores taken with two (2) years, inclusive of the current calendar year:
 - a. Reading:
 - i. Student scoring a 250 or higher (NG Reading) may be placed in college-level English
 - ii. Students with a score of 236-249 and that have a cumulative high school GPA of 2.5 or higher from within the last 10 years.
 - b. Mathematics:
 - i. Student scoring a 250 or higher (NG Mathematics) will be placed in college-level algebra.
 - ii. Students with a score of 236-249 and that have a cumulative high school GPA of 2.7 or higher from within the last 10 years.
2. Documentation of subject area test scores on the ACT test taken within five calendar years, inclusive of the current calendar year, for reading and mathematics. A student who obtains the following minimum scores or higher shall be placed in the corresponding college-level course(s).
 - a. Reading:
 - i. A student who presents a reading subject area test score of 21 or higher may be placed in courses that designate college-level reading skills as a prerequisite.
 - ii. A student who presents an ACT score of 19-20 and has a cumulative high school GPA of 2.5 or higher from within the last 10 years may be placed in courses that designate college-level reading as a prerequisite.
 - b. Mathematics:
 - i. A student who presents a mathematics subject area test score of 22 or higher may be placed in any college-level mathematics course.
 - ii. A student who presents an ACT score of 20-21 and has a cumulative high school GPA of 2.7 or higher from within the last ten years may be placed in any college-level mathematics course.
3. Documentation of subject area test scores on the MCA assessments taken within five calendar years, inclusive of the current calendar year, for reading and mathematics:
 - a. Reading:
 - i. The MCA Benchmark Study concluded that the MCA reading assessment scores were not an appropriate predictor of performance in college writing courses, and thus, Minnesota State/Ridgewater College will not use MCA scores for writing placements. A student who presents a MCA reading assessment score of 1047 or higher shall be placed in courses that designate college-level reading skills as a prerequisite.
 - ii. A student who presents an MCA score of 1042-1046 and has a cumulative high school GPA of 2.5 or higher from within the last 10 years may be placed in courses that designate college-level reading skills as a prerequisite.
 - b. Mathematics:
 - i. A student who presents an MCA mathematics assessment score of 1148 or higher may be placed in any college-level mathematics course with the exception of MATH 1120 and MATH 2070 (which require a MCA score of 1158 or higher).
 - ii. A student who presents an MCA statistics score of 1148 or higher may be placed in college-level statistics course. A student who presents an MCA statistics score of 1146-1147 and has a cumulative high school GPA of 2.7 or higher from within the last 10 years may be placed in college-level statistics course.
 - iii. A student who presents an MCA liberal arts mathematics score of 1150 or higher may be placed in a liberal arts mathematics course. A student who presents an MCA liberal arts mathematics score of 1146-1149 and has a cumulative high school GPA of 2.7 or higher from within the last 10 years may be placed in a liberal arts mathematics course.
4. Documentation of subject area test scores on the SAT taken within five calendar years, inclusive of the current calendar year:
 - a. Reading:
 - i. A student who presents an Evidence-Based Reading and Writing (ERW) subject area test score of 480 or higher shall be placed in courses that designate college-level reading skills as a prerequisite
 - ii. A student who presents an SAT score of 440-479 and has a cumulative high school GPA of 2.5 or higher from

within the last 10 years may also be placed in any course with a college-level reading skills prerequisite.

- b. Mathematics:
 - i. A student who presents a mathematics subject area test score of 530 or higher shall be placed in any college-level mathematics course.
 - ii. A student who presents an SAT score of 520-529 and has a cumulative high school GPA of 2.7 or higher from within the last 10 years may be placed in any college-level mathematics course.
5. Documentation of completion of college-level coursework from a post-secondary institution as follows:
 - a. Mathematics: C- or higher in an equivalent mathematics course.
 - b. Reading: A student who presents a transcript demonstrating 24 credits or more in at least two of the following three areas: history and the social and behavioral sciences; humanities and fine arts; mathematical/logical reasoning or natural sciences (with a cumulative GPA of 2.0 or higher) or a C- or higher college-level English course may be placed in courses that designate college-level reading skills as a prerequisite.
6. Documentation of completion of developmental coursework from a post-secondary institution as follows:
 - a. Reading: C- or higher in an equivalent course.
 - b. Mathematics: C- or higher in an equivalent course.
7. Documentation of completion of a bachelor's degree or higher. If the degree includes a college-level mathematics class, all assessments will be waived. If not, the student will be required to take the mathematics assessment.
8. Enrollment is exclusively in non-credit courses or programs.
9. Enrollment is exclusively in the Farm Business Management (FBM) program.

Definitions

The following definitions are important to the interpretation of the Assessment for College Placement Policy:

COLLEGE LEVEL - Courses offered by Ridgewater College numbered 1000 or above (prior to summer 2018, any courses numbered 100 or above in the transfer division) count toward the credit requirements of a certificate, diploma or associate degree.

DEVELOPMENTAL EDUCATION - Courses numbered below 1000 (prior to summer 2018, any courses numbered below 100) are intended for students who do not meet minimum assessment standards. These courses do not count toward a certificate, diploma, or associate degree.

HEALTH PROMOTIONS

Ridgewater College strives to provide students with information related to wellness, nutrition, stress management, etc. We offer a number of activities on campus that promote such concepts. We also annually host the Red Cross Bloodmobile, a health fair, and a host of educational symposiums and speakers.

TEST CENTER

Ridgewater College's **Test Centers** exists to meet the needs of both Ridgewater and area students in the areas of testing. The Test Center has two specific purposes:

1. To give assessment tests for students entering Minnesota State colleges and universities and needing to be assessed, as well as for students transferring to other institutions requiring the Accuplacer for entrance or admission purposes.
2. To proctor exams for students from other institutions enrolled in distance learning courses. Ridgewater College is a test proctoring site listed on MN Online and has the ability to proctor both online and paper/pencil tests.

COOPERATIVE EDUCATION/ INTERNSHIPS

Cooperative education is also available to students at Ridgewater College. Placement is made with an agency, business or industry related to the student's major. The primary objective is to provide the student with a combination of field experience alternated with academic study to provide a more meaningful education. It is further intended that students will achieve the practical exposure necessary to make their field experience relevant to their long-range occupational goals. For more specific information, contact an advisor or cooperative education supervisor and complete the required forms.

GRADING

Ridgewater College operates on a semester system. After each semester, grade reports will be available on the web at www.ridgewater.edu through eServices.

The following grading system is used at Ridgewater College to report academic achievement and to compute the student's grade point average.

Grading Symbol	Grade Points
A	4.0
A-	3.67
B+	3.33
B	3.0
B-	2.67
C+	2.33
C	2.00
C-	1.67
D+	1.33
D	1.0
D-	0.67
F (Failure)	0.00

OTHER TRANSCRIPT SYMBOLS

NC	No credit. Attempted course but did not earn credit. No grade point value earned.
I	Incomplete.
P	Pass with C or higher level of performance attained. Earned credit but no grade point value.
W	Withdrawal. No credit earned.
AU	Audit - no credit earned. No grade assigned or grade point value.
IP	In progress. Entered by Registrar's Office for courses still in progress at end of current semester. No grade assigned at this time.
Z	Course registered for current semester. No grade assigned at this time.

AUDIT

Students auditing courses are required to pay the regular tuition and fees but are not required to take tests or complete assignments. No credit is awarded for audited courses. Students wishing to audit a course must declare this at the time of registration. Students wishing to audit a course may enroll on a space-available basis. Financial aid is not awarded for an audited course. A student does not need to be admitted to the college to audit a course.

INCOMPLETES

The mark "I" (incomplete) is a temporary grade that is assigned only in exceptional circumstances. A student may request a grade of "I" when coursework has been satisfactory and the majority of coursework has been completed, but the student is unable to complete all course requirements before the end of the semester. The "Incomplete Grade Request Form" must be signed by both the instructor and the student and submitted to the Student Services Office front desk by the end of the course. Coursework must be completed and a grade submitted to the Student Services front desk by a mutually agreed-upon date, not to exceed the end of the following semester. A grade of "F" will be recorded if this deadline is not met.

GRADE POINT AVERAGE

Grade point average (GPA) is the student's grade point total divided by the grade point credit total. Each grade report shows the student's GPA for the term and cumulative GPA since admission. An "I," "P," "IP," or "W" does not carry a grade point value and, as such, is not calculated in the GPA. "I," "P," and "W" credits do not count toward total registered credits. "IP" does not count toward total registered credits in the calculation of satisfactory academic progress.

REPEATING COURSES

A course may be repeated for an improved grade. Repeated courses are coded automatically at the end of each semester. Only the higher grade will be counted toward graduation and in the computation of the overall grade point average. An "R" will be entered on the transcript next to the initial grade to indicate the course was repeated. The maximum number of credits that may be repeated is 18. A student may repeat a course no more than two times.

If a student wishes to satisfactorily repeat or complete a course for which s/he previously earned an "F", the student must register for the course again. Click [here](#) to read the entire grading system policy.

ATTENDANCE

Faculty may have a written attendance policy. Attendance requirements are written into the course syllabus and explained to all students. Fair treatment will be afforded to all students under any and all circumstances.

GRADUATION REQUIREMENTS

To be considered eligible for graduation with an associate degree, diploma, or certificate (9-credit minimum as defined by Minnesota State), each student must meet the following requirements:

1. Complete all courses and achieve a cumulative grade point average of 2.0 or better on a 4.0 grading scale. In addition, diplomas and degrees may require minimum passing grades for specific courses.
2. Fulfill all financial obligations to the college.
3. A student seeking candidacy for an associate degree, diploma or certificate must submit an "Application for Graduation" form to Student Services electronically when the student pre-registers for his/her last semester in residence. (A student must be within 10 credits or 12 credits internship of completing his/her degree or diploma to participate in graduation ceremony.) A separate application is required for each degree, diploma and/or certificate. Students must apply to graduate regardless of their plans to attend the commencement ceremony. Students must submit a separate application for each award. Students must check their Degree Audit Report System (DARS) in their eServices before applying. The audit must be for the major indicated on the application and it must read "ALL REQUIREMENTS COMPLETED - IN PROGRESS COURSES USED" or "ALL REQUIREMENTS IDENTIFIED BELOW HAVE BEEN MET."
4. Residence: To be eligible for graduation, a student must have earned at least one-third of the semester credits at Ridgewater College and must be enrolled at the college during the semester in which the degree requirements are completed. An exception may be made when a student who has completed at least 20 credits at Ridgewater College lacks 10 or fewer credits for graduation.

Such students may petition the administration for permission to complete the degree requirements through transfer of acceptable nonresident credit. Petitions/Transcripts will be evaluated on a case-by-case basis for recency or to insure compliance with current graduation standards. Except for extenuating circumstances, such as entry into the military service, this transfer of acceptable credits must occur within a reasonable amount of time after the student transferred from Ridgewater College. The petition form, which is available from the counselors, must be submitted in the year in which the degree is to be awarded.

5. Participation: All students seeking an associate degree or diploma are expected to participate in the graduation ceremonies.
6. Time limit: Students graduating in fewer than four years must meet the graduation and degree requirements in the current college catalog or those degree requirements in effect during their first term at Ridgewater College. Students graduating more than four years after the date of first enrollment must meet the requirements stated in the catalog in effect for the year in which graduation occurs.
7. The College reserves the right to automatically post certificate, diploma and degree completion to the student academic record upon the verification that all requirements have been satisfied.

ACADEMIC HONORS

At the end of each semester, students who have completed a minimum of twelve (12) credits will be named to the Dean's list if they have a semester GPA of at least 3.50.

Students graduating with a diploma or degree will graduate with Honors if they have a cumulative GPA of at least 3.50, with High Honors if they have a cumulative GPA of at least 3.75, and with Highest Honors if they have a cumulative GPA of 4.00.

ACADEMIC SUSPENSION GUIDELINES AND PROCEDURES

Satisfactory Academic Progress

Ridgewater College maintains an open door admission policy, assesses students admitted, and provides developmental coursework and other programs of assistance to support student success. Students must perform at an acceptable academic level to continue enrollment and to receive financial aid. Students will be evaluated both qualitatively (GPA) and quantitatively (completion percentage and maximum time frame).

Qualitative Measure of Progress

To earn a certificate, diploma, or associate degree from Ridgewater College, a student must have a cumulative Grade Point Average (GPA) of 2.0 or better in college level courses. Accordingly, a 2.0 GPA is the standard for all satisfactory academic progress.

If a program or discipline has academic standard guidelines and procedures that are more stringent than the Ridgewater College Academic Suspension Guidelines and Procedures, the program/discipline

guidelines supersede these guidelines and procedures.

Quantitative Measure of Progress

A. REQUIRED COMPLETION PERCENTAGE

Students must earn 66.67% of the cumulative credits registered. The completion percentage will be calculated dividing the credits successfully completed by the credits attempted. Courses for which the student receives an F, NC, W, I or FN are treated as attempted but not successfully completed.

B. MAXIMUM TIMEFRAME

Students may continue to receive financial aid through the number of credits required for the completion of a Ridgewater College degree/diploma/certificate multiplied by 150%. Students who have attempted more than 75 semester credits should meet with their advisor to fill out an academic plan. Students who have double majors will be evaluated based on the required course work for both programs. Students who change programs or return for an additional degree/diploma/certificate will be evaluated based on their current program of study requirements.

Evaluation Period

Student progress will be reviewed at the end of each term (fall, spring, and summer). Faculty will submit grades to the Registrar within 72 hours of the end of each term to allow enough time for progress to be evaluated. Reviews will be completed prior to the 5th day of the academic term.

Failure to Meet Standards

Warning Status

If at the end of the evaluation period a student has a cumulative GPA of less than 2.0 and/or a completion percentage below 66.67%, the student will be allowed to continue at Ridgewater College under a warning status for one evaluation period. Students are strongly encouraged to meet with their advisor and/or counselor.

Reinstatement of Students on Warning Status: If at the end of the warning period a student who has been on warning status has met Ridgewater College's cumulative qualitative and quantitative standards, the student will return to good academic standing.

Suspension

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 Ridgewater College's cumulative qualitative and/or quantitative standards, he/she will be suspended immediately.

Maximum Time-Frame Suspension

If at the end of the evaluation period a student has failed to meet Ridgewater College's standard for measurement of maximum time-frame, s/he shall be suspended from financial aid eligibility immediately upon completion of the evaluation.

Suspension of Students for Extraordinary Circumstances

Students may be suspended from financial aid in the event of extenuating 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.

A student who has been placed on suspension status at another Minnesota State institution shall have that suspension in effect at Ridgewater College. A student would have to follow the appeal process stated below to be considered for re-instatement.

Suspension for Inability to Meet Program Requirements within the Maximum Time Frame

If at the end of any evaluation period Ridgewater College determines that it is not possible for a student to raise her or his GPA or course completion percentage to meet the standards before the student would reach the end of the program for which s/he is receiving financial aid, he/she shall be suspended from financial aid eligibility immediately upon completion of the evaluation.

Notification

Students who fail to meet standards and are being placed on warning, probation or suspension prior to the start of the next semester will be notified in writing by the Registrar. Included with the written notification of suspension will be an Appeal Form as well as the date by which the appeal must be returned.

Appeals

Students who are suspended due to unsatisfactory academic progress (from this or any other Minnesota State institution) have the right to appeal based on an error of record or on extenuating/unusual circumstances. Examples of extenuating circumstances that may be considered for an appeal include, but are not limited to, death of a relative, illness, hospitalization, injury of the student or other unusual circumstances the student believes should be given consideration. Students are notified in writing via their suspension letter that sitting out a period of time in and of itself does not re-establish eligibility. The student must submit, as part of the appeal, documentation 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 at the end of the next evaluation period. Students must provide proof of the extenuating circumstances in addition to a written explanation, along with their Appeal Form.

An appeal may be approved only if Ridgewater College:

- Has determined that the student will be able to meet SAP cumulative (Pace and GPA) standards after the subsequent evaluation period; or
- Has assigned to the student an academic plan that will require a term GPA standard of 2.50, and a term completion standard of 85.00%. This academic plan shall also determine the appropriate credit load and courses that the student may attempt.

Students who have been suspended for not meeting SAP standards (here or at another Minnesota State college or university) that have successfully completed (at a 2.0 or higher GPA) 12 or more college-level transferable credits at an accredited college or university since that suspension do not have to go through the appeals process.

We will analyze any submitted transcripts to determine whether or not the student would be allowed to re-enter on probation.

Results of all appeals shall be communicated to students in writing and shall include the standards that the student is expected to meet and/or the academic plan that the student is expected to complete in order to retain eligibility. Notifications of denied appeals shall describe the reason for the denial and the process for appealing the denial.

Students are strongly encouraged to meet with a counselor to review an Academic Inventory as well as to establish an Academic Improvement Plan to accompany their appeal.

All appeals will be initially considered by the Director of Financial Aid. Appeals of reinstatement denials may be considered by an Appeals Committee which will meet at the end of each evaluation period and as needed throughout the remainder of the year. The Chief Academic Officer will establish an Academic Suspension Appeals Committee that will consist of one to two Academic Deans, the Financial Aid Director, and the Registrar. The committee will also include two to four faculty (with representation from campuses) as well as a counselor from each campus.

Students who have a grade change after the initial evaluation may also appeal for a new evaluation. Students who successfully appeal will be allowed to continue enrollment under their previous status.

Probation Status

A student who has successfully appealed will be placed on financial aid probation for one semester. If at the end of the next semester (evaluation period), a student on probation status:

- a. has met the cumulative and pace standards, the student will be returned to good standing;
- b. has failed to meet the cumulative qualitative and pace standards but have satisfied the conditions specified in their academic plan, the student will be allowed to continue for a subsequent semester on probation;
- c. has failed to meet the cumulative qualitative and pace standards and failed to meet the conditions specified in their academic plan, the student shall be suspended immediately.

Reinstatement

Students who have been suspended and wish to return to college (or who are currently suspended from any other Minnesota State institution) and who feel as though they have mitigated their extenuating circumstances shall follow the appeals process described above.

Additional Elements

A. TREATMENT OF GRADES

Completion Percentage: The completion percentage will be calculated by dividing successfully completed credits by attempted credits. Courses for which a student receives an "I," "F," "NC," "W" or "FN," are considered not successfully completed. In Progress "IP" and Audited "AU" courses are not counted in the calculation of completion percentage.

Grade point average: Grade point average (GPA) is the student's grade point total divided by the grade point credit total. Each grade report shows the student's GPA for the term and cumulative GPA

General Information

since admission. An "I," "AU," "P," "NC," "IP" or "W" does not carry a grade point value and, as such, is not calculated in the GPA.

Incompletes: Credits for which an "I" is received are considered attempted credits but not successfully completed credits for the purpose of monitoring satisfactory academic progress. Thus, an "I" does not impact GPA but does negatively impact the cumulative completion percentage.

Registered Credits: The total number of credits for which a student is officially enrolled at the end of the drop/add period each term.

B. ACADEMIC AMNESTY

Ridgewater College does not offer academic amnesty.

C. AUDITED COURSES

Audited courses will not be funded by financial aid and are not included in any satisfactory academic progress measurements.

D. CONSORTIUM CREDITS

Credits for which financial aid is received under a consortium agreement shall be recorded in the Student Data System to be included in cumulative GPA, pace percentage, and maximum timeframe calculations.

E. REMEDIAL/DEVELOPMENTAL COURSES

Credits awarded for course work with a course prefix below 100. Students may receive financial aid for developmental credits up to a maximum of 30 semester credits. Developmental courses do not count toward graduation, but will be included in the qualitative and pace percentage measurement of satisfactory academic progress. Up to 30 developmental credits shall be excluded from the maximum time frame calculation.

F. REPEATED COURSES

A course may be repeated for an improved grade. A student will not be permitted to receive financial aid for more than one repetition of a previously passed course. A change of grade request form must be submitted to the Records and Registration Office for the change to be recorded. Only the higher grade will be counted toward graduation and in the computation of the overall grade point average. All attempts are counted toward calculation of the overall completion rate. An "R" will be entered on the transcript next to the initial indicate the course was repeated. The grade to maximum number of credits that may be repeated is 18. A student may repeat a course no more than two times. If a student wishes to satisfactorily repeat or complete a course for which he/she previously earned an "F" or "NC," the student must register for the course again.

G. TRANSFER CREDITS

Transfer credits accepted by Ridgewater College and applied to the student's program requirements shall be counted as credits attempted for calculation of completion percentage. Grades associated with these credits shall not be used in calculating cumulative GPA. Credits accepted in transfer and applied toward a student's general education or degree requirements shall apply towards maximum time frame evaluation.

H. WITHDRAWALS

Credits for which a "W" is received are considered attempted credits but not successfully completed credits for the purpose of monitoring

satisfactory academic progress. Thus, a "W" does not impact GPA but does negatively impact the cumulative completion percentage.

Definitions:

Academic Plan - A student who successfully appeals for reinstatement may be required by an institution to complete, during a probationary period, specific requirements contained in an academic plan developed for that student by the institution.

Evaluation Period - Institutions shall measure Satisfactory Academic Progress at the end of each academic term or at the mid-point of programs less than one year in length.

Suspension of Students on Warning Status - A student on suspension status is not eligible to attend. Students who have been suspended may regain their eligibility only through the institution's appeal process or when they are again meeting the institution's satisfactory academic progress cumulative grade point average and completion percentage standards.

Maximum Time Frame - The maximum number of cumulative attempted credits within which a student must complete his or her academic program.

Probation Status - A status under which a student who has successfully appealed a suspension shall regain his or her financial aid eligibility for one evaluation period, after which he or she must either have met the institution's cumulative GPA and completion percentage standards, or have successfully completed the requirements of an academic plan developed for that student by the institution.

Qualitative Measure - The Grade Point Average (GPA) a student must maintain in order to retain eligibility.

Quantitative Measure - The "pace" at which a student must progress through his or her program in order to retain eligibility.

Required Completion Percentage - The percentage of cumulative attempted credits a student must successfully complete in order to retain eligibility.

Warning Status - A status under which a student shall continue to retain her or his eligibility for one evaluation period despite a determination that she or he has not met either an institution's grade point average standards, or completion percentage standard or both.

GRADE APPEAL POLICY

Ridgewater College recognizes the long-standing and widely accepted practice that the individual classroom instructor is the final authority in evaluating student performance in his/her courses. Also recognized is the fact that this right brings with it a responsibility to provide students with a clear statement of course grading policies, and of fairly and consistently applying these policies. A corollary to this is the student's right to receive from an instructor an explanation of any grade received.

While recognizing the rights and responsibilities of the instructor, in extraordinary circumstances students have the right to appeal for a grade review in instances where they believe that a final course grade was assigned unfairly or in a manner inconsistent with the stated

course grading policy. To be precise, the following three categories are the only legitimate basis for a grade appeal at Ridgewater College:

Arbitrariness: The course grade awarded represents such a substantial departure from accepted academic norms as to demonstrate that the instructor did not actually exercise professional judgment.

Prejudice: The grade awarded was motivated by ill will, and is not indicative of the student's academic performance in the course.

Error: The instructor made a mistake in fact (e.g., a calculation error or omission), or failed to give students enrolled in the course adequate notice of grading policies. In cases where a student believes that a grade has been assigned incorrectly based on one or more of the grounds stated above, it is expected that the student will seek to resolve any concerns informally by speaking directly with the course instructor before beginning a formal appeal process. The formal appeals process should not be undertaken lightly, nor should it be undertaken merely because a student is unhappy with the grade received in a course.

A student who has questions regarding his/her course grade must speak with the instructor within two weeks from the date grades are posted online.²

If, after speaking with the instructor in a good-faith effort to resolve a grade dispute, a student still believes that his/her course grade was assigned in a way that is arbitrary, prejudicial, or in error according to the categories listed above, the student may make a formal grade appeal no later than two weeks after speaking with the instructor. If no formal appeal is made by the end of these two weeks, then the student will in general have no rights to formally appeal the course grade.

FORMAL GRADE APPEAL

Grade appeals will proceed according to the following steps:

Step 1

A written appeal will be submitted by the student to the instructor of the class. The appeal is a formal request to the course instructor that the student's specific concerns about the grade be completely addressed. The student must complete the Grade Appeal Form, which requires the following:

- Identification of the course, section, instructor's name, and grade received.
- A statement verifying that the student has sought an informal remedy by speaking with or otherwise contacting the instructor.
- A justification for the requested review, i.e., a statement of reasons as to why the student believes his/her grade was improperly assigned.
- Relevant information and documentation that supports the appeal (e.g., course papers, syllabus, class notes, etc., that support the justification).
- Any additional items that the student deems relevant to his/her appeal.
- The remedy sought.

In cases in which the instructor is unavailable during this time, the student must speak with the instructor as soon as the instructor is available.

The Step 1 Appeal is submitted to the instructor. The student should retain a copy of these materials for his/her records. Within two weeks, the instructor will respond to the student in writing. The instructor's response should include:

- A statement of the grading policy for the course.
- An explanation of how the student's grade was assigned in the course according to this policy.
- A reply to the justification given by the student in his/her formal grade appeal.
- A reply to the student's desired remedy, including a summary statement indicating:
 - a. that the instructor has determined that a grade change is not warranted,
 - b. that the instructor has determined that a grade change is warranted, with a statement of the new grade to be assigned to the student, or
 - c. an alternative proposed remedy.

If the student is not satisfied with the response provided by the instructor, s/he may proceed to Step 2.

Step 2

A written appeal will be submitted by the student to the Dean of Instruction. The appeal is a formal request to the Dean that the student's specific concerns about the grade be completely addressed. The student must complete the Grade Appeal Form, which requests the following:

- Copies of all materials submitted to the instructor in Step 1.
- A justification for the requested review, i.e., a statement of reasons as to why the student believes the instructor's reply to the Step 1 Appeal is incorrect.
- Relevant information and documentation that supports the appeal.
- Any additional items that the student deems relevant to his/her appeal.
- The remedy sought.

The Step 2 Appeal is submitted to the Dean of Instruction, with a copy sent to the course instructor. The student should retain a copy of these materials for his/her records. The Dean will review the materials submitted by the student. This review may include a conference with the student and/or the course instructor, and may include a joint meeting with both in order to reach a mutually agreeable resolution.

In cases in which a mutually agreeable solution is not reached, the Dean's office will, within two weeks, issue a written opinion to the student and the course instructor.

It should be well-noted that there is no presumption or requirement that instructors will accept the Dean's recommendation.

¹In cases where this is not possible (due, e.g., to travel or other appropriate reasons), the instructor will respond to the student as soon as possible past the two-week limit.

TRANSFERRING CREDITS

TRANSFER FROM RIDGEWATER COLLEGE

Ridgewater College offers services and policies that will make it easier for students to plan their progress and prevent loss of time and credits. Help is available from the counselors, academic advisors and transfer specialists on each campus.

WRITTEN INTRASYSTEM AGREEMENTS:

- For transfer of general education (Minnesota Transfer Curriculum) or the Associate in Arts degree.
- For early application/admission to a university.
- That tell which courses qualify for transfer in key areas such as engineering and nursing.
- Clearly stated criteria for admission to the institution/major selected.
- Clear policies that tell kinds of courses a college or university will accept for transfer.
- A transfer appeals process on every campus that advisors and transfer specialists can assist with.

FACTS ABOUT TRANSFER OF CREDITS

The receiving college or university decides what credits transfer and whether those credits meet its degree requirements. The accreditation of originating and receiving institutions can affect the transfer of the credits earned. Institutions accept credits from courses and programs like those they offer. They look for similarity in course goals, content and level ("Like" transfers to "like"). Not everything that transfers will fulfill graduation requirements. Baccalaureate degree programs usually count credits in three categories: general education, major/minor courses and prerequisites and electives. The key question is, "Will your credits fulfill requirements of the degree or program you choose?" If students change career goals or majors, they might not be able to complete all degree requirements within the usual number of graduation credits.

PREPARING FOR TRANSFER

Students currently enrolled in a college or university should select the more appropriate suggestions as follows:

1. Tell the campus transfer specialist about individual plans. Find out who can help select courses that will transfer.
2. Visit the intended transfer college. Pick up a college catalog and a transfer brochure.

3. Call the intended transfer college. Find out what admissions criteria are for the institution/major of interest. Request transfer application materials.
4. Find out what materials (e.g. portfolio, transcripts, test scores) may be required for admission. Ask whether there are transfer scholarships available and whether there is a deadline for all materials to be submitted. If information about financial aid is needed, find out how to apply and by what date.
5. Make an appointment to talk with an advisor/ counselor in the college or program selected. Ask about course transfer and admission criteria. Prepare for this meeting by reading catalog information about specific majors or areas of interest.
6. If there has been a break in college attendance, meet with an admissions officer at your intended transfer college to plan the necessary steps.

APPLYING FOR TRANSFER ADMISSION

Application for admission is always the first step in transferring. Fill out the application as early as possible prior to the deadline, typically 6-12 months before intended transfer. Enclose the application fee. Request that official transcripts be sent from every institution previously attended. Students might be required to provide a high school transcript or GED test scores as well.

Re-check to be certain that all necessary paper work has been supplied to the college or university. Most colleges make no decisions until all required documents are on file. If no communication has been received from your intended college of transfer after one month, call to check on the status of the application.

After you are notified of acceptance for admission, transcripted credits will be evaluated for transfer. At a minimum, a written evaluation should tell which courses transfer and which do not. How courses specifically meet degree requirements may not be decided until orientation or declaration of a major.

TRANSFERRING

If there are questions about transcript evaluation, call the Admissions Office and ask to speak with the transcript evaluator. Ask why judgments were made about specific courses. Many concerns can be cleared up if you understand why decisions were made. If not satisfied, appeal. See "Your Rights as a Transfer Student" which follows.

For details on transfer of Minnesota Transfer Curriculum, refer to the Minnesota Transfer Curriculum section beginning on page 29.

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.
- A review of eligibility for financial aid or scholarships.

TRANSCRIPTS

Transcripts can only be released with a written request by the student. The request should include the student's name and signature, address, phone number and Social Security number. It should also include the address to which the transcript should be sent. There is a \$7.50 fee for official transcripts. This request should be brought to the Student Services Office or can be accessed [here](#).

MISCELLANEOUS

ALCOHOL/DRUG ABUSE POLICY

Ridgewater College recognizes alcohol and drug misuse and abuse as a potential health, safety, and security problem and that the use of illicit drugs and the unlawful possession and use of alcohol is wrong and harmful. It is the intent of Ridgewater College to provide a drug-free, healthy, safe, and secure educational and work environment.

The College has implemented a program to prevent the illicit use of drugs and abuse of alcohol by students and employees. This policy addresses the issues raised by the Drug-Free Schools and Communities Act Amendments of 1989 (Public Law 101-226). All students and employees will be provided with a copy of the college Alcohol and Drug Abuse Prevention policy annually and must abide by the terms of the policy. The complete policy can be viewed [here](#).

CAMPUS SECURITY

Ridgewater College complies with the Student Right to Know Act of 1990, as amended, and the Higher Education Amendment of 1992. Policies, prevention services, and crime statistics are available in the Student Services Office on either the Hutchinson or Willmar campuses. The campus crime report can be viewed [here](#).

COLLEGE COMPUTERS AND NETWORKS

Use of college computers and networks is meant to further the educational mission of the college, support the instructional objectives of college courses/programs, and enhance the educational experience of students. All rules and regulations in this policy document are designed to support these proper uses. For detailed information concerning student use of college computers and networks, refer to the [Student Handbook](#) online.

DATA PRIVACY POLICY

Students may access Data Privacy information regarding students' rights, responsibilities, and authorizations for the collection and release of data by accessing the following website [here](#).

EMAIL AND INTERNET

All students registering for credit coursework are assigned an official email account upon initial registration. Ridgewater College uses email as the primary method of communication with students. Students are responsible for information, notices, and deadlines disseminated through email.

FAMILY EDUCATION RIGHTS AND PRIVACY ACT (FERPA)

The purpose of the [Family Education Rights and Privacy Act](#) is to afford certain rights to students concerning their education records. The primary rights afforded are the right to inspect and review their 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 College Data Practices Policy can be viewed on our [website](#).

ORIENTATION

Orientation is mandatory for all first-time Ridgewater students. Once students have been accepted, they will be invited to complete an online orientation. At the end of the online orientation, students are directed to sign up for an Advising and Registration session. Students who return after a two-year time lapse will be required to complete another orientation session.

PARKING FOR STUDENTS

For students who bring motor vehicles to campus, the following regulations are in effect:

Registration: All motor vehicles operated by students must be registered with the college.

Parking Permits: A parking permit is issued when a vehicle is registered. Hanging permits are provided for inside rearview mirrors. Each permit will cost \$2.50 per credit taken at the college up to a maximum of \$37.50 per semester. If a student owns more than one vehicle, additional permits may be obtained for \$5 each. Contact the Business Office if a different vehicle has been purchased.

PERSONAL PROTECTIVE EQUIPMENT

Protective equipment, including personal protective equipment for eyes, face, head, and extremities, protective clothing, respiratory devices, and protective shields and barriers, shall be used and maintained in a sanitary and reliable condition by the student. Instructors shall base the requirement for personal protection equipment on an evaluation of the hazard relative to the task(s) to be performed, conditions present, duration of use, and the hazards and potential hazards identified.

Protective eye and face equipment may be required in:

- Science, Medical Assistant, Nursing, Cosmetology, and/or Veter-

General Information

inary Technology classes to protect the student from the specific hazard exposure. Chemical resistant goggles, gloves and face shields are required in some classes and will be enforced by the instructor.

- All shop/lab activities while participating in or in the vicinity of activity that could result in exposure to eye or face hazards from flying particles, molten metal, liquid chemicals, acids or caustic liquids, chemical gases or vapors, or potentially injurious light radiation. Use of industrial quality eyewear with side shields and/or face protection sufficient to protect against the specific hazard exposure will be required and enforced by the instructor. Examples of programs that may require eye and face protection may be: Art, Theater, Science labs, Cosmetology, Auto Body, Auto Mechanics, Agriculture, Electrician, Machine Tool, Carpentry, Welding, and Nondestructive Testing Technology.
- Any student failing to comply with eye and face protection requirements may be temporarily suspended from participation in said course and the registration of a student for such course may be cancelled for willful, flagrant, or repeated failure to observe requirements.

Foot, head and hand protection must be worn when working in areas where there is a danger of foot and/or head injuries due to falling or rolling objects, or objects piercing the sole, and where such employee's feet are exposed to electrical hazards. Hand protection to protect against severe cuts, severe punctures, abrasions or absorption will be required and enforced by the instructor. Programs such as Carpentry, Auto Body, Auto Mechanics, Agriculture, Electrician, Machine Tool, Nondestructive Testing, and Welding, may require hazard-specific PPE.

Respirators are required for Auto Body students. Prior to use of respirator, Auto Body students are required to have completed a medical evaluation and a fit test of the approved respirator.

Any student failing to comply with personal protection (PPE) requirements may be temporarily suspended from participation in said course and the registration of a student for such course may be cancelled for willful, flagrant, or repeated failure to observe requirements.

TITLE IX

It is the policy of the college not to discriminate on the basis of sex in its admissions, educational programs, activities, or employment policies as required by Title IX of the Educational Amendments of 1972. Student inquiries regarding compliance with Title IX may be directed to the Title IX Coordinator, Jay Morrison, at 320-222-8040. You may also contact the Director of the Office of Civil Rights, Department of Education, Washington, D.C.

TOBACCO USE

Smoking in educational facilities in Minnesota is governed by the Clean Indoor Act, Sections 144.411 through 144.417. It ... "prohibits smoking in those places of work where the close proximity of workers or the inadequacy of ventilation causes smoke pollution detrimental to the health and comfort of nonsmoking employees" It provides that ... "the proprietor or other person in charge of a public place shall make

reasonable efforts to prevent smoking in the public place ..." Ridgewater College recognizes that the use of tobacco products poses a hazard to the health of its students, employees and visitors.

To protect the health of the college community and the public, Ridgewater College designates all buildings and college property as tobacco free. Tobacco use in vehicles and equipment owned or leased by the College is also prohibited. Tobacco use in private vehicles in college parking areas is permitted. To the extent possible, Ridgewater College will provide access to cessation programs to help students and employees who presently use tobacco products.

ENFORCEMENT: All Ridgewater College students and employees are expected to share the responsibility for informing others of this policy. Problems unresolved will be referred to the Director of Health and Safety and, if necessary, to higher administrative levels of the College.

EXCEPTIONS: This policy does not prohibit the lighting of tobacco by an adult in an otherwise tobacco-free area as part of a traditional Native American spiritual or cultural ceremony.

STUDENT LIFE

CAMPUS/STUDENT LIFE ACTIVITIES

Student life at Ridgewater College is designed to contribute and enhance the overall development of the individual student by expanding their education beyond the traditional classroom. Students who get involved outside of the classroom tend to do better in the classroom.

Student life is intended to accomplish the following objectives:

- Teach and promote overall student development and success
- Provide growth in cultural awareness
- Integrate with and complement instructional programs
- Promote student and staff interaction
- Create awareness of individual differences
- Assist students in developing positive self-image and self-worth
- Increase student leadership training and opportunities
- Assist students in communicating with others
- Develop personal discipline as well as individual and group commitment, teamwork, and honor
- Assist in clarifying values and improve the physical and psychological well-being of students
- Promote the awareness and utilization of campus facilities
- Promote and disseminate information on student life programs
- Enhance the campus image in the community
- Promote local community identification with the college
- Promote student and community involvement

STUDENT CENTER/COMMONS

Each campus facility may provide various entertainment, novelty programs and educational opportunities for students to enjoy throughout the year. It is equipped with television, pool tables, video games, and board games. It also provides a comfortable atmosphere for students to relax and visit between classes.

STUDENT SENATE

Student leadership is centered in the **Student Senate** which is elected at large from the student body. The senate sponsors campus activities that help to promote social, cultural, intellectual, legislative and recreational activities, and represents the student body on matters of policy through consultation with the college administration. Members of the Student Senates develop leadership skills through opportunities to practice decision making, team building, and problem solving. Interested students should contact the Student Senate Office on either campus.

CULTURAL DIVERSITY

Ridgewater College is committed to providing diverse cultural experiences for its students that promote intercultural understanding through education. In addition to the multicultural opportunities that exist as a part of many of the classes at the college, the college participates in an annual diversity conference sponsored by Minnesota State as well as sponsoring a multicultural week each spring. Students are welcomed and encouraged to attend this conference and any other educational forums focused on diversity during the year. Ridgewater's goal is to increase our students' understanding of individual and group differences, the traditions and values of other cultures, and thereby enhance their recognition of the interdependence of all nations and the impact of that globalization on the world.

CLUBS AND ORGANIZATIONS

The student life program seeks to complement academics by providing an educational environment outside the classroom for all students. The program provides opportunities for individuals to participate in activities geared toward their educational, social, cultural, and recreational interests.

The comprehensive student life program strives to ensure equitable opportunities for both women and men, provide opportunities for all students, and include a fair and open process that integrates students, faculty, and administrators. The college currently has over 25+ active clubs on campus. See the list of **clubs** on the website. NOTE: Club lists subject to change.

HUTCHINSON CAMPUS CLUBS

- Automation/Electronics
- Collegiate DECA
- Computer Systems Technology
- Electrician
- Helping Hands
- Nondestructive Testing (NDT)
- Nursing
- Welding

WILLMAR CAMPUS CLUBS

- | | |
|--------------------------------|-----------------|
| Auto Body | Auto Tech |
| Christians in Action (CIA) | Collegiate DECA |
| Computer Systems Technology | Cosmetology |
| Criminal Justice | Electrician |
| Fine Arts | Jobs & Games |
| Multicultural | Nursing |
| Photography | Rodeo |
| Professional Ag Students (PAS) | VTA/VTPAS |
| Welding | |

ART GALLERY

The Willmar and Hutchinson campuses have art galleries which feature the work of many local artists, photographers, and students.

SPORTS — VARSITY ATHLETICS

Athletics play an important part of student life at Ridgewater College by providing exciting events for students, fans and boosters. Team practices are held on the Willmar campus but students from both campuses may participate. The Ridgewater Warriors compete in the Minnesota College Athletic Conference, Region 13 and national tournaments. Teams have earned a solid reputation as one of the best athletic programs in Minnesota. See more information on the **athletics website**.

Seven sports are offered:

Men:	Women:	Co-Ed:
Baseball	Softball	Clay Target
Basketball	Basketball	
Wrestling	Volleyball	

CAMPUS RECREATION

A variety of activities are also offered. Contact the Student Life Office for a list of activities offered each semester.

Hutchinson Campus: 320-234-8562
Willmar Office: 320-222-5643

MINNESOTA TRANSFER CURRICULUM AND DEGREES, DIPLOMAS, CERTIFICATES

PROGRAMS OF STUDY

MINNESOTA TRANSFER CURRICULUM (MnTC)

The Minnesota Transfer Curriculum (MnTC) is the means by which students will transfer their completed lower division general education requirements to any public university in Minnesota beginning Fall, 1995. The specified transfer curriculum will be accepted as a package, allowing transfer of general education from two-year colleges to universities or for transfers from one university to another.

All such “packaged” courses or transfer curricula are certified by the faculty of the sending institution as meeting the goals and student competencies agreed upon by representatives of all public higher education systems in Minnesota.

Beginning Fall 1995, all students who enroll initially at Ridgewater College will be eligible to complete the MnTC. All new students who seek the Associate in Arts (AA) degree must complete the MnTC. New students who seek the Associate in Science (AS) or Associate in Applied Science (AAS) degree may complete portions of the MnTC.

Students who enrolled at Willmar Community College/Ridgewater College before Fall 1995, and students who transfer credits into Ridgewater College from another school, may be eligible to complete the MnTC. If you are such a student, you must consult with a counselor and/or advisor in order to assess your eligibility and evaluate the MnTC for your specific situation.

Ridgewater College's degrees, and their relation to the MnTC

Ridgewater College offers three degrees:

THE ASSOCIATE IN ARTS (AA) DEGREE. The AA is a transfer degree for which the MnTC was developed. The MnTC is the general education component (40 credits) of the AA Degree. All students seeking an AA Degree who entered Ridgewater College in Fall 1995 or later will take the MnTC as their general education core requirements.

THE ASSOCIATE IN SCIENCE (AS) DEGREE. AS programs are transfer degrees with courses approved by both Ridgewater College and four-year colleges and universities. An Associate in Science program shall include a minimum of 30 semester credits in general education courses. General education courses shall be selected from at least six of the ten goal areas of the MnTC. An AS degree may include the entire MnTC. (Minnesota State Policy 3.17)

ASSOCIATE IN APPLIED SCIENCE (AAS) DEGREE. An AAS program shall include a minimum of 20 semester credits of liberal arts and sciences courses. General education courses shall be selected from at least three of the ten goal areas of the Minnesota Transfer Curriculum. (Minnesota State Policy 3.17)

MINNESOTA TRANSFER CURRICULUM GOALS

The Minnesota Transfer Curriculum has ten goal areas:

1. Communication
2. Critical Thinking
3. Natural Sciences
4. Mathematical/Logical Reasoning
5. History and the Social and Behavioral Sciences
6. The Humanities and Fine Arts
7. Human Diversity
8. Global Perspective
9. Ethical and Civic Responsibility
10. People and the Environment

Ridgewater College courses which apply to the above goal areas are indicated on subsequent pages. An individual course may be used to meet two goal areas. In these instances, the course may be used twice to meet different goals, but the credits can only be counted once.

Academic Advising

It is important that students work closely with their advisor as they plan coursework designed to meet the requirements of the Ridgewater College General Education Minnesota Transfer Curriculum. Advisors will also assist students in achieving their educational goals, such as an Associate in Arts degree or meeting course requirements for a specific major. Students will meet with their advisor each semester prior to registering for classes.

TRANSFER OF THE MINNESOTA TRANSFER CURRICULUM

Transfer from a Minnesota State College or University:

- When a Minnesota State college or university has determined that the entire Minnesota Transfer Curriculum has been completed by a student, the entire Minnesota Transfer Curriculum shall be accepted as complete for the student at Ridgewater College.
- When a Minnesota State college or university has determined that a Minnesota Transfer Curriculum goal area has been completed by a student, the goal area shall be accepted as complete for that student at Ridgewater College.
- When a Minnesota State college or university has determined that a course meets goal area competencies for a student, the goal area competencies shall be accepted as meeting the same goal area at Ridgewater College.

Transfer from the University of Minnesota:

- When the University of Minnesota has determined that the entire Minnesota Transfer curriculum has been completed by a student, the entire Minnesota Transfer Curriculum shall be accepted as complete for that student at Ridgewater College.
- If evidence is presented that another Minnesota State institution has assigned a University of Minnesota course to a goal area, Ridgewater shall accept the course as meeting the same goal area competencies for that student.

Transfer from other Institutions:

- For course credits accepted in transfer from a regionally-accredited institution, Ridgewater College shall determine how each course meets Minnesota Transfer Curriculum requirements. If evidence is presented that another Minnesota State institution has assigned an accredited institution course to a goal area, Ridgewater shall accept the course as meeting the same goal area competencies for that student.
- If evidence is presented that another Minnesota State institution has assigned a non-accredited institution course to a goal area, Ridgewater will not accept the course as meeting goal area competencies. Students with courses from non-regionally accredited institutions must demonstrate learning outcomes by choosing from an option based on Ridgewater College's Credit by Examination/Prior Learning Policy.

The full transfer policy and procedures are available on the Ridgewater College website [here](#).

RIDGEWATER COLLEGE GENERAL EDUCATION/MINNESOTA TRANSFER CURRICULUM DISTRIBUTION

40 Credits of General Education

NOTE: Numbers in parentheses indicate credit value of each course; bracketed numbers indicate cross-listed goals, if applicable.

1. COMMUNICATION

Goal: To develop writers and speakers who use the English language effectively and who read, write, speak and listen critically. There are two options to fulfill Goal One depending on testing placement and educational goals. Please work with your advisor to find the appropriate option for you.

Option 1: 9 credits/3 courses - Must take 1 CMST and 2 ENGL

CMST 1210 - Introduction to Communication (3)
CMST 2200 - Public Speaking (3)
CMST 2250 - Small Group Communication (3)
CMST 2260 - Interpersonal Communication (3) [7]
ENGL 1209 - College Composition I (3)
ENGL 1210 - College Composition I (3)
ENGL 1220 - College Composition II (3)

Option 2: 9 credits/3 courses - Must take 1 CMST and 2 ENGL

CMST 1210 - Introduction to Communication (3)
CMST 2200 - Public Speaking (3)

CMST 2250 - Small Group Communication (3)
CMST 2260 - Interpersonal Communication (3) [7]
ENGL 1209 - College Composition I (3)
ENGL 1210 - College Composition I (3)
ENGL 1230 - Scientific & Technical Writing (3)

2. CRITICAL THINKING

Goal: To develop thinkers who are able to unify factual, creative, rational and value-sensitive modes of thought. This goal will be satisfied by completing one course each from MnTC Goal Areas 1, 3, 4, 5 and 6.

3. NATURAL SCIENCES

Goal: To improve students' understanding of natural science principles and of the methods of scientific inquiry. Students are encouraged to study both the biological and physical sciences.

- Minimum 8 credits/2 disciplines-one from Group A and one from Group B (courses may be cross-listed with Goals 7-10 as indicated below in brackets [])

GROUP A

BIOL 1000 - Introduction to Biology (4) [10]
BIOL 1040 - Introduction to Human Genetics (4)
BIOL 1080 - Human Biology (4)
BIOL 1410 - Environmental Science (4) [10]
BIOL 1510 - People, Sustainability, & Environment (4) [10]
BIOL 2000 - General Biology I (5)
BIOL 2010 - General Biology II (5) [10]
BIOL 2100 - Human Anatomy (4)
BIOL 2110 - Human Physiology (4)
BIOL 2120 - Human Anatomy and Physiology I (4)
BIOL 2130 - Human Anatomy and Physiology II (4)
BIOL 2150 - Microbiology (4)
BIOL 2300 - Genetics (4)
ENVS 1410 - Environmental Science (4) [10]
ENVS 1510 - People, Sustainability, & Environment (4) [10]

GROUP B

CHEM 1000 - Intro to Chemistry (4) [10]
CHEM 1010 - Survey of Chemistry (4) [10]
CHEM 1020 - General Chemistry I (4) [10]
CHEM 1030 - General Chemistry II (4)
CHEM 1510 - Principles of Chemistry I (5) [10]
CHEM 1520 - Principles of Chemistry II (5)
ESCI 1100 - Physical Geology (4) [10]
ESCI 1120 - Introduction to Meteorology (4) [10]
ESCI 1130 - Intro to Astronomy (4)
ESCI 1140 - Natural Disasters (4) [10]
PHYS 1000 - Concepts in Physics (4)
PHYS 1010 - College Physics (4)
PHYS 1020 - College Physics II (4)
PHYS 1210 - General Physics (5)
PHYS 1220 - General Physics II (5)
SCI 1050 - Physical Science (4)
SCI 1060 - Introduction to Forensic Science (4)

4. MATHEMATICAL/LOGICAL REASONING

Goal: To increase students' knowledge about mathematical and logical modes of thinking.

- Minimum 3 credits/1 course

MATH 1000 - Quantitative Reasoning (3)
 MATH 1090 - Elements of Algebra and Trigonometry (4)
 MATH 1100 - Contemporary Concepts in Math (3)
 MATH 1120 - College Algebra (4)
 MATH 1160 - Trigonometry (3)
 MATH 1190 - Accelerated Pre-Calculus (4)
 MATH 1210 - Calculus I: Calc & Analytical Geometry (5)
 MATH 1220 - Calculus II: Calc & Analytical Geometry (5)
 MATH 2010 - Elementary Statistics (3)
 MATH 2070 - Statistics & Its Applications (4)
 MATH 2080 - Statistics for Social and Behavioral Sciences (4)
 MATH 2100 - Introduction to Modern Mathematics I (3)
 MATH 2110 - Introduction to Modern Mathematics II (3)
 MATH 2230 - Calculus III: Calc & Analytical Geometry (4)
 MATH 2330 - Linear Algebra & Differential Equations (5)
 PHIL 1100 - Logic and Critical Thinking (3)
 PSYC 2080 - Statistics for Social and Behavioral Sciences (4)

5. HISTORY AND THE SOCIAL AND BEHAVIORAL SCIENCES

Goal: To increase students' knowledge of how historians and social and behavioral scientists discover, describe and explain the behaviors and interactions among individuals, groups, institutions, events and ideas.

- Minimum 9 credits/2 disciplines required. 3 disciplines recommended. (Courses may be cross-listed with Goals 7-10 as indicated below in brackets [])

ANTH 1010 - Introduction to Cultural Anthropology (3) [8]
 ECON 1950 - Introduction to Economics (3) [9]
 ECON 2060 - Principles of Micro-Economics (3) [10]
 ECON 2070 - Principles of Macro-Economics (3) [8]
 ECON 2080 - Introduction to International Business/Economics (3) [8]
 GEOG 1400 - Introduction to Geography (3) [8]
 GEOG 1410 - World Regional Geography (3) [8]
 HIST 1010 - World History to 1500 (3) [8]
 HIST 1020 - World History 1500 to Present (3) [8]
 HIST 1110 - U.S. History to 1865 (3) [7]
 HIST 1120 - U.S. History 1865 to Present (3) [7]
 HIST 2500 - Minnesota History (3) [7]
 HIST 2570 - Special Topics (1-3) [7]
 HIST 2950 - Selected Topics in History (1-3)
 POLS 1310 - Introduction to Political Science (3) [9]
 POLS 1320 - American National Government (3) [9]
 POLS 1330 - State & Local Government (3) [9]
 POLS 1350 - International Relations (3) [8]
 PSYC 1310 - Introduction to Psychology (4) [7]
 PSYC 1320 - Lab in Introductory Psychology (1)
 PSYC 1650 - Psychology of Women (3) [9]
 PSYC 2120 - Psychology of Aging (3) [7]

PSYC 2470 - International Study (1-3) [8]
 PSYC 2630 - Developmental Psychology (3) [9]
 PSYC 2750 - Abnormal Psychology (3) [10]
 PSYC 2800 - Psychology of Adjustment (3) [9]
 SOC 1050 - Intro to Sociology (3) [7]
 SOC 1060 - General Social Problems (3) [9]
 SOC 1070 - Marriage & Family Living (3) [7]
 SOC 2105 - Native American Studies (3) [7]
 SOC 2250 - Sociology of Gender (3) [7]
 SOC 2400 - Juvenile Delinquency (3)
 SOC 2410 - Criminology (3) [9]
 SOC 2420 - Racial & Cultural Minorities (3) [8]
 SOC 2430 - Sociology of Aging (3) [7]
 SOC 2440 - Sociology of Death and Dying (3) [7]
 SOC 2507 - Topics in Sociology (1-3) [7]
 SOC 2508 - Topics in Sociology (1-3) [8]
 SOC 2509 - Topics in Sociology (1-3) [9]
 SOC 2510 - Topics in Sociology (1-3) [10]

6. THE HUMANITIES AND FINE ARTS

Goal: To expand students' knowledge of the human condition and human cultures, especially in relation to behavior, ideas and values expressed in works of human imagination and thought.

- Minimum 9 credits/2 disciplines (courses may be cross-listed with Goals 7-10 as indicated below in brackets [])

ART 1040 - Survey in Art (3) [7]
 ART 1060 - History of Modern Art (3) [7]
 ART 1070 - Women in Art (2) [7]
 ART 1200 - Introduction to Art Studio (3)
 ART 1250 - Art of Digital Photography (3)
 ART 1300 - Printmaking I (3)
 ART 1400 - Drawing (3)
 ART 1440 - Watercolor (3)
 ART 2260 - Elementary Art Education (3)
 ART 2300 - Two Dimensional Design (3)
 ART 2310 - Three Dimensional Design and Color (3)
 ART 2600 - Ceramics (3)
 ART 2610 - Painting (3)
 CMST 2280 - Argument & Reasoning (3) [9]
 ENGL 1500 - Introduction to Literature (3) [7]
 ENGL 1600 - The Short Story (3) [8]
 ENGL 1700 - World Literature (3) [8]
 ENGL 1800 - American Writers: Modern & Contemporary (3) [9]
 ENGL 1900 - British Writers: Modern and Post-Modern (3) [8]
 ENGL 2110 - Multicultural Literature (3) [7]
 ENGL 2200 - Creative Writing (1-3)
 ENGL 2320 - Fantasy, Fable & Science Fiction (3) [8]
 ENGL 2390 - Gender & Sexuality in Literature (3) [7]
 ENGL 2950 - Special Topics in Literature (3)
 GLST 1010 - Introduction to Global Studies (3) [8]
 GLST 2010 - Global Studies Capstone (1) [8]
 HIST 2100 - East Asian History (3) [8]
 HIST 2220 - Western Civilization II (3) [8]

HIST 2670 - Special Topics (1-3) [7]
 HUM 1050 - The Human Adventure (3) [8]
 HUM 1100 - Leadership Development Studies (3) [9]
 MUSC 1110 - Introduction to Music (3) [8]
 MUSC 1210 - From Bach to Broadway (3) [8]
 MUSC 1220 - Music of the U.S. (3) [7]
 MUSC 1230 - Fundamentals of Music (3)
 MUSC 1300 - Basic Musicianship I (4)
 MUSC 1310 - Basic Musicianship II (4)
 MUSC 1350 - Survey of Rock and Roll Music (3) [7]
 MUSC 1400 - Music in World Cultures (3) [8]
 PHIL 1010 - Introduction to Philosophy (3) [9]
 PHIL 1020 - Introduction to Ethics (3) [9]
 PHIL 1030 - World Religions (3) [8]
 SPAN 2070 - Intermediate Spanish (4) [8]
 SPAN 2080 - Intermediate Spanish (4) [8]
 SPAN 2100 - Culture of Costa Rica Through Study & Immersion (4) [8]
 SPAN 2950 - Special Topics in Spanish-Advanced Language (4) [8]
 Theatre 1400 - Introduction to Theatre (3)
 Theatre 1410 - Introduction to Film (3)
 Theatre 1420 - Theatre Production & Stagecraft (3)
 Theatre 1500 - Beginning Acting (3)
 Theatre 2500 - Intermediate Acting (3)

7. HUMAN DIVERSITY

Goal: To increase students' understanding of individual and group differences (e.g. race, gender, class) and their knowledge of the traditions and values of various groups in the United States.

- 1 course (may be cross-listed with courses from Goals 3-6 as indicated below in brackets [])

ART 1040 - Survey in Art (3) [6]
 ART 1060 - History of Modern Art (3) [6]
 ART 1070 - Women in Art (2) [6]
 CMST 2230 - Listening (3)
 CMST 2260 - Interpersonal Communication (3) [1]
 CMST 2270 - Intercultural Communication (3)
 CMST 2400 - Gender and Communication (3)
 ENGL 1500 - Introduction to Literature (3) [6]
 ENGL 2110 - Multicultural Literature (3) [6]
 ENGL 2390 - Gender & Sexuality in Literature (3) [6]
 HIST 1110 - U.S. History to 1865 (3) [5]
 HIST 1120 - U.S. History 1865 to Present (3) [5]
 HIST 2500 - Minnesota History (3) [5]
 HIST 2570 - Special Topics (1-3) [5]
 HIST 2670 - Special Topics (1-3) [6]
 MUSC 1220 - Music of the U.S. (3) [6]
 MUSC 1350 - Survey of Rock and Roll Music (3) [6]
 PSYC 1310 - Introduction to Psychology (4) [5]
 PSYC 2120 - Psychology of Aging (3) [5]
 SOC 1050 - Introduction to Sociology (3) [5]
 SOC 1070 - Marriage & Family Living (3) [5]
 SOC 2105 - Native American Studies (3) [5]

SOC 2250 - Sociology of Gender (3) [5]
 SOC 2430 - Sociology of Aging (3) [5]
 SOC 2440 - Sociology of Death & Dying (3) [5]
 SOC 2507 - Topics in Sociology (1-3) [5]

8. GLOBAL PERSPECTIVE

Goal: To increase students' understanding of the growing interdependence of nations and peoples and develop their ability to apply a comparative perspective to cross-cultural social, economic and political experiences.

- 1 course (may be cross-listed with courses from Goals 3-6 as indicated below in brackets [])

ANTH 1010 - Intro to Cultural Anthropology (3) [5]
 CMST 2500 - Computer-Mediated Communication (3)
 ECON 2070 - Principles of Macro-Economics (3) [5]
 ECON 2080 - Intro to International Business/Economics (3) [5]
 ENGL 1600 - The Short Story (3) [6]
 ENGL 1700 - World Literature (3) [6]
 ENGL 1900 - British Writers: Modern and Post-Modern (3) [6]
 ENGL 2320 - Fantasy, Fable & Science Fiction (3) [6]
 GEOG 1400 - Introduction to Geography (3) [5]
 GEOG 1410 - World Regional Geography (3) [5]
 GLST 1010 - Introduction to Global Studies (3) [6]
 GLST 2010 - Global Studies Capstone (1) [6]
 HIST 1010 - World History to 1500 (3) [5]
 HIST 1020 - World History 1500 to Present (3) [5]
 HIST 2100 - East Asian History (3) [6]
 HIST 2220 - Western Civilization II (3) [6]
 HUM 1050 - The Human Adventure (3) [6]
 MUSC 1110 - Introduction to Music (3) [6]
 MUSC 1210 - From Bach to Broadway (3) [6]
 MUSC 1400 - Music in World Cultures (3) [6]
 PHIL 1030 - World Religions (3) [6]
 POLS 1350 - International Relations (3) [5]
 PSYC 2470 - International Study (1-3) [5]
 SOC 2420 - Racial & Cultural Minorities (3) [5]
 SOC 2508 - Topics in Sociology (1-3) [5]
 SPAN 1070 - Beginning Spanish I (4)
 SPAN 1080 - Beginning Spanish II (4)
 SPAN 2070 - Intermediate Spanish (4) [6]
 SPAN 2080 - Intermediate Spanish (4) [6]
 SPAN 2100 - Culture of Costa Rica Through Study & Immersion (4) [6]
 SPAN 2950 - Special Topics in Spanish - Advanced Language (4) [6]

9. ETHICAL AND CIVIC RESPONSIBILITY

Goal: To develop students' capacity to identify, discuss, and reflect upon the ethical dimensions of political, social and personal life and to understand the ways in which they can exercise responsible and productive citizenship.

- 1 course (may be cross-listed with courses from Goals 3-6 as indicated below in brackets [])

General Information

CMST 2280 - Argument and Reasoning (3) [6]
CMST 2600 - Organizational Communication (3)
ECON 1900 - Personal Finance (3)
ECON 1950 - Introduction to Economics (3) [5]
ENGL 1800 - English Writers: Modern and Contemporary (3) [6]
HUM 1100 - Leadership Development Studies (3) [6]
PHIL 1010 - Introduction to Philosophy (3) [6]
PHIL 1020 - Introduction to Ethics (3) [6]
POLS 1310 - Introduction to Political Science (3) [5]
POLS 1320 - American National Government (3) [5]
POLS 1330 - State & Local Government (3) [5]
PSYC 1650 - Psychology of Women (3) [5]
PSYC 2630 - Developmental Psychology (3) [5]
PSYC 2800 - Psychology of Adjustment (3) [5]
SOC 1060 - General Social Problems (3) [5]
SOC 2410 - Criminology (3) [5]
SOC 2509 - Topics in Sociology (1-3) [5]

10. PEOPLE AND THE ENVIRONMENT

Goal: To improve students' understanding of today's complex environmental challenges.

- 1 course (may be cross-listed with courses from Goals 3-6 as indicated below in brackets [])

BIOL 1000 - Introduction to Biology (4) [3]
BIOL 1410 - Environmental Science (4) [3]
BIOL 1510 - People, Sustainability, and Environment (4) [3]
BIOL 2010 - General Biology II (5) [3]
CHEM 1000 - Introduction to Chemistry (4) [3]
CHEM 1010 - Survey of Chemistry (4) [3]
CHEM 1020 - General Chemistry I (4) [3]
ESCI 1100 - Physical Geology (4) [3]
ESCI 1120 - Introduction to Meteorology (4) [3]
ESCI 1140 - Natural Disasters (4) [3]
ECON 2060 - Principles of Micro-Economics (3) [5]
ENVS 1410 - Environmental Science (4) [3]
ENVS 1510 - People, Sustainability, and Environment (4) [3]
PSYC 2750 - Abnormal Psychology (3) [5]
SOC 2510 - Topics in Sociology (1-3) [5]

For students seeking the Associate in Arts (AA) degree, it may be necessary to complete up to 7 additional general education credits to meet the Minnesota Transfer Curriculum 40 credit minimum. Additional credits must represent at least two goal areas chosen from areas 3-6.

ACADEMIC ADVISING

Each student is assigned an academic advisor. The advisor is familiar with the college program in the student's area of interest and should be called upon to assist with the following:

- registration
- designing an educational plan to accomplish the student's objectives
- understanding the general education program of the college

- planning for long-range educational goals
- questions, concerns, or problems
- petitions
- transfer advice

It is important that students work closely with their advisor as they plan coursework designed to meet the requirements of the Ridgewater College General Education Minnesota Transfer Curriculum. Advisors will also assist students in achieving their educational goals, such as an Associate in Arts degree or meeting course requirements for a specific major. Students will meet with their advisor each semester prior to registering for classes.

Academic advisors are available by appointment during regularly scheduled office hours.

RIDGEWATER COLLEGE PROGRAM OPTIONS

The following provides definitions and other details concerning degrees, diplomas, and certificates offered by Ridgewater College. Our programs conform to Minnesota State Policy 3.36.

ASSOCIATE IN ARTS (AA) DEGREE

The Associate in Arts (60 credits) is a transfer degree for which the Minnesota Transfer Curriculum (MnTC) was developed. AA degrees are 60 semester credits in length and may be awarded for successful completion of a liberal arts and sciences curriculum designed to constitute the first two years of a baccalaureate degree. In order to graduate in 4 semesters with no summer terms, a student will want to average 15 credits per semester. An AA degree must include the entire MnTC (40 semester credits) which, pursuant to Minnesota Statute, must transfer to any Minnesota State university. Students must, however, be provided proper advising, as they may need to enroll in specific courses to meet general education and program major requirements of a four-year institution. All new students seeking an AA degree who entered Ridgewater College in fall quarter of 1995 or later, must complete the MnTC as the general education core requirement. In addition to the 40 credits in the MnTC, Ridgewater College requires all students to complete two credits of Health and Wellness.

Requirements for the Associate in Arts degree:

1. A minimum of sixty (60) credits numbered 0100 or above, with an overall grade point average of 2.0 (C average) or higher.
2. Orientation requirement satisfied.
3. Satisfactory completion of the Minnesota Transfer Curriculum (MnTC).
4. Two (2) credits from these courses:
 - a. Public Health 1050 - Personal and Community Health
 - b. Public Health 1100 - Drug Education in Contemporary Society
 - c. Physical Education 2200 - First Aid/CPR
 - d. Public Health 1070 - Nutrition
 - e. PE Activity Courses (1020-1400)

ASSOCIATE IN SCIENCE (AS) DEGREE

Associate in Science degrees are 60-64 semester credits in length with courses approved by both Ridgewater College and four-year colleges and universities. They may be awarded for successful completion of a program designed for transfer to a baccalaureate major in a related scientific or technical field, or may be designed for employment. An AS degree must have at least one articulation agreement between the college awarding the AS degree and a four-year institution awarding a related baccalaureate degree. Recipients of the AS degree will be prepared for transfer to baccalaureate majors in the same field.

Students seeking an AS degree will meet some, but not all, of the Minnesota Transfer Curriculum (MnTC) goal areas as part of their degree requirements. The AS degree must include a minimum of 30 semester credits in general education. General education must be selected from at least six of the ten goal areas of the MnTC. The AS degree must transfer pursuant to the terms and conditions of the articulation agreement, and the MnTC courses within the AS degree must transfer to any Minnesota State college or university.

Requirements for the Associate in Science degree:

The Associate in Science degree will include a maximum of 60 to 64 semester credits numbered at 1000 and above, including at least 30 from the Minnesota Transfer Curriculum (MnTC). A majority of the liberal arts and science courses shall be prerequisites to or specifically supportive of courses in the major.

The prerequisite and required courses of the student's curriculum precludes completion of the entire MnTC. The student's transfer needs will be best met, however, through completion of as many of the MnTC's ten goals as possible within the 60- to 64-credit framework of the AS degrees. Orientation and a cumulative grade point average of 2.0 (C average) or higher are required.

ASSOCIATE IN APPLIED SCIENCE (AAS) DEGREE

Associate in Applied Science (AAS) degrees are generally 60 to 72 credits in length and may be awarded for successful completion of a program primarily intended for employment. AAS degrees are typically not designed for transfer. This degree provides excellent preparation for the student planning immediate job entry at the end of two years. This degree requires a combination of technical and general education classes numbered 1000 and above. General education classes must be included in the degree from at least three of the ten goal areas of the Minnesota Transfer Curriculum (MnTC). The MnTC courses within the AAS degree must transfer to any Minnesota State college or university.

Several AAS degree programs are articulated with Bachelor of Applied Science (BAS) degrees. In these cases, the AAS degree must transfer pursuant to the terms and conditions of the articulation agreement, and the MnTC courses within the AAS degree must transfer to any Minnesota State college or university. See your faculty advisor or a college counselor for additional information.

DIPLOMA

Diplomas are 31 to 72 semester credits in length and may be awarded for successful completion of a program intended to provide students with employment skills. Diplomas are typically not designed for transfer. Any Minnesota Transfer Curriculum courses within a diploma must transfer to any Minnesota State college or university. The diploma is awarded to students who complete the technical and general studies requirements pertaining to the program. To qualify for a diploma, the student must complete the entire individual program curriculum as outlined in this catalog with a cumulative grade point average of at least 2.0 (C).

CERTIFICATES

Certificates are 9 to 30 semester credits in length and may be awarded for successful completion of a specialized program of study. Certificates are typically not designed for transfer. Any Minnesota Transfer Curriculum courses within a certificate must transfer to any Minnesota State college or university.

TRANSFER PATHWAYS

Minnesota State Transfer Pathways are designed so you can complete a specific associate degree at a Minnesota State college and transfer to a Minnesota State university to earn a bachelor's degree without losing credits or taking extra courses. Transfer Pathways can be a great resource for saving time and money as you work toward graduation.

If you complete a Transfer Pathway degree program at a Minnesota State college and are admitted to any of the 7 Minnesota State universities, you will be guaranteed junior status and given assurance that all 60 college credits will count toward the related bachelor's degree.

A student must still meet any special admission requirement for the major and is not guaranteed admission into the major itself.

Ridgewater College's Pathways

Ridgewater College is excited to offer transfer pathways in conjunction with our university partners. While additional pathways are in the works we currently offer pathways in:

General Information

Business

- Bemidji State University
- Metropolitan State University
- Minnesota State University - Mankato
- Minnesota State University - Moorhead
- Southwest Minnesota State University
- St. Cloud State University
- Winona State University

Communication Studies

- Metropolitan State University
- Minnesota State University - Mankato
- Southwest Minnesota State University
- St. Cloud State University
- Winona State University

Criminal Justice

- Bemidji State University
- Metropolitan State University
- Minnesota State University - Mankato
- Minnesota State University - Moorhead
- St. Cloud State University

Education

- Bemidji State University
- Metropolitan State University
- Minnesota State University - Mankato
- Minnesota State University - Moorhead
- Southwest Minnesota State University - Marshall
- St. Cloud State University
- Winona State University

English

- Bemidji State University
- Metropolitan State University
- Minnesota State University - Mankato
- Minnesota State University - Moorhead
- Southwest Minnesota State University
- St. Cloud State University
- Winona State University

Law Enforcement

- Bemidji State University
- Metropolitan State University
- Minnesota State University - Mankato
- Minnesota State University - Moorhead
- Southwest Minnesota State University
- Winona State University

Psychology

- Bemidji State University
- Metropolitan State University
- Minnesota State University - Mankato
- Minnesota State University - Moorhead
- Southwest Minnesota State University
- St. Cloud State University
- Winona State University

CAREER/TECHNICAL PROGRAMS

PROGRAMS OF STUDY	AWARDS	CAMPUS LOCATION ONLINE/BLENDED
Accountant	AAS/Diploma	O
Accounting Clerk / Accounting Technician	Diploma	O
Activity Director	AAS/Certificate	O
Administrative Assistant	AAS/Diploma/Certificate	H, W, O
Agri Business	AAS/Diploma	W, O
Agriculture Power and Equipment Technician	Diploma	W
Agronomy Applicator Technician	Diploma	W
Agronomy Technology	Diploma	W
Auto Body Collision Technology	AAS/Diploma	W
Automation and Robotic Systems Technology	AAS/Diploma/Certificate	H
Automotive Service Technology	AAS/Diploma	W
CNC Precision Manufacturing Technician	AAS/Diploma/Certificate	H
CNC Technician - NEW!	Diploma	W
Computer-Aided Drafting and Design	AAS/Diploma/Certificate	O
Computer Programming	AAS/Diploma/Certificate	H, W, B, O
Computer Support Technician	AAS/Diploma/Certificate	H, W, B
Cosmetology	AAS/Diploma	W
Dairy Management	AAS/Diploma	W
Electrician	AAS/Diploma, Certificate	H, W
Electrical Technology	Diploma	W, B
Emergency Medical Technician	Certificate	H, W
Entrepreneurship	Certificate	H, W, O
Estheology / Advanced Esthetics	AAS/Certificate	W
Farm Operation and Management	AAS/Diploma	W
Healthcare Administrative Assistant	AAS/Diploma/Certificate	O
Health Information Technician	AAS	O
HelpDesk	Certificate	H, W
Law Enforcement	AAS	H, W, O
Legal Assistant	AAS/Diploma/Certificate	O
Linux Administrator	Certificate	H
Machining Technician	Diploma	H
Manufacturing Production Technologies	Certificate	H
Marketing and Design	AAS	H, W, B
Marketing and Sales Management	AAS/Diploma	H, W
Massage Therapy	AAS/Diploma	H, W
Medical Assistant	AAS/Diploma/Certificate	H, W
Medical Coding Specialist	Diploma	O
Multimedia Design Technology	AAS/Diploma	O
Nail Technology	Certificate	W
Network Administration and Security	AAS/Diploma/Certificate	H, W, B
Nondestructive Testing Technology	AAS/Diploma	H
Nursing - Practical Nursing	Diploma	H, W
Occupational Skills	Diploma/Certificate	W
Office Assistant	Diploma	O

General Information

PROGRAMS OF STUDY	AWARDS	CAMPUS LOCATION ONLINE/BLENDED
Paramedic	AAS/Diploma	H, W, B
Phlebotomist	Certificate	H, W
Poultry Management	Certificate	O
Precision Agriculture	AAS/Diploma/Certificate	W
Process Controls Technician	AAS/Diploma	H
Photography and Design	AAS, Diploma	O
Professional Photography	AAS/Diploma/Certificate	O
Sales and Management Associate	Diploma	H, W
Veterinary Technology	AAS	W
Web Developer	AAS/Diploma	H, W, O
Welding	AAS, Diploma	H, W
Windows Administrator	Certificate	H, W

LIBERAL ARTS AND GENERAL EDUCATION

PROGRAMS OF STUDY	AWARDS	CAMPUS LOCATION ONLINE/BLENDED
Agricultural Science and Technology (Ag Ed)	AS	W
Business Transfer Pathway	AS	H, W
Communication Studies	Certificate	H, W
Communication Studies Transfer Pathway	AA	H, W
Criminal Justice Transfer Pathway	AS	W, O
Early Childhood Education Transfer Pathway	AS/Certificate	H, W
Elementary Ed Foundations Transfer Pathway	AS	H, W
English Transfer Pathway	AA	H, W
Global Studies	Certificate	H, W
Health Sciences Broadfield	AS	H, W
Law Enforcement Transfer Pathway	AS	W, O, B
Liberal Arts	AA	H, W, O
Nursing (MANE)	AS/BSN	H, W
Physical Education Teaching and Coaching	Certificate	W
Psychology Transfer Pathway	AA	H, W
Special Education Transfer Pathway	AS/Certificate	H, W

While many of these programs do not offer a degree option, they are specifically designed to provide students with a foundation of a professional or graduate level degree.

Pre-Accounting Information Systems
 Pre-Chiropractic
 Pre-Dentistry
 Pre-Engineering
 Pre-Law
 Pre-Medical Technology
 Pre-Medicine

Pre-Nursing
 Pre-Occupational Therapy
 Pre-Optometry
 Pre-Pharmacy
 Pre-Physical Therapy
 Pre-Veterinary Medicine

ADVANCED MANUFACTURING AND ENGINEERING TECHNOLOGY



AUTOMATION AND ROBOTIC SYSTEMS TECHNOLOGY

Hutchinson Campus

Diploma/AAS Degree – 64/67 credits

Certificates - 30/16 credits

The Automation and Robotic Systems Technology program brings the modern manufacturing environment into the classroom. Graduates are equipped with the skills needed to enter the advanced manufacturing industry. The program also offers current manufacturing employees an opportunity to update their skills and create opportunities for promotion to better paying jobs. This program participates in Articulated College Credit partnerships. Refer to page 6.

Diploma

Required Courses		56 Credits
CMAE 1514	Safety Awareness	.2
CMAE 1522	Quality Practices	.2
CST 1620	C# Programming	.4
CST 1794	Introduction to Programming	.3
DRFT 1503	Interpreting Engineering Drawings	.2
ELEC 1814	Electronics 1	.3
ELEC 1815	Electronics 2	.3
ELEC 2424	Troubleshooting Techniques	.3
ENGT 1103	Mechanical Systems	.2
ENGT 1203	Control Systems I	.3
ENGT 1205	Electro Mechanical Devices	.3
ENGT 1211	Industrial Electricity	.3
ENGT 1221	Process Control I	.2
ENGT 1230	Fundamentals of Machine Vision	.2
ENGT 1240	Fundamentals of Robotics	.3
ENGT 1301	Fluid Power	.2
ENGT 1701	Industrial Networking	.2
ENGT 2105	Motion Control	.3
ENGT 2203	Control Systems II	.3
MACT 1190	Principles of Machining Operations	.2
Total Credits:		.56

Elective Courses (select 8 credits from the courses below)

CMAE 1518	Manufacturing Processes	.2
CMAE 1526	Maintenance Awareness	.2

CST xxxx	Choose any CMST course	.3
CST 1510	System Diagnostics	.3
DRFT 1502	CAD I	.3
DRFT 2504	Electronic/Electrical Drawings	.2
ENGT 1110	Fundamentals of Low Pressure Boilers	.2
ENGT 2900	Internship	1-5*
ENGT 2950	Special Projects/Topics	1-5*
WELD 1190	Welding for Non-Welding Majors	.2
GSCM 1122	Oral and Written Communication	.2
GSMS 1222	Applied Elementary Algebra	.2
MATH 1000	Quantitative Reasoning	.3

Total Credits: .8

Total Diploma Credits: .64

*Credits for this course are variable. See your advisor about this course.

AAS Degree

Required Courses		50 Credits
CMAE 1514	Safety Awareness	.2
CMAE 1522	Quality Practices	.2
CST 1794	Introduction to Programming	.3
CST 1620	C# Programming	.4
DRFT 1503	Interpreting Engineering Drawings	.2
ELEC 1814	Electronics 1	.3
ELEC 1815	Electronics 2	.3
ELEC 2424	Troubleshooting Techniques	.3
ENGT 1103	Mechanical Systems	.2
ENGT 1203	Control Systems I	.3
ENGT 1205	Electro Mechanical Devices	.3
ENGT 1211	Industrial Electricity	.3
ENGT 1221	Process Controls	.2
ENGT 1230	Fundamentals of Machine Vision	.2
ENGT 1240	Fundamentals of Robotics	.3
ENGT 1301	Fluid Power	.2
ENGT 1701	Industrial Networking	.2
ENGT 2105	Motion Control	.3
ENGT 2203	Control Systems II	.3
Total Credits:		50

Programs of Study

Elective Courses (select 2 credits from the courses below)

CMAE 1518	Manufacturing Processes	.2
CMAE 1526	Maintenance Awareness	.2
CST 1510	System Diagnostics	.3
DRFT 1502	CAD I	.3
DRFT 2504	Electronic and Electrical Drawings	.2
ENGT 1110	Fundamentals of Low Pressure Boilers	.2
ENGT 1505	Predictive Maintenance	.2
ENGT 2900	Internship	1-3*
ENGT 2950	Special Projects/Topics	1-3*
GSCM 1122	Oral and Written Communication	.2
GSMS 1222	Applied Elementary Algebra	.2
MACT 1190	Principles of Machining Operations	.2
MACT 1801	Fundamentals of Precision Manufacturing	.2
WELD 1190	Fundamentals of Welding	.2

Total Credits: .2

General Education Courses (15 credits required)

MNTC Goal Area I: Choose one course .3
Choose one of the following math options:

MATH 1000	Quantitative Reasoning	.3
Math 0109	Elements of Algebra & Trigonometry	.4
Math 0112	College Algebra	.4

Total Credits: .6-7

General Education Elective Courses

General Education courses must be selected from at least three of the ten goal areas of the Minnesota Transfer curriculum. Electives can be taken from any goal area. See your advisor to select courses that fulfill this requirement.

Total Credits: 8-9

Total General Education Credits 15

Total AAS Degree Credits: .67

*Credits for this course are variable. See your advisor about this course.

Process Controls Technician Diploma

Required Courses .38 Credits

CMAE 1514	Safety Awareness	.2
CMAE 1518	Manufacturing Processes	.2
CST 1794	Introduction to Programming	.3
DRFT 1503	Interpreting Engineering Drawings	.2
ELEC 1814	Electronics 1	.3
ELEC 1815	Electronics 2	.3
ENGT 1103	Mechanical Systems	.2
ENGT 1203	Control Systems I	.3
ENGT 1205	Electro Mechanical Devices	.3
ENGT 1211	Industrial Electricity	.3
ENGT 1221	Process Controls	.2
ENGT 1301	Fluid Power	.2
ENGT 2203	Control Systems II	.3

Total Credits: .38

Elective Courses 13 Credits

CMAE 1522	Quality Practices	.2
CMAE 1526	Maintenance Awareness	.2
CST 1001	Solving Computer Problems	.2
CST 1801	Visual Basic 1	.4
DRFT 1502	CAD I	.3
DRFT 2504	Electronic/Electrical Drawings	.2
ELEC 1816	Electronics 3	.3
ELEC 2624	Micro Controllers	.2
ENGT 1110	Fundamentals of Low Pressure Boilers	.2

ENGT 1505	Predictive Maintenance	.2
ENGT 1701	Industrial Networking	.2
ENGT 2105	Motion Control	.3
ENGT 2900	Internship	1-5
ENGT 2950	Special Projects/Topics	1-5
GSCM 1102	Applied Written Communication	.2
GSMS 1222	Applied Elementary Algebra	.2
GSWS 1401	Employment Prep and Retention	.1
GSWS 1451	First Aid/Safety	.1
WELD 1190	Fundamentals of Welding	.2

Total Credits 13

Total Diploma Credits: 51

Process Controls Technician AAS Degree

Required Courses 37 Credits

CST 1794	Introduction to Programming	.3
CST 1801	Visual Basic I	.4
DRFT 1503	Interpreting Engineering Drawings	.2
ELEC 1814	Electronics 1	.3
ELEC 1815	Electronics 2	.3
ELEC 1816	Electronics 3	.3
ELEC 2424	Troubleshooting Techniques	.3
ENGT 1103	Mechanical Systems	.2
ENGT 1203	Control Systems I	.3
ENGT 1205	Electro Mechanical Devices	.3
ENGT 1211	Industrial Electricity	.3
ENGT 1221	Process Controls	.2
ENGT 2203	Control Systems II	.3

Total Credits: 37

Elective Courses (select 8 credits from the courses below)

CST 1001	Solving Computer Problems	.2
DRFT 1001	Principles of Engineering/Engineering Tech	.1
DRFT 1500	Drafting Basics	.2
DRFT 1502	CAD I	.3*
DRFT 2504	Electronic and Electrical Drawings	.2
ENGT 1301	Fluid Power	.2
ENGT 1505	Predictive Maintenance	.2
ENGT 2105	Motion Control	.3
ENGT 2900	Internship	1-5*
ENGT 2950	Special Projects/Topics	1-5*
GSWS 1451	First Aid/CPR	.1
MACT 1801	Fundamentals of Precision Manufacturing	.2
NDT 1100	Manufacturing Processes	.2
WELD 1190	Fundamentals of Welding	.2

Total Credits: 8

General Education Electives:

A total of 15 general education credits are required. Courses must be selected from at least three (3) of the ten (10) goal areas of the Minnesota Transfer Curriculum.

Goal 1: Communications (choose one)

Goal 4: Mathematical/Logical Reasoning (choose one)

General Ed Electives (choose from any MnTC Goal Area)

Total General Education Electives 15

Total Program Credits 60

Certificate - Process Controls

Required Courses

ENGT 1203	Control Systems I . . . . .	.3
ENGT 1205	Electro Mechanical Devices . . . . .	.3
ENGT 1211	Industrial Electricity . . . . .	.3
ENGT 1230	Fundamentals of Machine Vision . . . . .	.3
ENGT 1240	Fundamentals of Robotics . . . . .	.3
ENGT 1301	Fluid Power . . . . .	.2
ENGT 2105	Motion Control . . . . .	.2
ENGT 2203	Control Systems. . . . .	.3
ENGT 2950	Special Projects/Topics . . . . .	.2-4

Choose one of two options:

CST 1801	Visual Basic 1. . . . .	.4
CST 1620	C# Programming . . . . .	.4

Total Certificate Credits 30

Certificate - Manufacturing Production Technologies

Required Courses

CMAE 1514	Safety Awareness . . . . .	.2
CMAE 1518	Manufacturing processes and Production. . . . .	.2
CMAE 1522	Quality Practices . . . . .	.2
CMAE 1526	Maintenance Awareness . . . . .	.2

Elective Courses: 8 credits

DRFT 1502	CAD I . . . . .	.3
DRFT 1503	Interpreting Engineering Drawings. . . . .	.2
ELEC 1814	Electronics 1 . . . . .	.3
ENGT 1103	Mechanical Systems . . . . .	.2
ENGT 1203	Control Systems I . . . . .	.3
GSCM 1122	Applied Oral and Written Communications . . . . .	.2
GSMS 1222	Applied Elementary Algebra . . . . .	.2
MACT 1190	Principles of Machining Operations . . . . .	.2
WELD 1190	Fundamentals of Welding . . . . .	.2

Total Certificate Credits 16

COMPUTER AIDED DRAFTING AND DESIGN

Online

Diploma - 64 credits/AAS - 67 credits/Certificate - 29 credits

Computer Aided Drafting and Design is the process of visualizing and developing three-dimensional drawings that production workers use to fabricate and assemble products. Students will develop entry-level drafting skills on state-of-the-art equipment and software used in industry today. This program participates in Articulated College Credit partnerships. Refer to page 6.

Diploma

Required Courses 49 Credits

DRFT 1500	Drafting Basics . . . . .	.2
DRFT 1502	CAD I . . . . .	.3
DRFT 1503	Interpreting Engineering Drawings . . . . .	.2
DRFT 1504	Technical Sketching . . . . .	.2
DRFT 1508	Applied Math . . . . .	.2
DRFT 1510	CAD II . . . . .	.3
DRFT 1511	Intersections and Development . . . . .	.3
DRFT 1512	Dimensioning Principles . . . . .	.3
DRFT 2500	Design Drafting I . . . . .	.4
DRFT 2501	Geometric Dimensioning and Tolerancing . . . . .	.3
DRFT 2503	Parametric Design I . . . . .	.3
DRFT 2504	Electronic and Electrical Drawings . . . . .	.2

DRFT 2506	Sheet Metal Design . . . . .	.2
DRFT 2510	Design Drafting II . . . . .	.4
DRFT 2512	Technical References . . . . .	.2
DRFT 2513	Parametric Design II . . . . .	.3
DRFT 2515	Parametric Design III . . . . .	.3
DRFT 2516	Advanced Parametrics . . . . .	.3

Total Credits: 49

Elective Courses (select 15 credits from the courses below)

CMAE 1518	Manufacturing Processes and Production . . . . .	.2
CMAE 1522	Quality Practices . . . . .	.2
CMAE 1528	Career Success Skills . . . . .	.1
GSCI 1401	Computer Technology . . . . .	.1
GSCM 1122	Oral and Written Communications . . . . .	.2
GSIS 1502	Human Relations . . . . .	.2
GSIS 1602	Personal Financial Management . . . . .	.2
GSWS 1401	Employment Preparation . . . . .	.1
DRFT 1001	Principles of Engineering/Engineering Tech . . . . .	.1
DRFT 1002	Fundamentals of Parametric Design. . . . .	.2
DRFT 1506	Manufacturing Processes . . . . .	.2
DRFT 2502	Fixture Design and Tooling . . . . .	.2
DRFT 2505	Computer Aided Manufacturing . . . . .	.2
DRFT 2900	Internship	1-6
DRFT 2950	Special Projects/Topics	1-6
ENGT 1103	Mechanical Systems . . . . .	.2
ENGT 1301	Fluid Power . . . . .	.2
MACT 1190	Principles of Machining Operations . . . . .	.2
ONCR 1000	OnCourse . . . . .	.3
WELD 1190	Fundamentals of Welding . . . . .	.2

Total Credits: 15

Total Diploma Credits: 64

AAS Degree

Required Courses 49 Credits

DRFT 1500	Drafting Basics . . . . .	.2
DRFT 1502	CAD I . . . . .	.3
DRFT 1503	Interpreting Engineering Drawings . . . . .	.2
DRFT 1504	Technical Sketching . . . . .	.2
DRFT 1508	Applied Math . . . . .	.2
DRFT 1510	CAD II . . . . .	.3
DRFT 1511	Intersections and Development . . . . .	.3
DRFT 1512	Dimensioning Principles . . . . .	.3
DRFT 2500	Design Drafting I . . . . .	.4
DRFT 2501	Geometric Dimensioning and Tolerancing . . . . .	.3
DRFT 2503	Parametric Design I . . . . .	.3
DRFT 2504	Electronic and Electrical Drawings . . . . .	.2
DRFT 2506	Sheet Metal Design . . . . .	.2
DRFT 2510	Design Drafting II . . . . .	.4
DRFT 2512	Technical References . . . . .	.2
DRFT 2513	Parametric Design II . . . . .	.3
DRFT 2515	Parametric Design III . . . . .	.3
DRFT 2516	Advanced Parametrics . . . . .	.3

Total Credits: 49

Elective Courses (select 3 credits from the courses below)

CMAE 1518	Manufacturing Processes and Production . . . . .	.2
CMAE 1522	Quality Practices . . . . .	.2
CMAE 1528	Career Success Skills . . . . .	.1
GSCI 1401	Computer Technology . . . . .	.1
DRFT 1001	Principles of Engineering/Engineering Tech . . . . .	.1
DRFT 1002	Fundamentals of Parametric Design. . . . .	.2
DRFT 1506	Manufacturing Processes . . . . .	.2

Programs of Study

DRFT 2502	Fixture Design and Tooling	2
DRFT 2505	Computer Aided Manufacturing	2
DRFT 2900	Internship	1-6
DRFT 2950	Special Projects/Topics	1-6
ENGT 1103	Mechanical Systems	2
ENGT 1301	Fluid Power	2
MACT 1190	Principles of Machining Operations	2
ONCR 1000	OnCourse	3
WELD 1190	Fundamentals of Welding	2
Total Credits:		3

Goal Area 1: Communications (choose one)
Choose any course from Goal 13

Goal Area 4: Mathematics/Logical Reasoning (choose one)		
MATH 1000	Quantitative Reasoning	3
MATH 1090	Elements of Algebra and Trigonometry	4
MATH 1120	College Algebra	4
MATH 1160	Trigonometry	3

General Education Electives:

Select 8-9 credits of general education courses from at least three of the 10 goal areas of the Minnesota Transfer Curriculum with recommendations from advisor. Recommended elective general courses include the following:

CHEM 1010	Survey of Chemistry	4
CMST 1210	Intro to Communication	3
CMST 2200	Public Speaking	3
CMST 2250	Small Group Communication	3
ECON 1900	Personal Finance	3
ECON 1950	Introduction to Economics	3
ENGL 1210	Collect Composition I	3
ENGL 1220	College Composition II	3
ENGL 1230	Technical & Scientific Communications	3
MATH 1000	Quantitative Reasoning	3
MATH 1090	Elements of Algebra and Trigonometry	4
MATH 1120	College Algebra	4
MATH 1160	Trigonometry	3
MATH 2010	Elementary Statistics	3
PHIL 1100	Logic and Critical Thinking	3
PHYS 1000	Concepts in Physics	4
PHYS 1010	College Physics	4
PSYC 1310	Introduction to Psychology	4

Total AAS Degree Credits67

Certificate - Computer Aided Technician

Required Courses		23 Credits
DRFT 1500	Drafting Basics	2
DRFT 1502	CAD I	3
DRFT 1503	Interpreting Engineering Drawings	2
DRFT 1504	Technical Sketching	2
DRFT 1510	CAD II	3
DRFT 1511	Intersections and Development	3
DRFT 1512	Dimensioning Principles	3
DRFT 2501	Geometric Dimensioning and Tolerances	3
DRFT 2512	Technical References	2

Parametric Courses (choose 6 credits)

DRFT 2503	Parametric Design I	3
DRFT 2513	Parametric Design II	3
DRFT 2515	Parametric Design III	3
DRFT 2516	Advanced Parametrics	3

Total Certificate Credits29

MACHINE TOOL CAREERS

Hutchinson Campus

Diploma/AAS Degree – 32/64/67 Credits

Certificate - 21 credits

Machining is a craft that provides the key to modern manufacturing. The machinist shapes and finishes the metal parts that go into every consumer product. Ridgewater College graduates are in every area of manufacturing including machine operation, plant management, and sales of machine tools. The lab is state-of-the-art with equipment found in high-tech manufacturing firms like Computer Numerical Control (CNC) machines and CAD/CAM. This program participates in Articulated College Credit partnerships. Refer to page 6.

CNC Precision Manufacturing Technician Diploma

Required Courses		Credits
CMAE 1514	Safety Awareness	2
CMAE 1518	Manufacturing Processes	2
CMAE 1522	Quality Practices	2
CMAE 1526	Maintenance Awareness	2
CMAE 1528	Career Success Skills	1
MACT 1005	Blueprint Reading	2
MACT 1508	Applied Math	2
MACT 1801	Fundamentals of Precision Manufacturing	2
MACT 1812	Fixture Design and Tooling	2
MACT 1831	Manual Lathe Operations	3
MACT 1840	2-Axis CNC I	3
MACT 1900	Advanced Manual Lathe and Mill Operations	3
MACT 2506	Reverse Engineering for Machinists	3
MACT 2507	Practical Applic. of Geometric Dimensioning/Tolerancing	2
MACT 2803	Precision Grinding	2
MACT 2811	CNC Programming and Set-up Mill	3
MACT 2813	CNC Vertical Machining Centers	3
MACT 2815	CNC Programming and Set-up Lathe	3
MACT 2820	Mentorship I	1
MACT 2821	Mentorship II	2
MACT 2826	Computer Assisted Machining I	3
MACT 2827	Computer Assisted Machining II	3
MACT 2890	CNC Turning Centers	3
MACT 2899	Advanced CNC	6
Total Credits:		61

Elective Courses (select 3 credits from the courses below)..... Credits

DRFT 1001	Principles of Engineering/Engr. Technology	1
DRFT 1502	CAD I	3
ENGT 1103	Mechanical Systems	2
ENGT 1301	Fluid Power	2
MACT 1190	Principles of Machining Operations	2
MACT 2503	Parametric Design	3
MACT 2950	Special Topics/Projects	1-6
NDT 1100	Manufacturing Processes	2
ONCR 1000	OnCourse	3
WELD 1190	Fundamentals of Welding	2
Any MNTC Goal Area 1 course		3

Total Credits:3

Total Diploma Credits: 64

CNC Precision Manufacturing Technician AAS Degree

Required Courses	Credits
CMAE 1514 Safety Awareness	2
MACT 1005 Blueprint Reading	2
MACT 1801 Fundamentals of Precision Manufacturing	2
MACT 1812 Fixture Design and Tooling	2
MACT 1831 Manual Lathe Operations	3
MACT 1840 2-Axis CNC I	3
MACT 1900 Advanced Manual Lathe and Mill Operations	3
MACT 2506 Reverse Engineering for Machinists	2
MACT 2507 Practical Application of Geometric Dimensioning and Tolerancing	2
MACT 2803 Precision Grinding	2
MACT 2811 CNC Programming and Set-up Mill	3
MACT 2813 CNC Vertical Machining Centers	3
MACT 2815 CNC Programming and Set-up Lathe	3
MACT 2820 Mentorship I	1
MACT 2821 Mentorship II	2
MACT 2826 Computer Assisted Machining I	3
MACT 2827 Computer Assisted Machining II	3
MACT 2890 CNC Turning Centers	3
MACT 2899 Advanced CNC	6
Total Credits:	52

Elective Courses (not required)

CMAE 1518 Manufacturing Processes	2
CMAE 1522 Quality Practices	2
CMAE 1526 Maintenance Awareness	2
CMAE 1528 Career Success Skills	1
DRFT 1502 CAD I	3
ENGT 1103 Mechanical Systems	2
ENGT 1301 Fluid Power	2
MACT 1190 Principles of Machining Operations	2
MACT 1508 Applied Math	2
MACT 2503 Parametric Design I	3
MACT 2950 Special Topics/Projects	1-6
NDT 1100 Manufacturing Processes	2
ONCR 1000 OnCourse	3
WELD 1190 Fundamentals of Welding	2

General Education Courses

Goal Area 1: Communications: Choose one course. 3

Goal Area 4: Mathematics/Logical Reasoning: (choose one)

MATH 1000 Quantitative Reasoning	3
MATH 1090 Elements of Algebra & Trigonometry	4
MATH 1120 College Algebra	4

General Education Electives:

Select 8-9 credits with recommendations from advisor. General Education courses must be selected from at least 3 of the ten 10 goal areas of the Minnesota Transfer Curriculum. Courses can be taken from any of the ten (10) goal areas.

Total General Education Credits: 15
Total AAS Degree Credits: 67

CNC Technician Diploma

Required Courses	Credits
CMAE 1514 Safety Awareness	2
CMAE 1528 Career Success Skills	1
MACT 1005 Blueprint Reading	2
MACT 1190 Principles of Machining Operations	2
MACT 1507 GD & T Basics	1
MACT 1508 Applied Math	2
MACT 1802 Precision Measurement and Inspection	1
MACT 1804 Basic Shop Maintenance	1
MACT 2811 CNC Programming and Set-up Mill	3
MACT 2815 CNC Programming and Set-up Lathe	3
MACT 2506 Reverse Engineering for Machinists	3
MACT 2813 CNC Vertical Machining Centers	3
MACT 2826 Computer-Assisted Machining I	3
MACT 2890 CNC Turning Centers	3
Total Credits:	32

Elective Courses

CMAE 1518 Manufacturing Processes	2
CMAE 1522 Quality Practices	2
CMAE 1526 Maintenance Awareness	2
COLL 1000 College Success: Get On Course	3
DRFT 1502 CAD 1	3
MACT 2950 Special Topics/Projects	2
WELD 1190 Fundamentals of Welding	2
Any MNTC Goal Area 1 course	3
Total Elective Credits:	2
Total Diploma Credits	32

Machining Technician Diploma

CMAE 1514 Safety Awareness	2
CMAE 1518 Manufacturing Processes	2
CMAE 1522 Quality Practices	2
MACT 1005 Blueprint Reading	2
MACT 1508 Applied Math	2
MACT 1801 Fundamentals of Precision Manufacturing	2
MACT 1812 Fixture Design and Tooling	2
MACT 1831 Manual Lathe Operations	3
MACT 1840 Manual Mill Operations	3
MACT 1900 Advanced Manual Lathe & Mill Operations	3
MACT 2507 Practical Applic. of Geometric Dimensioning/Tolerancing	2
MACT 2811 CNC Programming and Set-up Mill	3
MACT 2815 CNC Programming and Set-up Lathe	3
Total Credits:	31

Elective Courses (select 1 credit from the courses below)

CMAE 1526 Maintenance Awareness	2
CMAE 1528 Career Success Skills	1
DRFT 1502 CAD I	3
ENGT 1103 Mechanical Systems	2
ENGT 1301 Fluid Power	2
MACT 1190 Principles of Machining Operations	2
MACT 2950 Special Topics/Projects	1-4
NDT 1100 Manufacturing Processes	2
ONCR 1000 OnCourse	3
WELD 1190 Fundamentals of Welding	2
Total Credits:	1
Total Diploma Credits:	32

Programs of Study

Computer Numerical Control Technician Certificate

Required Courses	Credits
MACT 2506 Reverse Engineering for Machinists	3
MACT 2813 CNC Vertical Machining Centers	3
MACT 2826 Computer Assisted Machining I	3
MACT 2827 Computer Assisted Machining II	3
MACT 2890 CNC Turning Centers	3
MACT 2899 Advanced CNC	6
Total Certificate Credits	21

NONDESTRUCTIVE TESTING TECHNOLOGY (NDT)

Hutchinson Campus

Diploma/AAS Degree – 64 Credits

Nondestructive testing is the examination of an object or material using nondestructive means which does not affect its future usefulness. Career opportunities exist in the aerospace, power, petrochemical, construction and manufacturing industries. Students study the theory of each NDT method and spend much of their time working in a fully equipped lab. They receive hands-on training in the methods of x-ray and isotope radiography, ultrasonics, eddy current, liquid penetrant, magnetic particle, and visual inspection. This program is recognized by the American Society for Nondestructive Testing as one of the leading college programs in the country.

NDT Diploma

Required Courses	Credits
NDT 1030 Basic Liquid Penetrant Inspection	2
NDT 1045 Basic Radiographic Inspection	6
NDT 1065 Basic Ultrasonic Inspection	6
NDT 1080 Basic Eddy Current Inspection	3
NDT 1090 Basic Magnetic Particle Inspection	2
NDT 1100 Manufacturing Processes	2
NDT 1501 Introduction to NDT	1
NDT 1510 Fundamentals of Metallurgy	3
NDT 1820 NDT Geometry and Trigonometry	3
NDT 2030 Advanced Liquid Penetrant Inspection	1
NDT 2045 Advanced Radiography/Safety	6
NDT 2075 Advanced Ultrasonic Inspection	6
NDT 2085 Advanced Eddy Current	3
NDT 2090 Advanced Magnetic Particle Inspection	1
NDT 2160 Applied Physics	2
NDT 2170 Advanced Visual Inspection	2
WELD 1190 Fundamentals of Welding	2
Total Credits:	51

Elective Courses - these courses are not required but are recommended

BUS/CSCI 1400 Introduction to Computers	3
DRFT 1502 CAD I	3
ENGT 1240 Fundamentals of Robotics	3
GSWS 1451 First Aid/Safety	1
MSM 2102 Professional Sales	3
MSM 2105 Computer Applications	3
COLL 1000 College Success: Get On Course	3
NDT 1140 Basic Blueprint Reading	1
NDT 1516 Intro to Codes/Specifications	1
NDT 1517 Intro to Report Forms/Writing	1
NDT 2052 Computerized Radiography	2
NDT 2076 Advanced Phased Array Ultrasonics	3
NDT 2150 Infrared Inspection	1

NDT 2240 Internship I	1-11
NDT 2260 Composites	1
NDT 2510 Leak Testing	1
NDT 2527 AWS Weld Evaluation	2
NDT 2605 Introduction to Nuclear Reactors	1
NDT 2950 Special Projects/Topics	1-3
Total Diploma Credits:	64

NDT AAS Degree

Required Courses	Credits
NDT 1030 Basic Liquid Penetrant Inspection	2
NDT 1045 Basic Radiographic Inspection	6
NDT 1065 Basic Ultrasonic Inspection	6
NDT 1080 Basic Eddy Current Testing Inspection	3
NDT 1090 Basic Magnetic Particle Inspection	2
NDT 1100 Manufacturing Processes	2
NDT 1501 Introduction to NDT	1
NDT 1510 Fundamentals of Metallurgy	3
NDT 2030 Advanced Liquid Penetrant Inspection	1
NDT 2045 Isotope/Radiation Safety/Advanced Radiography	6
NDT 2075 Advanced Ultrasonic Inspection	6
NDT 2085 Advanced Eddy Current Inspection	3
NDT 2090 Advanced Magnetic Particle Inspection	1
NDT 2160 Applied Physics	2
NDT 2170 Advanced Visual Inspection	2
WELD 1190 Fundamentals of Welding	2
Total Credits:	48

Elective Courses

BUS 1400 Business Computers	3
COLL 1000 College Success: Get On Course	3
CSCI 1400 Business Computers	3
DRFT 1502 CAD I	3
ENGT 1240 Fundamentals of Robotics	3
MSM 2102 Professional Sales	3
MSM 2105 Computer Applications	3
NDT 1140 Basic Blueprint Reading	1
NDT 1502 Fundamentals of Nondestructive Testing	2
NDT 1820 NDT Geometry and Trigonometry	3
NDT 2052 Computerized Radiography I	2
NDT 2076 Advanced Phased Array Ultrasonics	3
NDT 2150 Infrared Inspection	1
NDT 2240 Nondestructive Testing Internship	1-11
NDT 2260 Composites	1
NDT 2510 Leak Testing	1
NDT 2527 AWS Weld Evaluation	2
NDT 2605 Introduction to Nuclear Reactors	1
NDT 2950 Special Projects/Topics	1-2

General Education courses must be selected from at least 3 of the 10 goal areas of the Minnesota Transfer curriculum. Elective courses can be taken from any of the 10 goal areas.

General Education Electives

Goal Area 1: Communications - Choose at least one course	3
Goal 4 - Choose one of the following three options:	
MATH 1000 Quantitative Reasoning	3
MATH 1120 College Algebra	4
MATH 1125 College Algebra with Co-Requisite Support	4

Choose one course in either Goal Area:

Goal 7-Human Diversity

Goal 9-Ethical and Civic Responsibility

Choose additional General Ed. electives from any of the 10 Goal Areas.

Total General Education Electives 15

Total AAS Degree Credits: 64

WELDING

Willmar and Hutchinson Campuses

Diploma/AAS Degree – 32/64/72 Credits

Welding is the process of joining metals through heat. The industrial welding program is different from other programs because it offers either a one-year completion or a two-year advanced technical welding education. Shop equipment is the type found in industry, and classroom instruction is related directly to shop work. The Hutchinson campus has the only welding program in the state with in-house X-ray. Using this quality control inspection method, students always have feedback on the quality of their welds. Both programs give students broad and continuous exposure to welding methods and equipment. This program participates in Articulated College Credit partnerships. See Tech Prep under Admissions, page 6.

One-Year Diploma

Required Courses Credits

WELD 1201	Applied Math	2
WELD 1311	Prints, Symbols & Joint Designs 1	2
WELD 1312	Welding Processes	4
WELD 1314	Gas Welding, Brazing & Cutting Shop 1	1
WELD 1316	Shielded Metal Arc Welding Shop 1	2
WELD 1319	Gas Tungsten Arc Welding Shop 1	1
WELD 1320	Computer-Aided Manufacturing	2
WELD 1321	Prints, Symbols & Joint Designs 2	2
WELD 1322	Welding Processes, Metals & Fabrication	4
WELD 1324	Gas Welding, Brazing & Cutting Shop 2	2
WELD 1326	Shielded Metal Arc Welding Shop 2	3
WELD 1327	Gas Metal Arc Welding Shop 1	2
WELD 1328	Gas Metal Arc Welding Shop 2	3
WELD 1329	Gas Tungsten Arc Welding Shop 2	2

Total Credits:32

Elective Courses (0 credits required)

GSWS 1401	Employment Preparation and Retention	1
WELD 2900	Welding Internship	1-6

Total Diploma Credits:32

Welding Two-Year Diploma

Required Courses Credits

WELD 1201	Applied Math	2
WELD 1311	Prints, Symbols & Joint Designs 1	2
WELD 1312	Welding Processes	4
WELD 1314	Gas Welding, Brazing & Cutting Shop 1	1
WELD 1316	Shielded Metal Arc Welding Shop 1	2
WELD 1319	Gas Tungsten Arc Welding Shop 1	1
WELD 1320	Computer-Aided Manufacturing	2
WELD 1321	Prints, Symbols & Joint Designs 2	2
WELD 1322	Welding Processes, Metals & Fabrication	4
WELD 1324	Gas Welding, Brazing & Cutting Shop 2	2
WELD 1326	Shielded Metal Arc Welding Shop 2	3
WELD 1327	Gas Metal Arc Welding Shop 1	2
WELD 1328	Gas Metal Arc Welding Shop 2	3
WELD 1329	Gas Tungsten Arc Welding Shop 2	2
WELD 2101	Layout and Fabrication I	4
WELD 2103	Advanced Tungsten Arc Welding Shop	2-4
WELD 2105	Advanced GMAW/FCAW Shop	1-4
WELD 2106	Metal Finishing Shop	4
WELD 2111	Layout and Fabrication 2	2
WELD 2201	Pipe Layout and Fabrication	3
WELD 2203	Pipe Welding Shop	1-4
WELD 2204	Welding Qualification Shop	1-4
WELD 2206	Welding Fabrication Shop	1-4
WELD 2207	Welding Metallurgy and Qualifications	2

Total Minimum Credits53

Elective Courses

CMAE 1528	Career Success Skills	1
DRFT 1002	Fundamentals of Parametric Design	2
GSIS 1602	Personal Financial Management	2
GSMS 1251	Applied Physics	1
GSWS 1401	Employment Preparation and Retention	1
GSWS 1451	First Aid/Safety	1
MACT 1190	Principles of Machining Operations	2
NDT 1502	Fundamentals of Nondestructive Testing	2
WELD 2100	Introduction to Machining	1
WELD 2828	Multi-Axis CAM and Robotic Welding	2
WELD 2900	Internship	1-6

Total Credits 0-11

Total Diploma Credits 64

Programs of Study

Welding AAS Degree

Required Courses		Credits
WELD 1201	Applied Math	2
WELD 1311	Prints, Symbols & Joint Designs 1	2
WELD 1312	Welding Processes	4
WELD 1314	Gas Welding, Brazing & Cutting Shop 1	1
WELD 1316	Shielded Metal Arc Welding Shop 1	2
WELD 1319	Gas Tungsten Arc Welding Shop 1	1
WELD 1320	Computer-Aided Manufacturing	2
WELD 1321	Prints, Symbols & Joint Designs 2	2
WELD 1322	Welding Processes, Metals & Fabrication	4
WELD 1324	Gas Welding, Brazing & Cutting Shop 2	2
WELD 1326	Shielded Metal Arc Welding Shop 2	3
WELD 1327	Gas Metal Arc Welding Shop 1	2
WELD 1328	Gas Metal Arc Welding Shop 2	3
WELD 1329	Gas Tungsten Arc Welding Shop 2	2
WELD 2101	Layout & Fabrication I	4
WELD 2103	Advanced Gas Tungsten Arc Welding Shop	2-4
WELD 2105	Advanced GMAW/FCAW Shop	1-4
WELD 2106	Metal Finishing Shop	4
WELD 2111	Layout and Fabrication 2	2
WELD 2201	Pipe Layout and Fabrication	3
WELD 2203	Pipe Welding Shop	1-4
WELD 2204	Welding Qualifications Shop	1-4
WELD 2206	Welding Fabrication Shop	1-2
WELD 2207	Welding Metallurgy and Qualifications	2
Total Credits:		53-57

Technical Elective

CMAE 1528	Career Success Skills	1
DRFT 1002	Fundamentals of Parametric Design	2
GSIS 1602	Personal Financial Management	2
GSMS 1251	Applied Physics	1
GSWS 1401	Employment Preparation and Retention	1
GSWS 1451	First Aid/Safety	1
MACT 1190	Principles of Machining Operations	2
NDT 1502	Fundamentals of Nondestructive Testing	2
WELD 1190	Fundamentals of Welding	2
WELD 2100	Introduction to Machining	1
WELD 2828	Multi-Axis CAM and Robotic Welding	2
WELD 2900	Welding Internship	1-6
Total Credits:		0-4

General Education Electives

MNTC Goal Area 1 - Choose one course. **3**
Choose remaining courses from any goal area. General Education courses must be selected from at least three of the ten goal areas of the Minnesota Transfer curriculum. See your advisor to select courses that fulfill this requirement.

Total Credits: 12
Total AAS Degree Credits: 72

Entry Level Welder Certificate - 16 Credits

Required Courses		Credits
WELD 1311	Prints, Symbols & Joint Designs I	2
WELD 1312	Welding Processes	4
WELD 1314	Gas Welding, Brazing & Cutting Shop I	1
WELD 1316	Shielded Metal Arc Welding Shop I	2
WELD 1321	Prints, Symbols & Joint Designs 2	2
WELD 1324	Gas Welding, Brazing & Cutting Shop 2	2
WELD 1327	Gas Metal Arc Welding Shop I	2
Total Credits		15

Elective Courses

CMAE 1528	Career Success Skills	1
GSWS 1451	First Aid/Safety	1
WELD 1319	Gas Tungsten Arc Welding Shop I	1
WELD 1328	Gas Metal Arc Welding Shop 2	3
Total Required Elective		1
Total Credits		16
Total Diploma Credits		64

AGRICULTURE AND VETERINARY TECHNOLOGY



AGRI BUSINESS

Willmar Campus

Diploma/AAS Degree – 72 Credits

Agriculture continues to be an extremely high-tech industry. Many agri-business firms are providing more and more services to large farms. This program prepares students for occupations in ag-related businesses in the areas of feeds, seeds, plant food, crop protection, agricultural products, equipment, petroleum, ag sales and services, and office management. Specializations within the Agri-Business program include:

- Agronomy
- Ag Office Management
- Dairy
- Animal Science

Graduates may find employment at the technical, sales, office or managerial level. See related programs: Agriculture, Agronomy Technician, Farm Operation and Management, and Dairy Management. This program participates in Articulated College Credit partnerships. Refer to page 6.

Diploma

Required CoursesCredits

AGRI 1001	Ag Orientation	2
AGRI 1201	Applied Mathematics for Agricultural Careers	1
-or-		
Math 1120	College Algebra	4
AGRI 1520	Computers in Agriculture	3
AGRI 1550	Introduction to Ag Business	2
AGRI 1551	Ag Business Procedures and Records	3
AGRI 1552	Ag Business Credit and Finance	2
AGRI 1553	Agri-Business Management & Marketing	3
AGRI 1580	Agricultural Sales & Service	3
AGRI 1640	Ag Commodity Marketing	3
AGRI 1650	Soils and Fertility Management	3
AGRI 1660	Introduction to Agronomy	3
AGRI 1771	Introduction to Precision Ag	2
AGRI 2123	Agricultural Communications and Leadership	3
AGRI 2402	Employment Preparation for Ag Professionals	2
AGRI 2800	Agriculture Internship (take twice)	6
Total Credits:		41

Elective Courses

Choose electives for a total of 30 credits. See emphasis areas in addition to any course with an AGRI prefix and/or the following option.

WELD 1118	Agricultural Welding	2
Total Credits:		30

Highly suggested electives for Crop Emphasis:

AGRI 1621	Farm Management I	3
AGRI 1670	Integrated Pest Management	3
AGRI 1680	Crop Scouting Techniques	2
AGRI 1681	Crop Scouting Techniques Lab	1
AGRI 1700	Crop Protection Recommendations	2
AGRI 1720	Corn and Soybean Production	3
AGRI 1721	Fall Agriculture Field Experience Lab	1
AGRI 1722	Spring Agriculture Experience Lab	1
AGRI 1761	Ag Water Management	2
AGRI 1770	GIS Applications	3
AGRI 1780	Grain Handling and Storage	2
AGRI 2160	Planters and Spring Tillage	3
AGRI 2191	CDL - Prep for Written Test	1
AGRI 2192	CDL - Prep for Road Test	1
AGRI 2210	Ag Industry Machinery Maintenance	3
AGRI 2240	Pesticide/Fertilizer Equipment	3
AGRI 2250	Basic Custom Application	2

Highly suggested electives for Livestock Emphasis:

AGRI 1212	Dairy Evaluation	1
AGRI 1810	Introductory Animal Science	3
AGRI 1815	Meat Animal Reproduction	3
AGRI 1820	Animal Nutrition	3
AGRI 1830	Beef Cow Calf	2
AGRI 1840	Beef Feedlot	2
AGRI 1870	Swine Breeding and Farrowing	3
AGRI 1871	Swine Nursery and Finishing	3
AGRI 1900	Sheep Management	1
AGRI 2191	CDL - Prep for Written Test	2
AGRI 2192	CDL - Prep for Road Test	1
AGRI 2210	Ag Industry Machinery Maintenance	3

Programs of Study

Highly suggested electives for Dairy Emphasis:

AGRI 1210	Dairy Cattle Breeding and Reproduction . . . . .	.3
AGRI 1212	Dairy Evaluation . . . . .	.1
AGRI 1220	Dairy Facilities and Equipment . . . . .	.3
AGRI 1230	Raising Dairy Replacements . . . . .	.2
AGRI 1240	Dairy Cattle Anatomy, Physiology & Health . . . . .	.3
AGRI 1241	Cattle Health Lab . . . . .	.2
AGRI 1242	Palpation/Ultra-sounding of Dairy Cattle . . . . .	.1
AGRI 1243	Embryo Transfer . . . . .	.1
AGRI 1244	Hoof Trimming . . . . .	.1
AGRI 1260	Dairy Seminar I . . . . .	.1
AGRI 1261	Dairy Seminar II . . . . .	.1
AGRI 1270	Dairy Nutrition . . . . .	.3
AGRI 1681	Crop Scouting Techniques Lab . . . . .	.1
AGRI 1730	Forage Production . . . . .	.3
AGRI 1820	Animal Nutrition . . . . .	.3
GSCL 1141	Spanish Conversation/Culture . . . . .	.1

Highly suggested electives for Office Management Emphasis:

ADS 1007	Keyboarding I . . . . .	.2
ADS 1020	Administrative Office Procedures . . . . .	.4
ADS 1026	Access . . . . .	.3
ADS 2030	Word . . . . .	.3
ACCT 1814	Payroll Accounting . . . . .	.3
ACCT 1815	Principles of Accounting I . . . . .	.4
ACCT 1816	Principles of Accounting II . . . . .	.4
ACCT 1831	Accounting Math and Calculators . . . . .	.3
ACCT 1834	Computerized Accounting Applications . . . . .	.3
ACCT 2814	Cost Accounting 1 . . . . .	.4
ACCT 2815	Cost/Managerial Accounting . . . . .	.4

General Studies

GSWS 1451	First Aid/Safety . . . . .	.1
Total Credits:		.1
Total Diploma Credits:		.72

AAS Degree

Required CoursesCredits

AGRI 1001	Ag Orientation . . . . .	.2
AGRI 1201	Applied Mathematics for Agriculture Careers . . . . .	.1
or		
Math 1120	College Algebra . . . . .	.4
AGRI 1520	Computers in Agriculture . . . . .	.3
AGRI 1550	Introduction to Ag Business . . . . .	.2
AGRI 1551	Agri-Business Procedures and Records . . . . .	.3
AGRI 1552	Agri-Business Credit and Finance . . . . .	.2
AGRI 1553	Agri-Business Management & Marketing . . . . .	.3
AGRI 1580	Agricultural Sales & Service . . . . .	.3
AGRI 1640	Ag Commodity Marketing . . . . .	.3
AGRI 1650	Soils and Fertility Management . . . . .	.3
AGRI 1660	Introduction to Agronomy . . . . .	.3
AGRI 1771	Introduction to Precision Ag . . . . .	.2
AGRI 2800	Internship (3 credits, taken twice) . . . . .	.6
Total Credits:		38

Elective Courses

Take additional courses to complete a total of 18 technical electives. See emphasis areas below. Up to one 4-credit non-AGRI prefix course can be selected as a technical elective. Work with advisor to select courses.

AGRI 2123	Agricultural Communications and Leadership . . . . .	.2
AGRI ****	Any other course with the AGRI prefix	
WELD 1118	Agricultural Welding . . . . .	.2
Total Credits:		18

Highly suggested electives for Crop Emphasis:

AGRI 1621	Farm Management I . . . . .	.3
AGRI 1670	Integrated Pest Management . . . . .	.3
AGRI 1680	Crop Scouting Techniques . . . . .	.2
AGRI 1681	Crop Scouting Techniques Lab . . . . .	.1
AGRI 1700	Crop Scouting Recommendations . . . . .	.2
AGRI 1720	Corn and Soybean Production . . . . .	.3
AGRI 1721	Fall Agriculture Field Experience Lab . . . . .	.1
AGRI 1722	Spring Agriculture Experience Lab . . . . .	.1
AGRI 1761	Ag Water Management . . . . .	.2
AGRI 1770	GIS Applications . . . . .	.3
AGRI 1780	Grain Handling and Storage . . . . .	.2
AGRI 2160	Planters and Spring Tillage . . . . .	.3
AGRI 2191	CDL - Prep for Written Test . . . . .	.1
AGRI 2192	CDL - Prep for Road Test . . . . .	.1
AGRI 2210	Ag Industry Machinery Maintenance . . . . .	.3
AGRI 2240	Pesticide/Fertilizer Equipment . . . . .	.3
AGRI 2250	Basic Custom Application . . . . .	.2

Highly suggested electives for Livestock Emphasis:

AGRI 1810	Introductory Animal Science . . . . .	.3
AGRI 1815	Meat Animal Reproduction . . . . .	.3
AGRI 1820	Animal Nutrition . . . . .	.3
AGRI 1830	Beef Cow Calf . . . . .	.2
AGRI 1840	Beef Feedlot . . . . .	.2
AGRI 1870	Swine Breeding and Farrowing . . . . .	.3
AGRI 1871	Swine Nursery and Finishing . . . . .	.3
AGRI 1900	Sheep Management . . . . .	.1
AGRI 2191	CDL - Prep for Written Test . . . . .	.2
AGRI 2192	CDL - Prep for Road Test . . . . .	.1
AGRI 2210	Ag Industry Machinery Maintenance . . . . .	.3

Highly suggested electives for Dairy Emphasis:

AGRI 1210	Dairy Cattle Breeding and Reproduction . . . . .	.3
AGRI 1212	Dairy Evaluation . . . . .	.1
AGRI 1220	Dairy Facilities and Equipment . . . . .	.3
AGRI 1230	Raising Dairy Replacements . . . . .	.2
AGRI 1240	Dairy Cattle Anatomy, Physiology & Health . . . . .	.3
AGRI 1241	Cattle Health Lab . . . . .	.2
AGRI 1242	Palpation/Ultra-sounding of Dairy Cattle Lab . . . . .	.1
AGRI 1243	Embryo Transfer Lab . . . . .	.1
AGRI 1244	Hoof Trimming . . . . .	.1
AGRI 1260	Dairy Seminar I . . . . .	.1
AGRI 1261	Dairy Seminar II . . . . .	.1
AGRI 1270	Dairy Nutrition . . . . .	.3
AGRI 1681	Crop Scouting Techniques Lab . . . . .	.1
AGRI 1730	Forage Production . . . . .	.3
AGRI 1820	Animal Nutrition . . . . .	.3
GSCL 1141	Spanish Conversation / Culture . . . . .	.1

General Studies Required Course

GSWS 1451	First Aid/Safety . . . . .	.1
Total Credits:		.1

General Education Required Courses: Goal Area 1

Choose one ENGL course and one CMST course

CMST 1210	Introduction to Communication . . . . .	.3
CMST 2200	Public Speaking . . . . .	.3
CMST 2250	Small Group Communication . . . . .	.3
ENGL 1210	College Composition I . . . . .	.3
ENGL 1220	College Composition II . . . . .	.3
ENGL 1230	Scientific and Technical Writing . . . . .	.3
Total Credits:		6

General Education Elective Courses

General Education courses will be selected from at least three (3) of the ten (10) goal areas of the Minnesota Transfer curriculum. Courses can be taken from any of the ten (10) goal areas.

Total Credits:	9
Total AAS Degree Credits:	72

AGRICULTURAL SCIENCE AND TECHNOLOGY

PRE-AGRICULTURAL EDUCATION FOR THE UNIVERSITY OF MINNESOTA

Willmar Campus (2+2 Program)

AS Degree – 60 Credits

This program is designed for students interested in earning a Bachelor of Science degree in Agricultural Education through partnership with the University of Minnesota.

For more information, call Curt Yoose at 800-722-1151 or 320-222-5274. This program participates in Articulated College Credit partnerships. Refer to page 6.

General Education (40 credits required)

CMST 1210	Introduction to Communication . . . . .	.3
-or-		
*CMST 2200	Public Speaking . . . . .	.3
ENGL 1210	College Composition I . . . . .	.3
ENGL 1220	College Composition II . . . . .	.3
ECON 2060	Principles of Micro Economics . . . . .	.3
MATH 1120	College Algebra . . . . .	.4

Choose one of the following:

BIOL 1000	Introduction to Biology . . . . .	.4
*BIOL 2000	General Biology I . . . . .	.5
CHEM 1020	General Chemistry I . . . . .	.4

Choose one of the following:

*PSYC 1310	Introduction to Psychology . . . . .	.4
SOC 1050	Introduction to Sociology . . . . .	.3

Additional general education courses will be taken in the following MNTC areas of study:

Goal 5 - History & Behavioral Sciences (2 courses)
Goal 6 - Humanities and Fine Arts (2 courses)
Goal 8 - Global Perspective (1 course cross-referenced with Goal areas 5 or 6)

Electives: Choose 20 credits from list below with approval of advisor)

AGRI 1580	Ag Sales and Service . . . . .	.3
AGRI 1621	Farm Management I or . . . . .	.3
AGRI 1250	Farm Records & Business Analysis . . . . .	.3

AGRI 1650	Soils and Fertility Management . . . . .	.3
AGRI 1110	Soil and Fertility Management . . . . .	.3
AGRI 1660	Introduction to Agronomy . . . . .	.3
AGRI 1120	Principles of Agronomy . . . . .	.3
AGRI 1670	Integrated Pest Management . . . . .	.3
AGRI 1810	Introduction to Animal Science . . . . .	.3
AGRI 1260	Animal Science . . . . .	.3
AGRI 1820	Animal Nutrition . . . . .	.3
BIOL 1410	Environmental Science . . . . .	.4
BUS 2240	Financial Accounting . . . . .	.4
Total AS Degree Credits:		60

Students planning to attend the University of Minnesota:

- must take courses marked by an asterisk.
- are strongly recommended that AFEE 1001, AFEE 1002, and AFEE 2096 be taken prior to transfer.
- AGRI 1621 is not accepted at the University of Minnesota.

AGRICULTURE POWER AND EQUIPMENT TECHNICIAN

Willmar Campus
Diploma – 72 Credits

Diploma

Required Courses	Credits
AGRI 1001	Ag Orientation.2
AGRI 1201	Applied Mathematics in Agricultural Careers1 or MNTC Goal 4 course for 3-4 credits
AGRI 1520	Computers in Ag3
AGRI 1540	Personnel Management for Ag Producers.1
AGRI 1580	Ag Sales and Service3
AGRI 1771	Introduction to Precision Ag2
AGRI 1774	Electronic Components and Troubleshooting3
AGRI 2100	Farm Shop Repair Skills2
AGRI 2123	Agricultural Communications and Leadership3
AGRI 2140	Ag Power Maintenance and Repair.3
AGRI 2141	Ag Power Maintenance and Repair Lab4
AGRI 2142	Hydraulics for Ag Power Systems.3
AGRI 2143	Fuel Systems and Emissions for Ag Power Systems3
AGRI 2144	Electrical Systems for Ag Power3
AGRI 2145	Powertrains for Ag Power Systems.3
AGRI 2146	Engines for Ag Power Systems3
AGRI 2147	HVAC for Ag Power Systems2
AGRI 2148	Ag Shop Procedures1
AGRI 2191	CDL - Prep for Written Test2
AGRI 2192	CDL - Prep for Road Test1
AGRI 2402	Employment Preparation for Ag Professionals2
AGRI 2800	Agriculture Internship (take twice, 3 credits each).6
WELD 1190	Fundamentals of Welding2
Total Credits:	58

Technical Electives 13**Highly Suggested Electives**

AGRI 2150	Harvesting and Fall Tillage Equipment. . . . .	.2
AGRI 2151	Forage Harvesting and Tillage. . . . .	.2
AGRI 2160	Planters and Spring Tillage. . . . .	.2
AGRI 2221	Medium and Heavy Duty Truck Repair. . . . .	.3

Other Technical Electives

AGRI 1650	Soils and Fertility Management . . . . .	.3
AGRI 1660	Introduction to Agronomy . . . . .	.3
AGRI 1670	Integrated Pest Management . . . . .	.3
AGRI 1720	Corn and Soybean Production . . . . .	.3
AGRI 1770	GIS Applications . . . . .	.3
AGRI 1772	Remote Sensing/Image Analysis . . . . .	.2
AGRI 1773	GIS Problem Solving . . . . .	.3
AGRI 1776	GIS for Agricultural Producers . . . . .	.3
AGRI 2180	Ag Machinery Management . . . . .	.2
AGRI 2240	Pesticide/Fertilizer Equipment . . . . .	.3
AGRI 2250	Basic Custom Application . . . . .	.2
AGRI ****	Any other course with the AGRI prefix	
Up to 4 non-AGRI prefix course(s).		

General Studies

GSWS 1481	OSHA General Industry / First Aid.	1
Total General Studies Credits		1

Total Program Credits: 72

AGRONOMY APPLICATOR TECHNICIAN

Willmar Campus

Diploma – 38 Credits

Become certified for one of the most in-demand occupations in agriculture. The Agronomy Applicator Technology diploma is a one-year program that trains you to be an effective and efficient custom applicator through classroom, laboratory and internship experiences.

Required CoursesCredits

AGRI 1670	Integrated Pest Management . . . . .	.3
AGRI 1680	Crop Scouting Techniques . . . . .	.2
AGRI 1700	Crop Protection Products . . . . .	.2
AGRI 1770	GIS Applications . . . . .	.3
AGRI 1771	Introduction to Precision Ag . . . . .	.2
AGRI 1774	Electronic Components and Troubleshooting . . . . .	.3
AGRI 2191	CDL - Preparation for Written Test . . . . .	.2
AGRI 2192	CDL - Preparation for Road Test	1
AGRI 2210	Ag Industry Machinery Maintenance . . . . .	.3
AGRI 2240	Pesticide and Fertilizer Equipment. . . . .	.3
AGRI 2240	Pesticide/Fertilizer Equipment . . . . .	.3
AGRI 2250	Basic Custom Application . . . . .	.2
AGRI 2251	Advanced Custom Application . . . . .	.2
AGRI 2800	Agriculture Internship (3 credits x 2) . . . . .	.6
GSWS 1481	OSHA General Industry / First Aid.	1

Total Diploma Credits: 38

AGRONOMY TECHNOLOGY

Willmar Campus

Diploma – 72 Credits

In agronomy centers across the Midwest, there is a serious shortage of qualified applicator technicians and agriculture sales and service staff. Because of this shortage, Agrilience agronomy centers and other agronomy centers, along with Ag Chem, have teamed up with the agriculture department at Ridgewater College. This partnership will provide education and work experience to students who will become employees of local agronomy centers. See related technical programs under Agri-Business, Agriculture, Farm Operation and Management, and Dairy Management. This program participates in Articulated College Credit partnerships. Refer to page 6.

Required CoursesCredits

AGRI 1001	Ag Orientation . . . . .	.2
AGRI 1201	Applied Mathematics in Ag Careers	1
or Math 1120	College Algebra . . . . .	.4
AGRI 1520	Computers in Agriculture . . . . .	.3
AGRI 1550	Intro to Ag Business . . . . .	.2
AGRI 1551	Ag Business Procedures and Records . . . . .	.3
AGRI 1552	Ag Business Credit and Finance . . . . .	.2
AGRI 1553	Agri-Business Management & Marketing . . . . .	.3
AGRI 1580	Ag Sales & Service . . . . .	.3
AGRI 1640	Ag Commodity Marketing . . . . .	.3
AGRI 1650	Soils and Fertility Management . . . . .	.3
AGRI 1660	Introduction to Agronomy	3
AGRI 1670	Integrated Pest Management . . . . .	.3
AGRI 1680	Crop Scouting Techniques . . . . .	.2
AGRI 1700	Crop Protection Products . . . . .	.2
AGRI 1720	Corn & Soybean Production . . . . .	.3
AGRI 1770	GIS Applications . . . . .	.3
AGRI 1771	Introduction to Precision Ag . . . . .	.2
AGRI 1780	Grain Handling and Storage . . . . .	.2
AGRI 2123	Agricultural Communications and Leadership . . . . .	.3
AGRI 2191	CDL - Preparation for Written Test . . . . .	.2
AGRI 2192	CDL - Preparation for Road Test	1
AGRI 2210	Ag Industry Machinery Maintenance . . . . .	.3
AGRI 2240	Pesticide/Fertilizer Equipment . . . . .	.3
AGRI 2250	Basic Custom Application . . . . .	.2
AGRI 2402	Employment Preparation for Ag Professionals . . . . .	.2
AGRI 2800	Agriculture Internship (3 credits x 2) . . . . .	.6
GSWS 1481	OSHA General Industry / First Aid.	1

Total Credits: 68

Highly Suggested Elective

AGRI 1681	Crop Scouting Technique	1
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Elective Courses (select 4 credits from the courses below)

AGRI 1621	Farm Management I3
AGRI 1622	Farm Management II . . . . .	.3
AGRI 1721	Fall Agriculture Field Experience Lab	1
AGRI 1722	Spring Agriculture Field Experience Lab.	1
AGRI 1730	Forage Production . . . . .	.3
AGRI 1740	Specialty Crops . . . . .	.2
AGRI 1761	Ag Water Management . . . . .	.2
AGRI 1773	GIS Problem Solving . . . . .	.3
AGRI 2135	Electricity . . . . .	.2
AGRI 2800	Internship	3-6
WELD 1118	Agricultural Welding . . . . .	.2
AGRI ****	Any other course with the AGRI prefix	

Total Credits: 4

Total Diploma Credits: 72

DAIRY MANAGEMENT

Willmar Campus

Diploma/AAS Degree – 72 Credits

The two-year Dairy Management program at Ridgewater College includes all phases of dairy management with an emphasis in owner/operator, agri-business, or employed manager.

Dairy Management program (diploma) students do a four-week paid internship internships provide opportunity to apply skills learned in college and to learn new skills that can best be learned on the job.

This program participates in Articulated College Credit partnerships.
Refer to page 6.

Diploma

Technical Core Required for Ag Business Emphasis Credits

AGRI 1001	Ag Orientation	2
AGRI 1201	Applied Mathematics in Ag Careers	1
-or-		
MATH 1120	College Algebra	4
AGRI 1210	Dairy Cattle Breeding and Reproduction	3
AGRI 1211	Artificial Insemination	1
AGRI 1220	Dairy Facilities and Equipment	3
AGRI 1230	Raising Dairy Replacements	2
AGRI 1240	Dairy Cattle Anatomy, Physiology & Health	3
AGRI 1241	Cattle Health Lab	2
AGRI 1260	Dairy Seminar I	1
AGRI 1261	Dairy Seminar II	1
AGRI 1270	Dairy Nutrition	3
AGRI 1520	Computers in Agriculture	3
AGRI 1550	Introduction to Ag Business	2
AGRI 1551	Ag Business Procedures and Records	3
AGRI 1552	Ag Business Credit and Finance	2
AGRI 1553	Ag Business Management and Marketing	3
AGRI 1580	Ag Sales and Service	3
AGRI 1640	Ag Commodity Marketing	3
AGRI 1650	Soils and Fertility Management	3
AGRI 1660	Introduction to Agronomy	3
AGRI 1820	Animal Nutrition	3
AGRI 2100	Farm Shop Repair Skills	2
AGRI 2123	Agricultural Communications and Leadership	3
AGRI 2800	Internship (taken twice)	6
Total Credits:		61

Technical Core Required for Farm Op Emphasis

AGRI 1001	Ag Orientation	2
AGRI 1201	Applied Mathematics in Ag Careers	1
-or-		
MATH 1120	College Algebra	4
AGRI 1210	Dairy Cattle Breeding and Reproduction	3
AGRI 1211	Artificial Insemination	1
AGRI 1220	Dairy Facilities and Equipment	3
AGRI 1230	Raising Dairy Replacements	2
AGRI 1240	Dairy Cattle Anatomy, Physiology & Health	3
AGRI 1241	Cattle Health Lab	2
AGRI 1260	Dairy Seminar I	1
AGRI 1261	Dairy Seminar II	1
AGRI 1270	Dairy Nutrition	3
AGRI 1520	Computers in Agriculture	3
AGRI 1540	Personnel Management for Ag Producers	1
AGRI 1621	Farm Management I	3
AGRI 1622	Farm Management II	3

AGRI 1623	Farm Management III	3
AGRI 1624	Farm Management IV	3
AGRI 1640	Ag Commodity Marketing	3
or AGRI 1645	Farm Direct Marketing	3
AGRI 1650	Soils and Fertility Management	3
AGRI 1660	Introduction to Agronomy	3
AGRI 1820	Animal Nutrition	3
AGRI 2100	Farm Shop Repair Skills	2
AGRI 2123	Agricultural Communications and Leadership	3
AGRI 2800	Internship (taken twice)	6
Total Credits:		61

Highly suggested Elective Courses

AGRI 1242	Palpation & Ultrasounding of Dairy Cattle	1
AGRI 1243	Embryo Transfer	1
AGRI 1244	Hoof Trimming	1
AGRI 1720	Corn and Soybean Production	3
AGRI 1730	Forage Production	3
AGRI 1761	Ag Water Management	2
AGRI 1771	Introduction to Precision Ag	2
AGRI 2151	Forage Harvesting and Fall Tillage	2
GSCL 1141	Spanish Conversation/Culture	1

Other Elective Courses

AGRI 1721	Fall Agriculture Field Experience Lab	1
AGRI 1722	Spring Agriculture Experience Lab	1
AGRI 2191	CDL - Preparation for Written Test	2
AGRI 2192	CDL - Preparation for Road Test	1
WELD 1118	Agricultural Welding	2
AGRI **** Choose any course with the AGRI prefix		
Up to 4 credits non-AGRI prefix course(s)		

General Studies

GSWS 1481	OSHA General Industry / First Aid	1
Total Credits		1

Ag Business Option - Required (61) + Electives (10) 71

Farm Op Option - Required (61) + Electives (10) 71

General Studies 1

Total Diploma Credits: 72

Dairy Management AAS Degree

Technical Core Required for Ag Business Emphasis Credits

AGRI 1001	Ag Orientation	2
AGRI 1201	Applied Mathematics in Ag Careers	1
-or-		
MATH 1120	College Algebra	4
AGRI 1210	Dairy Cattle Breeding and Reproduction	3
AGRI 1211	Artificial Insemination for Cattle	1
AGRI 1220	Dairy Facilities and Equipment	3
AGRI 1230	Raising Dairy Replacements	2
AGRI 1240	Dairy Cattle Anatomy, Physiology & Health	3
AGRI 1241	Cattle Health Lab	2
AGRI 1260	Dairy Seminar I	1
AGRI 1261	Dairy Seminar II	1
AGRI 1270	Dairy Nutrition	3
AGRI 1520	Computers in Agriculture	3
AGRI 1550	Introduction to Ag Business	2
AGRI 1551	Ag Business Procedures and Records	3
AGRI 1552	Ag Business Credit and Finance	2
AGRI 1553	Ag Business Management and Marketing	3
AGRI 1580	Ag Sales and Service	3

Programs of Study

AGRI 1640	Ag Commodity Marketing	3
AGRI 1650	Soils and Fertility Management	3
AGRI 1660	Introduction to Agronomy	3
AGRI 1820	Animal Nutrition	3
AGRI 2100	Farm Shop Repair Skills	2
AGRI 2800	Internship	6
Total Credits:		55

Technical Core Required for Farm Op Emphasis Credits

AGRI 1001	Ag Orientation	2
AGRI 1201	Applied Mathematics in Ag Careers	1
-or-		
MATH 1120	College Algebra	4
AGRI 1210	Dairy Cattle Breeding and Reproduction	3
AGRI 1211	Artificial Insemination	1
AGRI 1220	Dairy Facilities and Equipment	3
AGRI 1230	Raising Dairy Replacements	2
AGRI 1240	Dairy Cattle Anatomy, Physiology & Health	3
AGRI 1241	Cattle Health Lab	2
AGRI 1260	Dairy Seminar I	1
AGRI 1261	Dairy Seminar II	1
AGRI 1270	Dairy Nutrition	3
AGRI 1520	Computers in Agriculture	3
AGRI 1540	Personnel Management for Ag Producers	1
AGRI 1621	Farm Management I	3
AGRI 1622	Farm Management II	3
AGRI 1623	Farm Management III	3
AGRI 1624	Farm Management IV	3
AGRI 1640	Ag Commodity Marketing	3
or AGRI 1645	Farm Direct Marketing	3
AGRI 1650	Soils and Fertility Management	3
AGRI 1660	Introduction to Agronomy	3
AGRI 1820	Animal Nutrition	3
AGRI 2100	Farm Shop Repair Skills	2

Highly Suggested Elective Courses

AGRI 1242	Palpation & Ultrasounding of Dairy Cattle	1
AGRI 1243	Embryo Transfer	1
AGRI 1244	Hoof Trimming	1
AGRI 1730	Forage Production	3
AGRI 1761	Ag Water Management	2
AGRI 1771	Introduction to Precision Ag	2
AGRI 2151	Forage Harvesting and Fall Tillage	2
GSCL 1141	Spanish Conversation/Culture	1

Other Elective Courses

AGRI 1721	Fall Agriculture Field Experience Lab	1
AGRI 1722	Spring Agriculture Experience Lab	1
AGRI 2123	Agricultural Communications and Leadership	3
AGRI 2191	CDL - Preparation for Written Test	2
AGRI 2192	CDL - Preparation for Road Test	1
WELD 1118	Agricultural Welding	2
AGRI **** Choose any course with the AGRI prefix		
Total Credits:		1

General Studies

GSWS 1481	OSHA General Industry / First Aid	1
Total Credits:		1

General Education Required Courses

Choose one CMST and one ENGL course

CMST 1210	Introduction to Communication	3
CMST 2200	Public Speaking	3
CMST 2250	Small Group Communication	3
ENGL 1210	College Composition I	3
ENGL 1220	College Composition II	3
ENGL 1230	Scientific and Technical Writing	3
Total Credits:		6

General Education Electives

General Education courses will be selected from at least three (3) of the ten (10) goal areas of the Minnesota Transfer curriculum. Courses can be taken from any of the ten (10) goal areas.

Total Credits: 9

Required Credits 55

Elective Credits 1

General Studies Electives 1

Total General Education Credits 15

Total AAS Degree Credits: 72

FARM OPERATION AND MANAGEMENT

Willmar Campus

Diploma/AAS Degree – 72 Credits

The Farm Operation & Management program includes courses in all phases of technical agriculture with special emphasis on farm management. Four-week fall and spring internships allow students to be involved with harvesting and planting. Graduates have a wide variety of career possibilities in addition to working on their farm.

Specializations within the Farm Operation and Management program include: Agronomy, Ag Mechanics, Dairy, and Animal Science. See other related programs: Agri-Business, Agronomy Technician, Dairy Management, or the Liberal Arts AA degree. This program participates in Articulated College Credit partnerships. See page 6.

Diploma

Technical Required Courses Credits

AGRI 1001	Ag Orientation	2
AGRI 1201	Applied Mathematics in Agricultural Careers	1
-or-		
MATH 1120	College Algebra	4
AGRI 1520	Computers in Agriculture	3
AGRI 1540	Personnel Management for Ag Producers	1
AGRI 1621	Farm Management I	3
AGRI 1622	Farm Management II	3
AGRI 1623	Farm Management III	3
AGRI 1624	Farm Management IV	3
AGRI 1640	Ag Commodity Marketing	3
or AGRI 1645	Farm Direct Marketing	3
AGRI 1650	Soils and Fertility Management	3
AGRI 1660	Introduction to Agronomy	3
AGRI 1771	Introduction to Precision Ag	2
AGRI 2100	Farm Shop Repair Skills	2
AGRI 2123	Agricultural Communications and Leadership	3
AGRI 2800	Agriculture Internship (complete twice - 3 cr)	6
Total Credits:		41

Highly Suggested Electives for Crop Emphasis

AGRI 1670	Integrated Pest Management	3
AGRI 1680	Crop Scouting Techniques	2
AGRI 1681	Crop Scouting Techniques Lab	1
AGRI 1700	Crop Protection Products	2
AGRI 1720	Corn & Soybean Production	3
AGRI 1721	Fall Agriculture Field Experience Lab	1
AGRI 1722	Spring Agriculture Experience Lab	1
AGRI 1740	Specialty Crops	2
AGRI 1761	Agricultural Water Management	2
AGRI 1776	GIS for Agricultural Producers	3
AGRI 1780	Grain Handling and Storage	2
AGRI 1781	Grain Handling Principles	1
AGRI 2140	Ag Power Maintenance and Repair	3
AGRI 2141	Ag Power Maintenance and Repair Lab	4
AGRI 2150	Harvesting and Fall Tillage Equipment	2
AGRI 2160	Planters and Spring Tillage	3
AGRI 2240	Pesticide/Fertilizer Equipment	3

Highly Suggested Electives for Livestock Emphasis

AGRI 1810	Introductory Animal Science	3
AGRI 1815	Meat Animal Reproduction	3
AGRI 1820	Animal Nutrition	3
AGRI 1830	Beef Cow Calf	2
AGRI 1840	Beef Feedlot	2
AGRI 1870	Swine Breeding and Farrowing	3
AGRI 1871	Swine Nursery and Finishing	3
AGRI 1900	Sheep Management	1

Highly Suggested Electives for Dairy Emphasis

AGRI 1210	Dairy Cattle Breeding & Reproduction	3
AGRI 1220	Dairy Facilities and Equipment	3
AGRI 1230	Raising Dairy Replacements	2
AGRI 1240	Dairy Cattle Anatomy, Physiology & Health	3
AGRI 1241	Cattle Health Lab	2
AGRI 1242	Palpation & Ultrasounding of Dairy Cattle	1
AGRI 1244	Hoof Trimming	1
AGRI 1260	Dairy Seminar I	1
AGRI 1261	Dairy Seminar II	1
AGRI 1270	Dairy Nutrition	3
AGRI 1730	Forage Production	3
AGRI 1820	Animal Nutrition	3
AGRI 2151	Forage Harvesting and Fall Tillage	2
GSCL 1141	Spanish Conversation/Culture	1

Other Technical Electives:

AGRI ****	Any course with the AGRI prefix	
AGRI 1721	Fall Agriculture Field Experience Lab	1
AGRI 1722	Spring Agriculture Experience Lab	1
AGRI 2191	CDL - Preparation for Written Test	2
AGRI 2192	CDL - Preparation for Road Test	1
WELD 1118	Agricultural Welding	2
Up to 4 credits non-AGRI prefix course(s)		

General Studies: 1 credit required

GSWS 1481	OSHA General Industry / First Aid	1
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Total Required Credits41

Total Elective Credits30

Total General Studies Credits1

Total Diploma Credits:72

AAS Degree

Technical/General Studies Required Courses Credits

AGRI 1001	Ag Orientation	2
AGRI 1201	Applied Mathematics in Agriculture Careers	1
-or-		
MATH 1120	College Algebra	4
AGRI 1520	Computers in Agriculture	3
AGRI 1540	Personnel Management for Ag Producers	1
AGRI 1621	Farm Management I	3
AGRI 1622	Farm Management II	3
AGRI 1623	Farm Management III	3
AGRI 1624	Farm Management IV	3
AGRI 1640	Ag Commodity Marketing	3
or AGRI 1645	Farm Direct Marketing	3
AGRI 1650	Soils and Fertility Management	3
AGRI 1660	Introduction to Agronomy	3
AGRI 1771	Introduction to Precision Ag	2
AGRI 2100	Farm Shop Repair Skills	2
AGRI 2800	Agriculture Internship	6
GSWS 1481	OSHA General Industry / First Aid	1
Total Credits:		39

Highly Suggested Electives for Crop Emphasis

AGRI 1670	Integrated Pest Management	3
AGRI 1680	Crop Scouting Techniques	2
AGRI 1700	Crop Protection Recommendations	2
AGRI 1720	Corn and Soybean Production	3
AGRI 1721	Fall Agriculture Field Experience Lab	1
AGRI 1722	Spring Agriculture Experience Lab	1
AGRI 1761	Ag Water Management	2
AGRI 1780	Grain Handling and Storage	2
AGRI 1781	Grain Handling Principles	1
AGRI 2150	Harvesting and Fall Tillage Equipment	2
AGRI 2160	Planters and Spring Tillage	3
AGRI 2240	Pesticide/Fertilizer Equipment	3

Highly Suggested Electives for Livestock Emphasis

AGRI 1810	Introductory Animal Science	3
AGRI 1815	Meat Animal Reproduction	3
AGRI 1820	Animal Nutrition	3
AGRI 1830	Beef Cow Calf	2
AGRI 1840	Beef Feedlot	2
AGRI 1870	Swine Breeding and Farrowing	3
AGRI 1871	Swine Nursery and Finishing	3
AGRI 1900	Sheep Management	1

Highly Suggested Electives for Dairy Emphasis

AGRI 1210	Dairy Cattle Breeding & Reproduction	3
AGRI 1220	Dairy Facilities and Equipment	3
AGRI 1230	Raising Dairy Replacements	2
AGRI 1240	Dairy Cattle Anatomy, Physiology & Health	3
AGRI 1241	Cattle Health Lab	2
AGRI 1260	Dairy Seminar I	1
AGRI 1261	Dairy Seminar II	1
AGRI 1270	Dairy Nutrition	3
AGRI 1730	Forage Production	3
AGRI 1820	Animal Nutrition	3
AGRI 2151	Forage Harvesting and Fall Tillage	2
GSCL 1141	Spanish Conversation/Culture	1

Other Technical Electives

AGRI ****	Any course with the AGRI prefix	
AGRI 1721	Fall Agriculture Field Experience Lab	1
AGRI 1722	Spring Agriculture Experience Lab	1
AGRI 2123	Agricultural Communications and Leadership	3
AGRI 2191	CDL - Preparation for Written Test	2

AGRI 2192	CDL - Preparation for Road Test	1
WELD 1118	Agricultural Welding	2
Up to 4 credits non-AGRI prefix course(s)		
Total Required Technical Electives		18

General Education Required Courses

Choose one CMST and one ENGL course:

CMST 1210	Introduction to Communication	3
CMST 2200	Public Speaking	3
CMST 2250	Small Group Communication	3
ENGL 1210	College Composition I	3
ENGL 1220	College Composition II	3
ENGL 1230	Scientific and Technical Writing	3
Total Credits:		6

General Education Electives

Choose general education courses from at least 3 of the 10 Goal Areas to meet MN Transfer Curriculum requirements.

Total Credits:	9
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Total Required/General Studies Credits	39
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Total Elective Credits	18
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General Education Credits	15
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Total AAS Degree Credits	72
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POULTRY MANAGEMENT

Willmar Campus

Certificate - 20 credits

Developed in partnership with industry leaders and the University of Minnesota, the Ridgewater 20-credit certificate will provide a solid foundation for potential advanced education or a strong base knowledge you need to be successful in the poultry industry, whether you are managing your own hobby farm or working within the poultry industry.

Certificate

Required Courses (14 credits) Credits

AGRI 1301	Poultry Nutrition, Feeds & Feeding	2
AGRI 1303	Environmental Mgmt. for Poultry Production	3
AGRI 1305	Managing Poultry Health	3

Choose one of the following options:

CMST 1210	Introduction to Communications	3
AGRI 2123	Agricultural Communications and Leadership	3

Choose one of the following options:

MSM 2823	Introduction to Entrepreneurship	3
AGRI 1621	Farm Management I	3
Agri 1553	Agri-Business Management and Marketing	3

Total Credits	14
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Suggested Electives (6 credits required)

AGRI 1810	Introductory Animal Science	3
AGRI 1820	Animal Nutrition	3
AGRI 2800	Internship	3
AGRI ****	Any other course with the AGRI prefix	
ENGL 1210	College Composition	3
GSWS 1401	Employment Preparation and Retention	1
GSWS 1481	OSHA General Industry / First Aid	1

Total Elective Credits	6
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Total Certificate Credits	20
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PRECISION AGRICULTURE

Willmar Campus

Diploma/AAS Degree – 72 Credits + Precision Farming Cert. - 19 Credits

The ag industry has an ever-increasing demand for graduates with an agronomy background who can provide decision-making data for the modern producer in the areas of field mapping, predicting field potential, soil sampling/soil analysis, fertility recommendations, yield monitoring, and many other such areas. The Precision Agriculture degree addresses these areas. This program participates in Articulated College Credit partnerships. Refer to page 6.

Diploma

Technical Course Required Courses Credits

AGRI 1001	Ag Orientation	2
AGRI 1201	Applied Mathematics in Agricultural Careers	1
-or-		
MATH 1120	College Algebra	4
AGRI 1520	Computers in Agriculture	3
AGRI 1550	Introduction to Ag Business	2
AGRI 1551	Agri-Business Procedures and Records	3
AGRI 1552	Agri-Business Credit and Finance	2
AGRI 1553	Agri-Business Management & Marketing	3
AGRI 1580	Agricultural Sales and Service	3
AGRI 1640	Ag Commodity Marketing	3
AGRI 1650	Soils and Fertility Management	3
AGRI 1660	Introduction to Agronomy	3
AGRI 1720	Corn and Soybean Production	3
AGRI 1770	GIS Applications	3
AGRI 1771	Introduction to Precision Agriculture	2
AGRI 1772	Remote Sensing/Image Analysis	2
AGRI 1773	GIS Problem Solving	3
AGRI 1774	Electronics Components/Troubleshooting	3
AGRI 2123	Agricultural Communications and Leadership	3
AGRI 2160	Planters and Spring Tillage	3
AGRI 2210	Ag Industry Machinery Maintenance	3
AGRI 2402	Employment Preparation for Ag Professionals	2
AGRI 2800	Internship (taken twice)	6
Total Technical Core Credits		61

Highly Suggested Electives

AGRI 1621	Farm Management I	3
AGRI 1670	Integrated Pest Management (IPM)	3
AGRI 1680	Crop Scouting Techniques	2
AGRI 1681	Crop Scouting Techniques Lab	1
AGRI 1700	Crop Protection Recommendations	2
AGRI 1761	Ag Water Management	2
AGRI 1780	Grain Handling and Storage	2
AGRI 2161	Planter Meter Certification	1
AGRI 2191	CDL - Preparation for Written Test	2
AGRI 2192	CDL - Preparation for Road Test	1
AGRI 2240	Pesticide & Fertilizer Equipment	3
AGRI 2250	Basic Custom Application	2

Other Technical Electives

AGRI 1622	Farm Management II	3
AGRI 1721	Fall Agriculture Field Experience Lab	1
AGRI 1722	Spring Agriculture Experience Lab	1
AGRI 1730	Forage Production	3
AGRI 1740	Specialty Crops	2
AGRI 2130	Small Engine Repair	2
AGRI 2135	Electricity	2
AGRI 2260	Ag Energy/Alternative Fuels	3
WELD 1118	Agricultural Welding	2

AGRI **** Any course with the Agri prefix	
Up to 4 credits non-AGRI prefix course(s)	
Total Technical Elective Credits	11

General Studies Electives

GSWS 1481 OSHA General Industry / First Aid	1
Total General Studies Credits	1

Total Required Credits	61
Total Elective Credits	10
General Studies Credit	1
Total Diploma Credits:	72

AAS Degree

Required Technical and General Studies Courses:

AGRI 1001 Ag Orientation	2
AGRI 1520 Computers in Agriculture	3
AGRI 1550 Intro to Ag Business	2
AGRI 1551 Agri-Business Procedures and Records	3
AGRI 1552 Agri-Business Credit and Finance	2
AGRI 1553 Ag Sales and Service	3
AGRI 1580 Ag Sales & Service	3
AGRI 1640 Ag Commodity Marketing	3
AGRI 1650 Soils and Fertility Management	3
AGRI 1660 Introduction to Agronomy	3
AGRI 1720 Corn & Soybean Production 3	
AGRI 1770 GIS Applications	3
AGRI 1771 Introduction to Precision Agriculture	2
AGRI 1772 Remote Sensing/Image Analysis	2
AGRI 1773 GIS Problem Solving	3
AGRI 1774 Electronics Components/Troubleshooting	3
AGRI 2160 Planters and Spring Tillage	3
AGRI 2210 Ag Industry Machinery Maintenance	3
AGRI 2402 Employment Preparation for Ag Professionals	2
AGRI 2800 Internship	3
GSWS 1481 OSHA General Industry / First Aid	1
Total Credits:	55

Highly Suggested Electives

AGRI 1621 Farm Management I	3
AGRI 1670 Integrated Pest Management	3
AGRI 1680 Crop Scouting Techniques	2
AGRI 1681 Crop Scouting Techniques Lab	1
AGRI 1700 Crop Scouting Recommendations	2
AGRI 1761 Ag Water Management	2
AGRI 1780 Grain Handling and Storage	2
AGRI 2191 CDL - Prep for Written Test	2
AGRI 2192 CDL - Prep for Road Test	1
AGRI 2240 Pesticide/Fertilizer Equipment	3
AGRI 2250 Basic Custom Application	2

Other Technical Electives

AGRI **** Any course with the Agri prefix	
AGRI 1721 Fall Agriculture Field Experience Lab	1
AGRI 1722 Spring Agriculture Experience Lab	1
AGRI 2123 Agricultural Communications and Leadership	3
WELD 1118 Agricultural Welding	2
Technical Electives	0

General Education Elective Courses

Choose one CMST, one ENGL and one MATH course:

CMST 1210 Introduction to Communication	3
CMST 2200 Public Speaking	3
CMST 2250 Small Group Communication	3
ENGL 1210 College Composition I	3
ENGL 1220 College Composition II	3
ENGL 1230 Scientific and Technical Writing	3
MATH 2010 Elementary Statistics	3
Total Credits	9
Additional General Education Credits	6

Total Required Credits/General Studies	55
Total Elective Credits	2
General Education Credits	15
Total AAS Degree Credits:	72

Certificate - Precision Farming

Required Technical Courses Credits

AGRI 1770 GIS Applications	3
AGRI 1771 Introduction to Precision Ag	2
AGRI 1772 Remote Sensing/Image Analysis	2
AGRI 1773 GIS Problem Solving	3
AGRI 1774 Electronic Components and Troubleshooting	3

Suggested Electives

AGRI 1680 Crop Scouting Techniques	2
AGRI 1720 Corn and Soybean Production	3
AGRI 1761 Ag Water Management	2
AGRI 1776 GIS for Agricultural Producers	3
AGRI 2160 Planters and Spring Tillage	3
AGRI 2161 Planter Meter Certification	1
GEOG 1400 Introduction to Geography	3
MATH 2010 Elementary Statistics	3

Other Technical Electives

AGRI **** Any other course with the AGRI prefix	
WELD 1118 Agricultural Welding	2
Total Certificate Credits	19

VETERINARY TECHNOLOGY

Willmar Campus

AAS Degree – 75 Credits

Accredited by the American Veterinary Medical Association, the Veterinary Technology program covers two years of college-level study taught by experienced veterinarians and technicians. This program will prepare graduates to assist veterinarians, biomedical researchers and professional animal scientists. After completing general studies and coursework, students gain occupational experience through a twelve-week internship program at a veterinary clinic or hospital, laboratory, research facility, or zoo.

A high school diploma or equivalent is necessary for acceptance into the Veterinary Technology major. In addition, students are required to successfully complete one year or equivalent of high school biology, chemistry, and algebra. Grades of C (2.0 GPA) or higher must be earned in each of these prerequisite courses. Prospective applicants without these required courses are encouraged to talk to a counselor.

The Veterinary Technology program is academically rigorous, and it takes highly motivated individuals with better than average ability to master a sizeable course load of scientific and medical material in a relatively short time. Experience with animals and an understanding of the field of veterinary medicine is ideally beneficial to applicants. Applicants are strongly encouraged to spend at least one week observing or working in a veterinary clinic with a veterinary technician.

In order to progress in the Veterinary Technology program, a student must achieve at least a “C” grade in each Veterinary Technology course and required science courses including: chemistry, biology, and microbiology. An overall “C” in all classes is essential for graduation with an Associate in Applied Science degree.

This program participates in Articulated College Credit partnerships. Refer to page 6.

AAS Degree

Required Courses Credits

VNTE 1000	Intro to Veterinary Science	1
VNTE 1016	Veterinary Nursing Procedures I	3
VNTE 1037	Anatomy and Physiology I	3
VNTE 1056	Laboratory Techniques I	3
VNTE 1117	Veterinary Nursing Procedures II	4
VNTE 1137	Anatomy and Physiology II	3
VNTE 1147	Pharmacology	3
VNTE 1157	Laboratory Techniques II	3
VNTE 2210	Vet Clinical Skills I	3
VNTE 2218	Veterinary Large Animal Husbandry	1
VNTE 2219	Vet Nursing Procedures of Large Animals	2
VNTE 2230	Radiographic and Imaging Techniques	3
VNTE 2246	Disease Processes	3
VNTE 2310	Vet Clinical Skills II	3
VNTE 2325	Veterinary Surgical Nursing and Anesthesia	4
VNTE 2331	Veterinary Hospital Procedures	3
VNTE 2340	Clinical Proficiency	1
VNTE 2350	Avian, Exotic and Lab Animal Care	3
VNTE 2715	Internship	8

Total Credits: 57

Technical Elective Courses

VNTE 2811	Shelter Medicine	1
VNTE 2812	Intro to Veterinary Physical Therapy	1
VNTE 2825	Advanced Veterinary Behavior	1
VNTE 2830	Pet Grooming	2

Required General Education Courses

BIOL 2150	Microbiology	4
CHEM 1010	Survey of Chemistry	4

Choose one of two options:

BIOL 1000	Introduction to Biology	4
BIOL 2000	General Biology	5

Communications (1 course required) Goal 13

Humanities or Social Science (1 course required)

Goal 5 or Goal 63

Total Technical Credits:57

Total General Education Credits:18

Total AAS Degree Credits:75

Requirements for Continuance and Graduation

In order to progress in the Veterinary Technology program, a student must achieve at least a “C” grade in each Veterinary Technology course and required science courses including: chemistry, biology, and microbiology. An overall “C” in all classes is essential for graduation with an associate in applied science degree.

ART, DESIGN & VISUAL COMMUNICATIONS



ART

Willmar and Hutchinson Campuses, Online
AA Liberal Arts – 60 Credits

Learn the elements of design from experienced faculty who share their creativity in their own works as well as by passing artistic strategies on to you so you can flourish as well. The liberal arts programs are designed to prepare students for transfer to baccalaureate majors at four-year colleges and universities. For those students who have already decided on a major, the programs described will provide guidelines to make sure that the relevant elements of the Minnesota Transfer Curriculum are satisfied and that the usual first two years of a major curriculum have been completed. **See Liberal Arts 60-credit AA on page 90.**

MULTIMEDIA DESIGN TECHNOLOGY

Hutchinson Campus, Online
Diploma/AAS Degree – 50/60 Credits

Multimedia consists of designing electronic graphics, interactive programming, dynamic presentations, web pages for the Internet and other communication projects. Students will learn to present information in its most creative and stimulating forms integrating design, video, audio, animation and 3-D design technologies. Multimedia skills, as an emerging, evolving and exciting industry, are currently in demand in almost every field of business. See page 76 for Marketing & Design AAS degree. This program participates in Articulated College Credit partnerships. Refer to page 6.

Diploma

Required Courses	Credits
MMDT 1002 Graphic Visualization	3
MMDT 1008 Introduction to Computer Graphics	3
MMDT 1010 Typography and Color Theory	3
MMDT 1021 HTML and CSS (or CST 1021)	3
MMDT 1041 Information Illustration	3
MMDT 1051 Image Editing	3
MMDT 1088 Basic Digital Photography	3
MMDT 1112 Animation for Web Design	3

MMDT 1142	Interface Design	3
MMDT 1152	Business of Multimedia	3
MMDT 1180	Multimedia Portfolio	4
PHOT 1018	Mobile Media for Business	2
Total Credits:		36

Elective Courses

Choose 13 credits from any MMDT, CST, MSM, PHOT, ADS, ACCT, BUS, General Studies, MnTC Goal 1 or MnTC Goal 6 courses as approved by your advisor

Total Credits:	14
Total Diploma Credits:	50

AAS Degree

Required Courses	Credits
MMDT 1002 Graphic Visualization	3
MMDT 1008 Introduction to Computer Graphics	3
MMDT 1010 Typography and Color Theory	3
MMDT 1021 HTML and CSS (or CST 1021)	3
MMDT 1041 Information Illustration	3
MMDT 1051 Image Editing	3
MMDT 1088 Basic Digital Photography	3
MMDT 1112 Animation for Web Design	3
MMDT 1142 Interface Design	3
MMDT 1152 Business of Multimedia	3
MMDT 1180 Multimedia Portfolio	4
PHOT 1018 Mobile Media for Business	2
Total Credits:	36

Elective Courses (9 elective credits required)

Choose 8 credits from any MMDT, CST, MSM, PHOT, ADS, ACCT or BUS courses as approved by your advisor.

Total Credits:	9
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General Education Required Courses

CMST - Any Goal 1 CMST course	3
ENGL - Any Goal 1 ENGL course	3
ART - Choose any Goal 6 ART course	3
Total Credits	9

Programs of Study

Elective General Education Courses

General Education courses will be selected from at least 3 of the 10 goal areas of the Minnesota Transfer curriculum, as recommended by advisor.

Total Credits:6
Total AAS Degree Credits: 60

MUSIC

Willmar and Hutchinson Campuses, Online

AA Liberal Arts – 60 Credits

If music makes your heart sing, listen to your heart and make music a part of your college experience. Explore private voice, piano or guitar lessons or take a structured, topical class. The liberal arts programs are designed to prepare students for transfer to baccalaureate majors at four-year colleges and universities. For those students who have already decided on a major, the programs described will provide guidelines to make sure that the relevant elements of the Minnesota Transfer Curriculum are satisfied and that the usual first two years of a major curriculum have been completed. **See Liberal Arts 60-credit AA on page 90.**

PHOTOGRAPHY AND DESIGN

Online with optional Weekly In-person Labs

Diploma 64 Credits | AAS Degree 60 Credits

Prepare yourself for an exciting career where you can combine the best of two in-demand creative worlds: professional photography and graphic design. Gain skills in typography, color theory, digital cameras, photography concepts, commercial photography and editing, digital and web publishing, video editing, and more!

Diploma

Required Technical Courses Credits

MMDT 1010	Typography & Color Theory	3
MMDT 1041	Information Illustration.....	3
MMDT 1051	Image Editing	3
MMDT 1057	Electronic Publishing	3
MMDT 1124	Web Publishing.....	3
PHOT 1016	Classic Portraiture.....	3
PHOT 1018	Mobile Media for Business	2
PHOT 1019	Digital Cameras & Photography Concepts I.....	3
PHOT 1028	Commercial Photography I.....	3
PHOT 2030	Commercial Photography II	4
PHOT 2032	On-Location Photography.....	3
PHOT 2040	Video Production I	2
Total Credits	.....	35

Required Electives Credits

Choose 19 credits from PHOT, MMDT, MSM, General Studies, MnTC Goal 1 or MnTC Goal 6 courses as approved.

Total Electives 19
Total Diploma Credits 54

AAS Degree

Required Courses Credits

MMDT 1010	Typography & Color Theory	3
MMDT 1041	Information Illustration.....	3
MMDT 1051	Image Editing	3
MMDT 1057	Electronic Publishing	3
MMDT 1124	Web Publishing.....	3
PHOT 1016	Classic Portraiture.....	3
PHOT 1018	Mobile Media for Business	2

PHOT 1019	Digital Cameras & Photography Concepts I.....	3
PHOT 1028	Commercial Photography I.....	3
PHOT 2030	Commercial Photography II	4
PHOT 2032	On-Location Photography.....	3
PHOT 2040	Video Production I	2
Total Credits	.....	35

Required Electives (10 credits required)

Choose 10 credits from PHOT, MMDT, or MSM courses as approved by your advisor

Total Elective Credits.....10

General Education (15 credits required)

Goal 1 - Select any Goal 1 CMST course.....	3
Goal 6 - Select any Goal 6 ART course.....	3
Additional electives (as recommended by advisor).....	9

Total General Education Credits 15

Total AAS Credits 60

PROFESSIONAL PHOTOGRAPHY TECHNOLOGY

Diploma/AAS – 64/60 credits

Certificate - 29 credits

Diploma - This newly updated program includes curriculum for the modern-day digital photographer, videographer, and visual communicator. Courses in portrait photography, commercial photography, video production, editing software, and business prepare graduates for a career in the creative industry. A variety of course electives allow for a customized experience based on individual student interests. Equipment such as mirrorless and DSLR camera bodies, lenses, lights, audio equipment and video stabilizers are available for checkout at no extra cost to the student. A computer lab allows student access to the latest industry-leading video editing and photo manipulation software.

AAS - This newly updated program provides students a broad perspective of digital photography. Students learn to use of digital cameras, composition, lighting, and portraiture. Several photography electives are available for the student to gain a deeper understanding of topics that interest them. General electives allow for student exploration in other topics in the liberal arts. Equipment such as mirrorless and DSLR camera bodies, lenses, lights, audio equipment and video stabilizers are available for checkout at no extra cost to the student. A computer lab allows student access to the latest industry-leading video editing and photo manipulation software.

Certificate - Students can complete the certificate in two semesters. Instruction focuses on the basics of computer editing, commercial photography, portraiture, and videography. Instruction will thoroughly cover the elements and principles of design, composition and efficiently operating your DSLR or mirrorless camera. Equipment such as mirrorless and DSLR camera bodies, lenses, lights, audio equipment and video stabilizers are available for checkout at no extra cost to the student. A computer lab allows student access to the latest industry-leading video editing and photo manipulation software.

Diploma

Required Courses Credits

PHOT 1015	Lightroom	3
PHOT 1016	Classic Portraiture	3
PHOT 1019	Digital Cameras & Photography Concepts I.....	3
PHOT 1024	Photoshop I	4
PHOT 1027	Advanced Portrait Techniques	4
PHOT 1028	Commercial Photography I	3
PHOT 2032	On-Location Portraiture	3
PHOT 2034	Photoshop II	4

PHOT 2035	Off-Camera Flash Photography	2
PHOT 2040	Video Production I	2
PHOT 2042	Photographic Presentations	2
PHOT 2048	Photography Business Development	3
PHOT 2057	Internship	3
Total Credits:		39

Electives (19 credits minimum)

PHOT 1020	Digital Cameras & Photography Concepts II	3
PHOT 2030	Commercial Photography II	4
PHOT 2033	Wedding Photography	3
PHOT 2041	Basic Photo Business Applications	3
PHOT 2043	Video Editing and Motion Graphics	3
PHOT 2044	Video Production II	3
PHOT 2046	Portrait Portfolio	4
PHOT 2050	Real Estate Photography	3
PHOT 2051	High-Volume Photography	3

Technical Elective Courses (if needed to meet the 64 credits)

ACCT 1800	Business Law	2
ACCT 1810	Introduction to Accounting	3
ADS 1014	Written Business Communications	3
MMDT 1010	Typography and Color Theory	3
MMDT 1041	Information Illustration (Adobe Illustrator)	3
MMDT 1057	Electronic Publishing (Adobe InDesign)	3
MSM 1101	Principles of Marketing	3
MSM 2125	E Commerce and Social Media	3
MSM 2823	Introduction to Entrepreneurship	3
MSM 2850	Introduction to Small Business Development	2

Total Technical Core Credits39

Total Photography Electives19

Total Additional electives6

Total Diploma Credits:64

AAS Degree

Required Courses Credits

PHOT 1015	Lightroom	3
PHOT 1016	Classic Portraiture	3
PHOT 1019	Digital Cameras & Photography Concepts I	3
PHOT 1024	Photoshop I	4
PHOT 1027	Advanced Portrait Techniques	4
PHOT 1028	Commercial Photography I	3
PHOT 2032	On-Location Portraiture	3
PHOT 2034	Photoshop II	4
PHOT 2035	Off-Camera Flash Photography	2
PHOT 2040	Video Production I	2
PHOT 2042	Photographic Presentations	2
PHOT 2048	Photography Business Development	3
Total Credits:		45

Photography Elective Courses 9 Credits Minimum

PHOT 1020	Digital Cameras & Photography Concepts II	3
PHOT 2030	Commercial Photography II	4
PHOT 2033	Wedding Photography	3
PHOT 2041	Basic Photo Business Applications	3
PHOT 2043	Video Editing and Motion Graphics	3
PHOT 2044	Video Production II	3
PHOT 2046	Portrait Portfolio	4
PHOT 2050	Real Estate Photography	3
PHOT 2051	High-Volume Photography	3
PHOT 2057	Internship and Client Simulation	3

General Education Electives15 credits required

GOAL AREA 1 (6 credits)

Take two classes from Goal Area 1 (one ENGL and one CMST class)

CMST 1210	Introduction to Communication	3
CMST 2200	Public Speaking	3
CMST 2250	Small Group Communication	3
ENGL 1210	College Composition I: Critical Reading and Writing	3
Total Credits:		6

GOAL AREA 6 (3-6 credits)

ART 1040	Survey in Art	3
ART 1060	History of Modern Art	3
ART 1070	Women in Art	3
ART 1200	Introduction to Art Studio	3
ART 1300	Printmaking I	3
ART 1400	Drawing	3
ART 1440	Watercolor	3
ART 2260	Elementary Art Education	3
ART 2300	Three-Dimensional Design and Color	3
ART 2600	Ceramics	3
ART 2610	Painting	3

GOAL AREA 7, 8, 9 (3-6 credits)

ECON 1900	Personal Finance	3
ECON 1950	Introduction to Economics	3
SPAN 1070	Beginning Spanish I	4
SOC 1070	Marriage and Family Living	3

General Education Electives

Take any classes from at least two additional goal areas to complete the 15-credit requirement. Students must take classes from at least three of the ten goal areas to meet Minnesota Transfer Curriculum standards.

Total Technical Core Credits 45

Total General Education Credits - Goal Area 16

Total Additional General Education Credits9

Total AAS Degree Credits: 60

Photography Certificate

Required Courses Credits

ADS 1014	Written Business Communications	3
PHOT 1015	Lightroom	3
PHOT 1016	Classic Portraiture	3
PHOT 1018	Mobile Media for Business	2
PHOT 1019	Digital Cameras & Photography Concepts I	3
PHOT 1020	Digital Cameras & Photography Concepts II	3
PHOT 1024	Photoshop I	4
PHOT 1028	Commercial Photography I	3
PHOT 2032	On-Location Portraiture	3
PHOT 2040	Video Production I	2
Total Certificate Credits		29

THEATER

Willmar and Hutchinson Campuses, Online

AA Liberal Arts – 60 Credits

Theater courses and experiences help you explore your talents as well as build your skills in teamwork, critical thinking, creativity, leadership, and communication. The liberal arts programs are designed to prepare students for transfer to baccalaureate majors at four-year colleges and universities. For those students who have already decided on a major, the programs described in this section of the catalog will provide guidelines to make sure that the relevant elements of the Minnesota Transfer Curriculum are satisfied and that the usual first two years of a major curriculum have been completed. **See Liberal Arts 60-credit AA on page 90.**

AUTOMOTIVE TRADES



AUTO BODY COLLISION TECHNOLOGY

Willmar Campus

Diploma/AAS Degree – 66/72 credits

Automobile body technicians are skilled metal repair experts who may be involved with all phases of auto body repair. This program offers students an opportunity to use state-of-the-art equipment such as computerized measuring systems, laser-guided measuring systems, computerized paint mixing systems, and other sophisticated equipment found in high tech auto collision shops. Ridgewater College has one of the most up-to-date facilities in the state of Minnesota, with the latest in modern equipment for diagnosis and repair of cars and light trucks. Students spend a large amount of time in the shop applying the knowledge they have learned in the classroom.

Diploma

Required CoursesCredits

ABOD 1002	Automotive Trades Skills . . . . .	.2
ABOD 1111	Minor Body Repair Technology . . . . .	.6
ABOD 1112	Welding Processes and Corrosion Procedures . . . . .	.6
ABOD 1113	Vehicle Preparation . . . . .	.3
ABOD 1124	Body and Glass Service . . . . .	.1
ABOD 1125	Automotive Refinishing . . . . .	.4
ABOD 1126	Refinishing Lab and Estimating . . . . .	.11
ABOD 2131	Color Matching & Blending Concepts . . . . .	.4
ABOD 2133	Collision Damage Replacement . . . . .	.4
ABOD 2135	Wheel Alignment and Mechanical Systems . . . . .	.9
ABOD 2145	Major Collision Repair Lab . . . . .	.5
ABOD 2146	Skillbuilding Lab . . . . .	.2-8
ABOD 2155	Collision Repair Business Operations3

Electives

ABOD 2900	Auto Body Internship	1-6
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Total Diploma Credits:66

AAS Degree

Required CoursesCredits

ABOD 1002	Automotive Trades Skills2
ABOD 1111	Minor Body Repair Technology . . . . .	.6
ABOD 1112	Welding Processes and Corrosion Procedures . . . . .	.6
ABOD 1113	Vehicle Preparation . . . . .	.3
ABOD 1124	Body and Glass Service . . . . .	.1
ABOD 1125	Automotive Refinishing . . . . .	.4
ABOD 1126	Refinishing Lab	9-11
ABOD 2131	Color Matching & Blending Concepts . . . . .	.4
ABOD 2133	Collision Damage Replacement . . . . .	.4
ABOD 2135	Wheel Alignment and Mechanical Systems . . . . .	.9
ABOD 2145	Major Collision Repair Lab . . . . .	.5
ABOD 2146	Skillbuilding Lab2-8

Technical Elective Course

ABOD 2900	Auto Body Internship	1-6
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Total Credits:57

General Education Courses

Goal Area 1: Communications - Choose one course.3
 General Education Elective Courses - Choose courses from at least
 3 of the 10 goal areas of the Minnesota Transfer curriculum.12

Total AAS Degree Credits:72

AUTOMOTIVE SERVICE TECHNOLOGY

Willmar Campus

Diploma/AAS Degree – 65/72 credits

This program prepares individuals in all phases of auto repair from basic maintenance to complex diagnostic procedures. Because of the variety of work, technicians must be familiar with electrical and computer-controlled systems, transmissions, and electronic fuel injection. Students will have the opportunity to work with state-of-the-art equipment while repairing today's cars and light duty trucks in a real world shop situation. The Automotive Service Technology program has met the required standards and achieved National Certification through Automotive Service Excellence (ASE). This program participates in Articulated College Credit partnerships. Refer to page 6.

Diploma

Required Courses		Credits
AUTO 1002	Automotive Trades Skills	.2
AUTO 1104	Vehicle Maintenance	.4
AUTO 1114	Engine Repair and Diagnosis	.4
AUTO 1134	Drivetrain and Axles	.4
AUTO 1142	Suspension 1	.2
AUTO 1152	Brakes 1	.2
AUTO 1162	Electrical Systems 1	.2
AUTO 1182	Engine Performance 1	.2
AUTO 1202	Safety and Service Information	.2
AUTO 1234	Manual Transmission	.4
AUTO 1364	Electrical Systems 2	.4
AUTO 2105	Service and Shop Operations	.5
AUTO 2124	Automatic Transmission	.4
AUTO 2174	Heating and Air Conditioning	.4
AUTO 2224	Transmission and Transaxle Diagnostics	.4
AUTO 2342	Suspension 2	.2
AUTO 2352	Brakes 2	.2
AUTO 2384	Engine Performance 2	.4
AUTO 2584	Engine Performance 3	.4
AUTO 2664	Electrical Systems 3	.4
Total Diploma Credits:		.65

AAS Degree

Required Courses		Credits
AUTO 1002	Automotive Trades Skills	.2
AUTO 1104	Vehicle Maintenance	.4
AUTO 1114	Engine Repair and Diagnosis	.4
AUTO 1134	Drivetrain and Axles	.4
AUTO 1142	Suspension 1	.2
AUTO 1152	Brakes 1	.2
AUTO 1162	Electrical Systems 1	.2
AUTO 1182	Engine Performance 1	.2
AUTO 1202	Safety and Service Information	.2
AUTO 1234	Manual Transmission	.4
AUTO 1364	Electrical Systems 2	.4
AUTO 2105	Service and Shop Operations	.5
AUTO 2342	Suspension 2	.2
AUTO 2352	Brakes 2	.2
AUTO 2384	Engine Performance 2	.4
AUTO 2664	Electrical Systems 3	.4
Total Credits:		.49

Technical Electives

AUTO 2124	Automatic Transmissions	.4
AUTO 2174	Heating and Air Conditioning	.4
AUTO 2224	Transmission and Transaxle Diagnostics	.4
AUTO 2584	Engine Performance 3	.4

Required Credits **8**

General Education Electives

General Education courses must be selected from at least three (3) of the ten (10) goal areas of the Minnesota Transfer curriculum.

Choose one MNTC Goal Area 1 course	.3
Choose remaining credits from any goal area	12

Total Credits: **15**

Total AAS Degree Credits: **72**

BUSINESS AND MARKETING



ACCOUNTING

Online

Diploma/AAS Degree – 60 Credits

Opportunities for people in accounting are abundant in business, schools, government offices, and industrial plants in both the public and private sector. Related areas of employment are with computer systems or in office management. An accountant examines, analyzes, and interprets accounting data for the purpose of giving advice and preparing financial statements. The study of accounting occurs through lectures, labs and the use of computers. Certain skills and knowledge are common to accounting career occupations, regardless of specific job titles, and are included in all accounting career programs. General education classes are also available in this field.

Accountant – Diploma

Required Courses	Credits
ACCT 1800 Business Law . . . . .	.2
ACCT 1814 Payroll Accounting . . . . .	.3
ACCT 1815 Principles of Accounting I . . . . .	.4
ACCT 1816 Principles of Accounting II . . . . .	.4
ACCT 1831 Accounting Math & Calculators. . . . .	.3
ACCT 1834 Computer Accounting Applications . . . . .	.3
ACCT 1837 Spreadsheet Concepts and Applications . . . . .	.3
ACCT 1842 Income Tax . . . . .	.4
ACCT 2814 Cost Accounting I. . . . .	.4
ACCT 2821 Intermediate Accounting I. . . . .	.4
ACCT 2823 Intermediate Accounting II . . . . .	.4
ACCT 2845 Auditing. . . . .	.4
ACCT 2847 Fund/Non-Profit Accounting . . . . .	.3
GSWS 1401 Employment Preparation . . . . .	.1
Total Credits	.46

Electives Courses

(choose at least one course)

GSIS 1403 Professional Development Skills . . . . .	.3
GSIS 1502 Human Relations . . . . .	.2
Total Credits	.2

Elective Courses

(choose at least one course)

ADS 1012 Business Presentations. . . . .	.2
GSCM 1112 Applied Oral Communications . . . . .	.2
MSM 1205 Business Presentations. . . . .	.3

Elective Courses

(choose at least one course)

ADS 1014 Written Business Communications. . . . .	.4
GSCM 1102 Applied Written Communications . . . . .	.2
GSCM 1103 Applied Written Communications (Willmar) . . . . .	.3

Elective Courses

(choose from remaining courses to meet 14-credit requirement)

ACCT 2833 Database Concepts and Applications . . . . .	.2
ADS 1007 Keyboard I . . . . .	.2
ADS 1014 Written Business Communications. . . . .	.4
ADS 1018 Personal Finance . . . . .	.2
ADS 1026 Database Microsoft Access . . . . .	.3
ADS 1027 Business Environment . . . . .	.2
ADS 1042 PowerPoint. . . . .	.3
ADS 1045 Computerized Accounting. . . . .	.1
ADS 2030 Word . . . . .	.3
BUS 1010 Business and the American Economy . . . . .	.3
ECON 1900 Personal Finance . . . . .	.3
GSCI 1401 Computer Technology . . . . .	.1
MSM 1212 Personal Finance . . . . .	.3
MSM 2110 Principles of Supervision. . . . .	.3
MSM 2203 Management Issues. . . . .	.3

Total Credits	.14
Total Diploma Credits	60

Accountant – AAS Degree

Required Courses	Credits
ACCT 1800 Business Law. . . . .	.2
ACCT 1814 Payroll Accounting . . . . .	.3
ACCT 1815 Principles of Accounting I . . . . .	.4
ACCT 1816 Principles of Accounting II . . . . .	.4
ACCT 1831 Accounting Math & Calculators. . . . .	.3
ACCT 1834 Computer Accounting Applications . . . . .	.3
ACCT 1837 Spreadsheet Concepts and Applications . . . . .	.3
ACCT 1842 Income Tax . . . . .	.4
ACCT 2814 Cost Accounting I. . . . .	.4
ACCT 2821 Intermediate Accounting I. . . . .	.4
ACCT 2823 Intermediate Accounting II . . . . .	.4
ACCT 2845 Auditing. . . . .	.4
ACCT 2847 Fund/Non-Profit Accounting . . . . .	.3
Total Credits	.45

Required General Education Courses

CMST 1210	Introduction to Communication . . . . .	.3
ENGL 1210	College Composition I . . . . .	.3
Total Credits		6

General Education Elective Courses

(select one of the Math courses below)

MATH 1120	College Algebra . . . . .	.4
MATH 2010	Elementary Statistics . . . . .	.3
MATH 2070	Statistics and Its Application . . . . .	.4
Total Credits		3-4

General Education Electives

(choose one of the ECON courses below)

ECON 1900	Personal Finance . . . . .	.3
ECON 2060	Principles of Microeconomics . . . . .	.3
ECON 2070	Principles of Macroeconomics . . . . .	.3

Choose enough credits to meet the 15-credit General Education requirements from any of the ten (10) MnTC Goal areas. See your advisor to select courses that fulfill this requirement.

Total AAS Degree Credits 60

ACCOUNTING CLERK

Online

Diploma – 32 Credits

Accounting clerks perform a combination of calculating, posting and verifying duties to obtain primary financial data for maintaining accounting records. Certain skills and knowledge are common to accounting career occupations, regardless of specific job titles and are included in all accounting career programs.

Diploma

Required Courses		Credits
ACCT 1800	Business Law	.2
ACCT 1814	Payroll Accounting	.3
ACCT 1815	Principles of Accounting I	.4
ACCT 1816	Principles of Accounting II	.4
ACCT 1831	Accounting Math & Calculators	.3
ACCT 1834	Computer Accounting Applications	.3
ACCT 1837	Spreadsheet Concepts & Applications	.3
ACCT 1842	Income Tax	.4
Total Credits:		26

General Studies

GSWS 1401	Employment Prep & Retention . . . . .	.1
GSCM 1102	Applied Written Communications . . . . .	.2
-or-		
GSCM 1103	Applied Written Communications . . . . .	.3
	(includes 1 credit of elective)	
-or-		
ADS 1014	Written Communications . . . . .	.4
	(includes 2 credits of electives)	
Total Credits		3

Elective Courses

(select 3 credits from the courses below)

ACCT 2833	Database Concepts & Applications . . . . .	.2
ADS 1014	Written Business Communications . . . . .	.4
ADS 1018	Personal Finance . . . . .	.2
ADS 1026	Database Microsoft Access . . . . .	.3
ADS 1027	Business Environment . . . . .	.2
ADS 1042	PowerPoint . . . . .	.3
ADS 1045	Computerized Accounting . . . . .	.1
ADS 2030	Word . . . . .	.3
BUS 2080	Intro to International Business/Economics . . . . .	.3
ECON 1900	Personal Finance . . . . .	.3
GSCI 1401	Computer Technology . . . . .	.1
GSCM 1103	Applied Written Communications (Willmar) . . . . .	.3
GSIS 1403	Professional Development Skills . . . . .	.3
GSWS 1422	Quality Management . . . . .	.2
GSWS 1432	Problem Solving/Decision Making . . . . .	.2
GSWS 1442	Team Development . . . . .	.2
MSM 1205	Business Presentations . . . . .	.3
MSM 1212	Personal Finance . . . . .	.3
MSM 2110	Principles of Supervision . . . . .	.3
MSM 2203	Management Issues . . . . .	.3
Total Elective Credits		3
Total Diploma Credits		32

ACCOUNTING TECHNICIAN

Online

Diploma – 45 Credits

Accounting technicians monitor and control various types of electronic data processing equipment used with accounting data. Certain skills and knowledge are common to accounting career occupations, regardless of specific job titles and are included in all accounting career programs.

Diploma

Required Courses		Credits
ACCT 1800	Business Law	.2
ACCT 1814	Payroll Accounting	.3
ACCT 1815	Principles of Accounting I	.4
ACCT 1816	Principles of Accounting II	.4
ACCT 1831	Accounting Math & Calculators	.3
ACCT 1834	Computer Accounting Applications	.3
ACCT 1837	Spreadsheet Concepts & Applications	.3
ACCT 1842	Income Tax	.4
ACCT 2814	Cost Accounting I	.4
ACCT 2821	Intermediate Accounting I	.4
ACCT 2847	Fund/Non-Profit Accounting	.3
GSWS 1401	Employment Preparation	.1
Total Credits:		38

Elective Courses

(choose at least one course)

GSIS 1403	Professional Developmental Skills . . . . .	.3
GSIS 1502	Human Relations . . . . .	.2

Elective Courses

(choose at least one course)

ADS 1012	Business Presentations . . . . .	.2
GSCM 1112	Applied Oral Communications . . . . .	.2
MSM 1205	Business Presentations . . . . .	.3

Programs of Study

Elective Courses

(choose at least one course)

ADS 1014	Written Business Communications	.4
GSCM 1102	Applied Written Communications	.2
GSCM 1103	Applied Written Communications (Willmar)	.3

Choose from remaining courses to meet 7 credits, if needed:

ACCT 2833	Database Concepts and Applications	.2
ADS 1007	Keyboarding I	.2
ADS 1018	Personal Finance	.2
ADS 1026	Database Microsoft Access	.3
ADS 1027	Business Environment	.2
ADS 1042	PowerPoint	.3
ADS 1045	Computerized Accounting	.1
ADS 2030	Word	.3
BUS 1010	Business and the American Economy	.3
ECON 1900	Personal Finance	.3
GSCI 1401	Computer Technology	.1
MSM 1212	Personal Finance	.3
MSM 2110	Principles of Supervision	.3
MSM 2203	Management Issues	.3

Total Elective Credits: .7
Total Diploma Credits: 45

ADMINISTRATIVE ASSISTANT

Online

Diploma/AAS Degree – 48/60 Credits

Administrative assistants are employed by every size and type of public and private business organization. The programs are designed to provide students with strong computer software, keyboarding and communication skills. The role of the administrative assistant is always evolving and may include the ability to problem solve ambiguous issues, provide excellent internal and external customer service, manipulate spreadsheet data, assist in project management, and utilize online tools. The development of good oral and written communication skills will allow the administrative assistant to excel in today's organizations. This program participates in Articulated College Credit partnerships. See page 6.

Additional Options:

Microsoft Office Specialist Cert., (pg. 80); Office Assistant Diploma (pg. 87)

Diploma

Required Courses	Credits
ACCT 1810	Introduction to Accounting .3
ACCT 1812	Payroll Preparation .2
ADS 1007	Keyboarding .2
ADS 1012	Business Presentations .3
ADS 1014	Written Business Communications .3
ADS 1020	Administrative Office Procedures .4
ADS 1027	Business Environment .2
ADS 1040	Office Accounting Concepts .2
ADS 1042	PowerPoint .3
ADS 1053	Excel .3
ADS 2010	Desktop Publishing .2
ADS 2015	Introduction to Project Management .2
ADS 2030	Word .3
ADS 2045	Advanced Word Processing .3
GSCI 1401	Computer Technology .1
GSIS 1403	Professional Developmental Skills .3
GSWS 1401	Employment Preparation .1
Total Credits:	.42

Elective Courses (select 6 credits from the courses below)

ACCT 1800	Business Law	.2
ADS 2090	Administrative Support Internship	2-6*
MMDT 1021	HTML and the Web	.3
MSM 2110	Principles of Supervision	.3
MSM 2203	Management Issues	.3
Total Credits:		6
Total Diploma Credits:		48

AAS Degree

Required Courses	Credits
ACCT 1810	Introduction to Accounting .3
ACCT 1812	Payroll Preparation .2
ADS 1007	Keyboarding .2
ADS 1012	Business Presentations .3
ADS 1014	Written Business Communications .3
ADS 1020	Administrative Office Procedures .3
ADS 1027	Business Environment .2
ADS 1042	PowerPoint .3
ADS 1053	Excel .3
ADS 2010	Desktop Publishing .2
ADS 2015	Introduction to Project Management .2
ADS 2030	Word .3
ADS 2045	Advanced Word Processing .3
GSCI 1401	Computer Technology .1
GSIS 1403	Professional Developmental Skills .3
GSWS 1401	Employment Preparation .1
MSM2015	Computer Concepts and Applications .3
Total Credits:	.42

Elective Courses

(select 3 credits from the courses below)

ACCT 1800	Business Law	.2
ADS 1300	Medical Terminology	.2
ADS 2090	Administrative Support Internship	2-6
MMDT 1021	HTML and the Web	.3
MSM 2110	Principles of Supervision	.3
MSM 2203	Management Issues	.3
Total Credits:		3

General Education Required Course

ENGL 1210	College Composition I	.3
Total Credits:		3

General Education Electives

Choose one course from the following three options:

CMST 1210	Introduction to Communication	.3
CMST 2250	Small Group Communication	.3
CMST 2260	Interpersonal Communications	.3
Total Credits:		3

Goal Area 7: Human Diversity

See your advisor to select courses that fulfill this requirement.

Total Credits: .3

Minnesota Transfer Curriculum

Choose from any goal area. See your advisor to select courses that fulfill this requirement.

Total Credits: 6
Total AAS Degree Credits: 60

BUSINESS TRANSFER PATHWAY

Hutchinson and Willmar Campuses

AS Degree - 60 Credits

Required Courses Credits

ACCT 1810	Introduction to Accounting	3
BUS 1010	Business and American Economy	3
BUS 1400	Business Computers	3
or		
CSCI 1400	Business Computers	3
BUS 2000	Principles of Management	3
BUS 2010	Legal Environment of Business	3
BUS 2100	Principles of Marketing	3
BUS 2240	Managerial Accounting	4

Total Program Area Courses: 26

MNTC Goal Area Courses

ENGL 1210	College Composition I (Goal 1)	3
ENGL 1220	College Composition II (Goal 1)	3
Any CMST course (Goal 1, 6, 7, 8, 9)		3
Any Goal 3 Science course		3
Math 1120	College Algebra (Goal 4)	4
Math 2070	Statistics and its Applications (Goal 4)	4
ECON 2060	Principles of Microeconomics (Goals 5, 10)	3
ECON 2070	Principles of Macroeconomics (Goals 5, 8)	3
Any Goal 6 course (recommend PHIL 1020, Intro to Ethics)		3

Total Required MNTC Goal Area Courses: 30

Elective MNTC Goal Area

Any MNTC Goal Area course(s) 4

Total AS Degree Credits: 60

HEALTHCARE ADMINISTRATIVE ASSISTANT

Hutchinson and Willmar Campuses

Diploma/AAS Degree – 48/60 Credits

Graduates learn specialized skills and receive a strong background in medical terminology usage and spelling. Learn how to prepare and maintain medical and financial records, make appointments, and work with patients. Certificate options: Medial Receptionist, Medical Transcriptionist (see page 80)

Diploma

Required Courses Credits

*ADS 1007	Keyboarding I	2
ADS 1012	Business Presentations	3
ADS 1014	Written Business Communications	3
ADS 1042	PowerPoint	3
ADS 1310	Med. Transcription/Quality/Production Mgmt	3
ADS 1320	Medical Office Management	3
ADS 1323	Electronic Health Records Technology	4
ADS 2030	Word	3
ADS 2322	Medical Insurance and Reimbursement	3
HLTH 1130	Medical Terminology	3
HLTH 1160	Anatomy and Physiology for Allied Health	3
HLTH 1200	Disease Conditions	3
HLTH 1220	Pharmacology for Allied Health	3

Total Credits: 39

Elective Courses (select 3 credits from the courses below)

ACCT 1800	Business Law	2
ACCT 1812	Payroll Preparation	2
ADS 1027	Business Environment	2
ADS 1040	Office Accounting Concepts	2
ADS 1045	Computerized Accounting Basics	1
ADS 1053	Excel (highly recommended)	3
ADS 2010	Desktop Publishing	2
ADS 2015	Introduction to Project Management	2
ADS 2045	Advanced Word Processing	3
ADS 2090	Internship	2-6
ADS 2312	Medical Transcription II	3
ADS 2313	Medical Transcription III	3
HIMC 1100	Fundamentals of Health Information	3
HIMC 1150	Legal Aspects of Health Information	2
HIMC 2001	CPT Coding	3
HIMC 2003	ICD-10-CM Coding	3
HIMC 2006	ICD-10-PCS Coding	3
MSM 2110	Principles of Supervision	3

General Studies

GSCI 1401	Computer Technology	1
GSIS 1403	Professional Development Skills	3
GSWS 1401	Employment Preparation	1

Total Credits: 5

Total Diploma Credits: 48

* Enrollment determined by placement test

** Dual Numbering: These courses have both an ADS and HIMC option.

AAS Degree

Required Courses Credits

*ADS 1007	Keyboarding	2
ADS 1014	Written Business Communications	3
ADS 1042	PowerPoint	3
ADS 1053	Excel	3
**ADS 1110	Anatomy and Physiology	3
**ADS 1120	Medical Terminology	3
**ADS 1140	Pharmacology	3
ADS 1310	Med. Transcription/Quality/Production Mgmt.	3
ADS 1320	Medical Office Management	3
ADS 1323	Electronic Health Record Technology	4
ADS 2030	Word	3
ADS 2322	Medical Insurance and Reimbursement	3
HIMC 1350	Pathophysiology	3

Total Credits: 40

Elective Courses

ACCT 1800	Business Law	2
ADS 1012	Business Presentations	3
ADS 1026	Access	3
ADS 1027	Business Environment	2
ADS 1040	Office Accounting Concepts	2
ADS 1045	Computerized Accounting Basics	1
ADS 1312	Medical Transcription II	3
ADS 1812	Payroll Preparation	2
ADS 2010	Desktop Publishing	2
ADS 2015	Introduction to Project Management	2
ADS 2045	Advanced Word Processing	3
ADS 2090	HealthcareAdministrative Asst. Internship	2-6
ADS 2312	Medical Transcription II	3
GSIS 1403	Professional Development Skills	3

Programs of Study

HIMC 1100	Fundamentals of Health Information	3
HIMC 1150	Legal Aspects of Health Information	2
HIMC 2001	CPT Coding	3
HIMC 2003	ICD-10-CM Coding	3
HIMC 2006	ICD-10-PCS Coding	3
MSM 2110	Principles of Supervision	3
Total Credits:		3

General Studies Required Courses

GSCI 1401	Computer Technology	1
GSWS 1401	Employment Preparation	1
Total Credits:		2

General Education Required Courses

ENGL 1210	College Composition I	3
PSYC 1310	Introduction to Psychology	4
Total Credits:		7

Goal Area 1: Communications (choose one)

CMST 1210	Introduction to Communication	3
CMST 2250	Small Group Communication	3
CMST 2260	Interpersonal Communication	3
Total Credits:		3

General Education Electives

See your advisor to select courses that fulfill this requirement.

Total Credits:		5
Total AAS Degree Credits:		60

* Enrollment determined by placement test

** Dual Numbering: These courses have both an ADS and HIMC option.

LEGAL ASSISTANT

Online

Diploma/AAS Degree – 48/60 Credits

Pursue a career as a legal assistant in a law firm, courthouse, government agency or any other office engaging in legal work. The duties of a legal assistant vary, depending on the type of office. Office duties may include answering the phone, greeting clients, scheduling appointments, filing, transcribing documents, preparing billings and assisting attorneys during meetings. This program is designed to provide students with specialized administrative skills and the background in legal terminology, document preparation and office procedures. This program participates in Articulated College Credit partnerships. Refer to page 6.

Diploma

Required Courses		Credits
ACCT 1800	Business Law	2
ADS 1012	Business Presentations	3
ADS 1014	Written Business Communications	3
ADS 1020	Administrative Office Procedures	3
ADS 1201	Civil Litigation and Criminal Law	3
ADS 1202	Real Estate and Corporate Law	3
ADS 1203	Family Law and Estate Planning/Probate	3
ADS 1204	Legal Documentation	3
ADS 1205	Legal Office Management	3
ADS 2030	Word	3
ADS 2201	Legal Research	3
ADS 2202	Advanced Legal Practices	2
GSCI 1401	Computer Technology	2

GSIS 1403	Professional Developmental Skills	3
GSWS 1401	Employment Preparation	1
Total Credits:		39

Elective Courses (select 9 credits from the courses below)

ACCT 1812	Payroll Preparation	2
ADS 1007	Keyboarding I (or required score)	2
ADS 1026	Database Microsoft Access	3
ADS 1027	Business Environment	2
ADS 1042	PowerPoint	3
ADS 1053	Excel	3
ADS 1300	Medical Terminology	2*
ADS 2010	Desktop Publishing	2
ADS 2015	Introduction to Project Management	2
ADS 2045	Advanced Word Processing	3
ADS 2290	Legal Assistant Program Internship	2-6*
Total Credits:		9
Total Diploma Credits:		48

AAS Degree

Required Courses		Credits
ACCT 1800	Business Law	2
ADS 1014	Written Business Communications	3
ADS 1020	Administrative Office Procedures	3
ADS 1201	Civil Litigation and Criminal Law	3
ADS 1202	Corporate and Real Estate Law	3
ADS 1203	Family Law and Estate Planning/Probate	3
ADS 1204	Legal Documentation	3
ADS 1205	Legal Office Management	3
ADS 2030	Word	3
ADS 2201	Legal Research & Appeal Procedures	3
ADS 2202	Advanced Legal Practices	2
GSCI 1401	Computer Technology	1
GSIS 1403	Professional Developmental Skills	3
GSWS 1401	Employment Preparation	1
Total Credits:		39

Elective Courses (select 9 credits from the courses below)

ACCT 1812	Payroll Preparation	2
ADS 1007	Keyboarding (or required score)	2
ADS 1012	Business Presentations	2
ADS 1026	Database Microsoft Access	3
ADS 1027	Business Environment	2
ADS 1042	PowerPoint	3
ADS 1053	Excel	3
ADS 1300	Medical Terminology	2-3
ADS 2010	Desktop Publishing	2
ADS 2015	Introduction to Project Management	2
ADS 2045	Advanced Word Processing	3
ADS 2290	Legal Assistant Program Internship	2-6
Total Credits:		

Goal Area 1: Communications

ENGL 1210	College Composition I	3
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Goal Area 1: Communications

Choose one course from the following three options:

CMST 1210	Introduction to Communication	3
CMST 2250	Small Group Communication	3
CMST 2260	Interpersonal Communications	3

Goal Area 7: Human Diversity

Choose one course3

General Education Electives

General Education courses must be selected from at least 3 of the 10 goal areas of the Minnesota Transfer curriculum. Elective courses may be taken from any of the ten (10) goal areas..... 6

Total General education Credits: 15

Total AAS Degree Credits: 60

Certificate - Legal Administrative Assistant

This certificate is designed for the student who has prior administrative support education and/or experience and who wishes to gain the necessary knowledge and skills for employment in a legal office setting. Entrance into this certificate program assumes that the student has strong keyboarding, word processing, and oral and written communication skills. Entrance into this certificate program will require the approval of the program advisor prior to enrollment.

Required Courses Credits

ADS 1201	Civil Litigation and Criminal Law.....	3
ADS 1202	Real Estate and Corporate Law.....	3
ADS 1203	Family Law and Estate Planning/Probate.....	3
ADS 2201	Legal Research and Appeal Procedure.....	3

Total Credits: 12

Elective Courses

ACCT 1800	Business Law.....	2
ADS 2202	Advanced Legal Practices.....	2
ADS 1204	Legal Documentation.....	3
ADS 1205	Legal Office Management.....	3

Total Electives 6

Total Certificate Credits: 18

MARKETING AND DESIGN

Hutchinson and Willmar Campuses, Blended Online

AAS Degree - 60 credits

Current research indicates a high demand for web sites and Internet services. Businesses are looking for individuals who can develop and maintain web sites and have other marketing skills to develop promotional materials. The Marketing and Design program is designed for the people who desire a career in all aspects of marketing a business.

AAS Degree

Required Courses Credits

MMDT 1002	Graphic Visualization.....	3
MMDT 1008	Introduction to Computer Graphics.....	3
MMDT 1010	Typography and Color Theory.....	3
MMDT 1051	Image Editing.....	3
MMDT 1124	Web Publishing.....	3
MMDT 1152	Business of Multimedia.....	3
MSM 1101	Principles of Marketing.....	3
MSM 1103	Basic Sales Techniques.....	3
MSM 1205	Business Presentations.....	3
MSM 1220	Advertising and Promotion.....	3
MSM 2105	Computer Applications.....	3
MSM 2110	Principles of Supervision.....	3
MSM 2125	E-Commerce & Social Media.....	3

Total Credits: 39

Elective Courses

Choose 6 credits from any MSM, MMDT, PHOT, ADS, ACCT or BUS courses as approved by your advisor.

Total Credits: 6

General Education

CMST - Any goal 1 CMST course.....3

ENGL - Any goal 1 ENGL course.....3

Total Credits: 6

General Education courses will be selected from at least 3 of the 10 goal areas of the Minnesota Transfer curriculum. Courses can be taken from any of the 10 areas.

Total Credits: 9

Total AAS Degree Credits: 60

MARKETING AND SALES MANAGEMENT

Willmar and Hutchinson Campuses

Diploma/AAS Degree - 54/60 credits

Certificate - 16 credits

Ridgewater College offers several programs in the marketing field. Students can earn an AAS degree or diploma in marketing and sales management. All of the programs offer a curriculum that centers on theory and practical experience through internships. This program participates in Articulated College Credit partnerships. Refer to page 6.

Diploma

Required Courses Credits

MSM 1012	Business Presentations (or choose ADS 1012).....	3
MSM 1101	Principles of Marketing.....	3
MSM 1103	Basic Sales Techniques.....	3
MSM 1137	Business Math and Accounting.....	3
MSM 1212	Personal Finance.....	3
MSM 1220	Advertising and Promotion.....	3
MSM 1818	Internship I.....	6
MSM 2102	Professional Sales.....	3
MSM 2105	Computer Applications.....	3
MSM 2110	Principles of Supervision.....	3
MSM 2125	E Commerce and Social Media.....	3
MSM 2203	Management Issues.....	3
MSM 2823	Introduction to Entrepreneurship.....	3

Total Credits: 39

Elective Courses (15 credits required)

ACCT 1800	Business Law.....	2
ACCT 1810	Introduction to Accounting.....	3
ADS 1014	Written Business Communications.....	3
ADS 2015	Introduction to Project Management.....	2
GSIS 1403	Professional Development.....	3
GSWS 1401	Employment Preparation.....	1
MMDT 1008	Introduction to Computer Graphics.....	3
MMDT 1015	Introduction to Digital Video Productions.....	3
MMDT 1057	Electronic Publishing.....	3
MMDT 1088	Basic Digital Photography.....	3
MMDT 1152	Business of Multimedia.....	3
MSM 1000	Student Success.....	1
MSM 1819	Internship II.....	1-3

Programs of Study

MSM 2207	Merchandising Management.....	3
MSM 2833	International Business	3
MSM 2850	Small Business Development	2
MSM 2950	Special Projects/Topics	1-3
Total Credits:		15
Total Diploma Credits:		54

AAS Degree - Option 1

Required Courses		Credits
MSM 1012	Business Presentations (or ADS 1012).....	3
MSM 1101	Principles of Marketing	3
MSM 1103	Basic Sales Techniques	3
MSM 1137	Business Math and Accounting	3
MSM 1212	Personal Finance	3
MSM 1220	Advertising and Promotion	3
MSM 1818	Internship I	3-6
MSM 2102	Professional Sales	3
MSM 2105	Computer Applications	3
MSM 2110	Principles of Supervision	3
MSM 2125	E-Commerce and Social Media	3
MSM 2203	Management Issues	3
MSM 2823	Introduction to Entrepreneurship	3
Total Credits:		39

Elective Courses

MMDT 1152	Business of Multimedia	3
MSM 1000	Student Success.....	1
MSM 1819	Internship II.....	1-3
MSM 2207	Merchandise Management	3
MSM 2833	International Business	3
MSM 2850	Small Business Development	2
MSM 2950	Special Projects/Topics	1-3
Total Credits:		6

General Education Electives

General Education courses will be selected from at least 3 of the 10 goal areas of the Minnesota Transfer Curriculum. See your advisor to select courses that fulfill this requirement.			9
Choose one Goal Area 1 CMST course			3
Total Credits:			12

Elective Courses (select 3 credits from the courses below)

ECON 2060	Principles of Microeconomics	3
ECON 2070	Principles of Macroeconomics	3
Total Credits:		3

Total AAS Degree Credits: **60**

AAS Degree - Option 2

Select same Required courses as Option 1	39
Choose courses from electives as Option 1	5

General Education Required Courses - Communications Study Certificate

CMST 2200	Public Speaking	3
CMST 2250	Small Group Communication	3
CMST 2260	Interpersonal Communication	3
CMST 2900	Communication Certificate Capstone.....	1
Total Credits:		10

General Education Electives (Choose 6 credits)

CMST 2230	Listening.....	3
CMST 2270	Intercultural Communication	3
CMST 2280	Argument and Reasoning.....	3
CMST 2400	Gender and Communication	3
CMST 2500	Computer-Mediated Communication	3
CMST 2600	Organizational Communications	3
Total Credits:		6
Total AAS Degree Credits:		60

CERTIFICATE - ENTREPRENEURSHIP

Hutchinson and Willmar Campuses, Online

Required Courses

ACCT 1800	Business Law.....	2
MSM 2823	Introduction to Entrepreneurship.....	3
MSM 2850	Introduction to Small Business Development	2
Total Required Credits:		7

Elective Courses - Choose 3 credits of Marketing or Sales

MSM 1101	Principles of Marketing	3
MSM 1103	Basic Sales.....	3
MSM 1220	Advertising and Promotion	3
MSM 2102	Professional Sales	3

Elective Courses - Choose 3 credits of Accounting or Business Math

ACCT 1810	Principles of Accounting	3
ACCT 1812	Payroll Preparation	2
ADS 1040	Office Accounting Concepts	2
ADS 1045	Computerized Accounting	1
MSM 1137	Business Math and Accounting	3

Choose 3 credits from the following programs:

Accounting (ACCT), Administrative Support (ADS), Business (BUS), Photography (PHOT), Marketing and Sales Management (MSM), or Multimedia Design Technology (MMDT)

Total Elective Credits:	9
Total Credits	16

MULTIMEDIA DESIGN TECHNOLOGY

Hutchinson Campus, Online

Diploma/AAS Degree – 50/60 Credits

See full education plans on page 56.

OFFICE ASSISTANT

Willmar and Hutchinson Campuses, Online

Diploma – 32 Credits

The Office Assistant program provides training to prepare individuals to perform limited clerical duties in the office. Students will learn computer, communication, and telephone skills, as well as gain knowledge in general office procedural skills. This program participates in Articulated College Credit partnerships. Refer to page 6.

Required Courses		Credits
ADS 1007	Keyboarding I	2
ADS 1012	Business Presentations	3
ADS 1014	Written Business Communications	3
ADS 1020	Administrative Office Procedures	4
ADS 1027	Business Environment	2
ADS 1042	PowerPoint	3
ADS 1053	Excel	3
ADS 2030	Word	3
GSCI 1401	Computer Technology	1
GSIS 1403	Professional Developmental Skills	3
GSWS 1401	Employment Preparation	1
Total Credits:		27

Elective Courses (select 5 credits from the courses below)

ACCT 1800	Business Law	2
ACCT 1810	Introduction to Accounting	3
ACCT 1812	Payroll Preparation	2
ADS 2010	Desktop Publishing	2
ADS 2015	Introduction to Project Management	2
ADS 2045	Advanced Word Processing	3
ADS 2090	Administrative Support Internship	2-6
MMDT 1021	HTML and the Web	3
MSM 2015	Computer Concepts and Applications	3
Total Credits:		5
Total Diploma Credits:		32

PHOTOGRAPHY AND DESIGN

Online with optional Weekly In-person Labs

Diploma 64 Credits | AAS Degree 60 Credits

See complete education plans on page 57.

PROFESSIONAL PHOTOGRAPHY TECHNOLOGY

Online

Diploma/AAS – 64/60 credits

Certificate - 29 credits

See complete education plans on page 57.

SALES & MANAGEMENT ASSOCIATE

Willmar and Hutchinson Campuses

Diploma – 34 Credits

Ridgewater College offers these programs to help students prepare for a sales career. Graduates will learn about product knowledge, customer service, territory and time management, and administrative duties. In the retail merchandising program, individuals will apply classroom knowledge to actual work experience through internships and field trips. These programs emphasize new concepts in effective selling techniques and strategies. Students who graduate are placed into sales positions within various businesses. Programs will prepare graduates for an exciting career in sales. This program participates in Articulated College Credit partnerships. Refer to page 6. See page 77 for related program.

Diploma

Required Courses		Credits
MSM or ADS 1012	Business Presentations	3
MSM 1101	Principles of Marketing	3
MSM 1103	Basic Sales Techniques	3
MSM 1137	Business Math and Accounting	3
MSM 1212	Personal Finance	3
MSM 1220	Advertising and Promotion	3
MSM 1818	Internship I	3-6
MSM 2125	E-Commerce	3
Total Credits:		24

Elective Courses (these courses are not required but are recommended)

ACCT 1800	Business Law	2
ACCT 1810	Introduction to Accounting	3
GSWS 1401	Employment Preparation	1
GSIS 1403	Professional Development	3
MSM 1000	Student Success	1
MSM 1819	Internship II	1-3
MSM 2102	Professional Sales	3
MSM 2105	Computer Applications	3
MSM 2207	Merchandise Management	3
MSM 2110	Principles of Supervision	3
MSM 2203	Management Issues	3
MSM 2833	International Business	3
MSM 2823	Introduction to Entrepreneurship	3
MSM 2950	Special Topics/Independent Study	1-3
Total Elective Credits:		10
Total Diploma Credits:		34

CONSTRUCTION TRADES



ELECTRICIAN/ ELECTRICAL TECHNOLOGY

Willmar and Hutchinson Campus

Diploma/AAS – 74/83 Credits | 60 Credits

The Electrician program is designed to provide entry-level skills and knowledge to perform electrical work in all types of electrical installations in accordance with the National Electrical Code. A student can specialize as a construction, industrial or maintenance electrician. Students will wire a variety of different labs that will expose them to residential, commercial, industrial, agricultural, or maintenance electrical wiring.

Electrician Diploma

Required Courses	Credits
CNEL 1001 Construction Site Safety	2
CNEL 1411 Circuits I	3
CNEL 1412 Circuits II	3
CNEL 1809 Electrical Materials Lab	2
CNEL 1810 Basic Wiring Lab 1	5
CNEL 1811 Basic Wiring Lab 2	4
CNEL 1815 Applied Math for Electricians	3
CNEL 1820 National Electrical Code I	3
CNEL 1825 National Electrical Code II	3
CNEL 1830 Print Reading, Planning and Estimating	3
CNEL 1850 Lighting Equipment	2
CNEL 2413 Circuits 3 Lab	2
CNEL 2730 Motor Controls	3
CNEL 2731 Programmable Logic Controllers	3
CNEL 2805 Electric Motors Lab	2
CNEL 2830 National Electrical Code III	3
CNEL 2835 National Electrical Code IV	3
CNEL 2840 Commercial Wiring Lab	2
CNEL 2846 Wiring Methods	2
CNEL 2847 Basic Residential Wiring Lab	1
CNEL 2848 Advanced Residential Wiring Lab	1
CNEL 2850 Specialized Systems	3
CNEL 2870 Heating/Air Conditioning	3
CNEL 2900 Transformers	3
CNEL 2901 Electrical Services	3
GSWS 1481 OSHA General Industry/First Aid	1
Total Credits:	68

General Education (6 credits required) **Credits**
Select any courses from the Minnesota Transfer Curriculum goal areas. Refer to pages 29-33 for a listing of the goal areas and courses assigned.

Total Credits **6**
Total Diploma Credits: **74**

Electrician AAS Degree

Required Courses	Credits
CNEL 1001 Construction Site Safety	2
CNEL 1411 Circuits I	3
CNEL 1412 Circuits II	3
CNEL 1809 Electrical Materials Lab	2
CNEL 1810 Basic Wiring Lab 1	5
CNEL 1811 Basic Wiring Lab 2	4
CNEL 1815 Applied Math for Electricians	3
CNEL 1820 National Electrical Code I	3
CNEL 1825 National Electrical Code II	3
CNEL 1830 Print Reading, Planning and Estimating	3
CNEL 1850 Lighting Equipment	2
CNEL 2413 Circuits 3 Lab	2
CNEL 2730 Motor Controls	3
CNEL 2731 Programmable Logic Controllers	3
CNEL 2805 Electric Motors Lab	2
CNEL 2830 National Electrical Code III	3
CNEL 2835 National Electrical Code IV	3
CNEL 2840 Commercial Wiring Lab	2
CNEL 2846 Wiring Methods	2
CNEL 2847 Basic Residential Wiring Lab	1
CNEL 2848 Advanced Residential Wiring Lab	1
CNEL 2850 Specialized Systems	3
CNEL 2870 Heating/Air Conditioning	3
CNEL 2900 Transformers	3
CNEL 2901 Electrical Services	3
GSWS 1481 OSHA General Industry/First Aid	1
Total Credits:	68

Required General Education Courses

General Education courses must be selected from at least three (3) of the ten (10) goal areas of the Minnesota Transfer curriculum. Refer to pages 29-33 for a listing of the goal areas and courses assigned.

Total General Education Courses **15**
Total Program Credits: **83**

Electrical Technology Diploma

Required Courses		Credits
CNEL 1411	Circuits I	3
CNEL 1412	Circuits II	3
CNEL 1809	Electrical Materials Lab	2
CNEL 1810	Basic Wiring Lab 1	5
CNEL 1811	Basic Wiring Lab 2	4
CNEL 1820	National Electrical Code I	3
CNEL 1825	National Electrical Code II	3
CNEL 1830	Print Reading, Planning and Estimating	3
CNEL 2730	Motor Controls	3
CNEL 2731	Programmable Logic Controllers	3
CNEL 2805	Electric Motors Lab	2
CNEL 2830	National Electrical Code III	3

CNEL 2835	National Electrical Code IV	3
CNEL 2840	Commercial Wiring Lab	2
CNEL 2850	Specialized Systems	3
CNEL 2870	Heating/Air Conditioning	3
CNEL 2900	Transformers	3
CNEL 2901	Electrical Services	3
Total Credits:		54

General Education

Choose from Minnesota Transfer Curriculum.

Total Credits	6
Total Diploma Credits	60

COSMETOLOGY AND MASSAGE THERAPY



COSMETOLOGY

Willmar Campus

Diploma/AAS Degree – 56/71 Credits

Cosmetologists provide a variety of services in hair design such as perms, haircuts, color, and sculpting to create artistic designs. Through this program, students become proficient in everything from deep conditioning treatments to special occasion long hair styles. They also perfect skills in esthetics (skin care and makeup) and nail technology. The curriculum includes classroom instruction and clinical experience in the campus salon.

Diploma

Required Courses:		Credits
COS 1403	Cosmetology Fundamentals	1
COS 1404	Cosmetology Fundamentals Spa Track	1
COS 1405	Pre-Clinic Haircutting	4
COS 1407	Pre-Clinic Nail Care	3
COS 1409	Pre-Clinic Chemical Control	3
COS 1411	Pre-Clinic Skin Care	3
COS 1413	Pre-Clinic Hair Color	3
COS 1415	Pre-Clinic Hair Design	2
COS 1417	Pre-Clinic Hair Care	2
COS 1418	Design Forum	2

COS 1435	Minnesota Laws & Rules	2
COS 1461	Salon Fundamentals for Estheticians	3
COS 1500	Clinical	26
COS 1519	Salon Success	1
Total Diploma Credits		56

AAS Degree

NOTE: The AAS degree option in Cosmetology is a nonconcurrent AAS degree. These General Education courses may be taken prior to acceptance into the Cosmetology program or after completion of the program.

Required Courses:		Credits
COS 1403	Cosmetology Fundamentals	1
COS 1404	Cosmetology Fundamentals Spa Track	1
COS 1405	Pre-Clinic Haircutting	4
COS 1407	Pre-Clinic Nail Care	3
COS 1409	Pre-Clinic Chemical Control	3
COS 1411	Pre-Clinic Skin Care	3
COS 1413	Pre-Clinic Hair Color	3
COS 1415	Pre-Clinic Hair Design	2
COS 1417	Pre-Clinic Hair Care	2
COS 1418	Design Forum	2

Programs of Study

COS 1435	Minnesota Laws & Rules	2
COS 1461	Salon Fundamentals for Estheticians	2
COS 1500	Clinical	26
COS 1519	Salon Success	1
Total Technical Credits:		56

General Education Electives

All students must complete a total of 15 credits taken from the following categories:

Goal Area 1: Communications	3
Goal Area 5: History & Social/Behavioral Sciences	3-4
Goal Area 6: The Humanities and Fine Arts	3-4
General Education Electives (see advisor)	4-6
Total Credits:	15
Total AAS Degree Credits:	71

Certificate - Nail Care Technology

Required Courses		Credits
COS 1407	Pre-Clinic Nail Care	3
COS 1435	Minnesota Laws and Rules	2
COS 1460	Salon Fundamentals for Nail Technology	4
COS 1502	Clinical	6
COS 1519	Salon Success	1
Total Credits		16

ESTHETICS (ADVANCED)

Willmar Campus

AAS Degree – 60 Credits

Required Courses:		Credits
COS 1411	Preclinic Skin Care	3
COS 1435	Minnesota Laws and Rules	2
COS 1461	Salon Fundamentals for Estheticians I	3
COS 1462	Salon Fundamentals for Estheticians II	2
COS 1500	Clinical	20
COS 1519	Salon Success	1
COS 2460	Advanced Esthetics I	3
COS 2462	Advanced Esthetics II	3
COS 2464	Spa and Alternative Therapies	3
COS 2920	Adv. Esthetics Experiential Cystone	4
Total Credits:		44

Electives

ADS 1120	Medical Terminology	3
PRNU 1617	Medical Terminology	1
Total Credits		1

General Education Required Course List

Choose at least one course from the following Goal Areas: 1, 5, and 6. Additional credits can be chosen from any goal area. See your advisor to select courses that fulfill this requirement.

Total Credits	15
Total Diploma Credits	60

ESTHEOLOGY

Willmar Campus

Certificate - 23 credits

Required Courses		Credits
COS 1411	Pre-Clinic Skin Care	3
COS 1435	Minnesota Law and Rules	2
COS 1461	Salon Fundamentals for Estheticians	3
COS 1462	Salon Fundamentals for Estheticians	2
COS 1500	Clinical	12
COS 1519	Salon Success	1
Total Credits		23

MASSAGE THERAPY

Willmar Campus

Diploma/AAS Degree - 32/60 Credits

Massage Therapy is a rapidly growing profession that offers a wide variety of opportunities for the motivated and talented practitioner. It is widely recognized as an effective means of reducing the incidence of soft tissue disorders, pain, and dysfunction and as such, has become an important and respected part of both the traditional medical community and the spa/salon industry.

Massage Therapy has now become one of the most popular complimentary therapies available since massage is no longer considered just a luxury, but rather an important part of an overall health and wellness program.

Students are trained in Swedish massage, therapeutic techniques, hot stone applications, and seated-chair massage, and are introduced to a variety of specialized massage techniques such as Reflexology, Shiatsu, Myofascial Release, Energy Work, and sports massage. Also included are a number of adjunct therapies, including ear candling, the use of hot/cold stones for specific areas, and spa body treatments. The Massage Therapy practitioner must also understand anatomy and physiology, pathology, client communications, business practices, principles of holistic health, and first aid and safety, all of which are included in this program.

Diploma:

Required Courses		Credits
GSWS 1451	First Aid/Safety	1
MTHE 1201	Basic Massage	5
MTHE 1203	Massage Therapy Anatomy & Physiology I	3
MTHE 1204	Massage Therapy Business Practices/Comm.	1
MTHE 1205	Principles of Holistic Health	2
MTHE 1206	Clinical/Field Experience I	1
MTHE 1208	Introduction to Pathology	2
MTHE 1211	Advanced Massage	5
MTHE 1212	Massage Therapy Anatomy & Kinesiology	3
MTHE 1213	Massage Therapy Business Practices/Comm.	2
MTHE 1214	Ancillary Treatments	2
MTHE 1220	Massage Therapy Certification Prep	1
MTHE 1230	Clinical/Field Experience II	2
Total Credits:		30

Elective Courses (choose one of the following)

GSWS 1122	Oral and Written Communications	2
or Any MnTC Goal Area 1 or 7 course		3
Total Credits:		2
Total Diploma Credits:		32

AAS Degree

Required Courses		Credits
GSWS 1451	First Aid/Safety	1
MTHE 1201	Basic Massage	5
MTHE 1203	Massage Therapy Anatomy & Physiology I	3
MTHE 1204	Massage Therapy Business/Comm. 1	1
MTHE 1205	Principles of Holistic Health	2
MTHE 1206	Clinical/Field Experience I	1
MTHE 1208	Introduction to Pathology	2
MTHE 1211	Advanced Massage	5
MTHE 1212	Massage Therapy Anatomy & Kinesiology	3
MTHE 1213	Business Practices/Communication II	2
MTHE 1214	Ancillary Treatments	2
MTHE 1220	Massage Therapy Certification Prep	1
MTHE 1230	Clinical Field Experience II	2
Total Credits:		30

Elective Courses

ADS 1040	Office Accounting Concepts	2
ADS 1045	Computerized Accounting	1
BIOL 1080	Human Biology	4
BIOL 2100	Human Anatomy	4
BIOL 2110	Human Physiology	4
BUS 1010	Business and the American Economy	3
BUS 1400	Business Computers	3
CHEM 1010	Survey of Chemistry	4
CMST 1210	Introduction to Communications	3
CMST 2230	Listening	3
CMST 2260	Interpersonal Communications	3
ECON 1900	Personal Finance	3
ECON 1950	Introduction to Economics	3
GSIS 1502	Human Relations	2
MSM 1101	Principles of Marketing	3
MSM 1103	Basic Sales	3
MSM 1220	Advertising and Promotions	3
MSM 2823	Introduction to Entrepreneurship	3
MSM 2850	Small Business Development	2
MTHE 1225	Field Experience	1
MTHE 1501	Advanced Massage 2	3
MTHE 2950	Special Projects/Topics	1-6
PE 1180	Introduction to Yoga	1
PE 1220	Fitness/Wellness	2
PSYC 1310	Introduction to Psychology	4
PUBH 1050	Personal/Community Health	2
PUBH 1070	Nutrition	3
SOC 1050	Introduction to Sociology	3
SOC 1070	Marriage and Family Living	3
Total Credits		15

General Education

Goal 1: Communications (choose at least 1 course)	3
Goal 5: History, Social, Behavioral Sciences (choose at least 1 course)	3
Choose remaining credits from any goal area	9
Total Credits	15
Total Program Credits	60

NOTE: Choice of general education courses must be made to include at least three Minnesota Transfer Curriculum Goal areas.

NAIL CARE TECHNOLOGY

Certificate

Required Courses		Credits
COS 1407	Precclinic Nail Care	3
COS 1435	Minnesota Laws and Rules	2
COS 1460	Salon Fundamentals for Nail Technology	
COS 1502	Clinical	6
COS 1519	Salon Success	1
Total Credits		16

EDUCATION



AGRICULTURAL SCIENCE AND TECHNOLOGY PRE-AGRICULTURAL EDUCATION FOR THE UNIVERSITY OF MINNESOTA

**Willmar Campus (2+2 Program)
AS Degree – 60 Credits**

See page 48 for the complete education plan.

EARLY CHILDHOOD EDUCATION

Willmar and Hutchinson Campuses, Blended Online

Transfer Pathway AS Degree 60 Credits | Certificates – 16/19 Credits

The Early Childhood Education program of Ridgewater College prepares students to provide developmentally appropriate activities for infants, toddlers, and preschoolers.

This Associate of Science degree can lead to a Bachelor of Science degree from Southwest Minnesota State University. Private preschools, childcare, Head Start, Early Childhood Family Education, kindergarten, and primary grade teaching are possible career directions with this degree.

Early childhood education is a growing career area with the possibility for leadership positions in agencies that provide support to families and children such as Head Start and other child care resource and referral agencies.

This program participates in Articulated College Credit partnerships. Refer to page 6.

Work with your academic advisor to select courses that will best suit your educational goals.

NOTE: Program participants are subject to background checks according to Minnesota state law. See page 9 of the catalog for more specific information.

Transfer Pathway AS Degree

Required Courses	Credits
ECED 1015 Creative Activities and Environment	3
ECED 1105 Behavior Guidance	3
ECED 1110 Foundations of Language and Literacy	3
ECED 1115 Introduction to Special Education	3
ECED 1120 Diverse Children and Family Relations	3
ECED 1125 Child Growth and Development	3
ECED 1610 Health, Wellness, and Nutrition in Early Childhood	3
ECED 1620 Introduction to Early Childhood Education	3
ECED 1630 Observation and Assessment in Early Childhood	3
ECED 2900 Internship	3
Total Credits:	30

Electives

ECED 1150 Children's Mental Health	2
ECED 1155 Crisis Intervention	1
ECED 1410 Introduction to Autism Spectrum Disorder	2
ECED 1420 Bullying: An Educator's Role	1
ECED 1430 Assistive Technology in Early Childhood	1
ECED 1440 Creating an Inclusive Environment	1
GSWS 1451 First Aid/Safety	1

Goal Area 1: Communications

CMST 2200 Public Speaking	3
ENGL 1209 or 1210 - College Composition 1	1
Total Credits	6-9

Goal Area 2: Critical Thinking

Goal Area 3: Natural Sciences

At least 1 lab science course	
Total Credits:	3-4

Goal Area 4: Mathematics/Logical Reasoning

College level MATH course	3-4
Total Credits:	3-4

Goal Area 5: History and the Social/Behavioral Sciences

PSYC 1310 Introduction to Psychology (required)	4
At least one SOC course (required)	3-4
Total Credits:	7-8

Goals 6, 7, 8: Humanities and Fine Arts | Human Diversity | Global

Perspectives

At least 1 course in Goal 7 is required. 3-4

At least 1 course in Goals 6 or 8 is required 3-4

Total Credits: **6-8**

Additional credits as needed to complete the 30-credit general education degree requirements.

Total AS Degree Credits: **60**

Certificate - Early Childhood Education (online)

ECED 1115 Introduction to Special Education. 3

ECED 1120 Diverse Children and Family Relations 2

ECED 1125 Child Development. 3

ECED 1610 Health, Safety, and Nutrition in Early Childhood. 3

ECED 1620 Foundations of Early Childhood 3

ECED 2900 Internship. 3

Total AS Degree Credits: **18**

Certificate - Early Childhood Special Education (online)

ECED 1105 Behavior Guidance 3

ECED 1115 Introduction to Special Education. 3

ECED 1150 Children's Mental Health. 2

ECED 1155 Crisis Intervention. 1

ECED 1410 Introduction to Autism Spectrum Disorder 2

ECED 1420 Bullying: An Educator's Role 1

ECED 1430 Assistive Technology in Early Childhood Special Education 1

ECED 1440 Creating an Inclusive Early Childhood Environment 1

ECED 1630 Observation and Assessment in Early Childhood. 3

ECED 2910 Early Childhood Special Education Internship 2

GSWS 1451 First Aid/CPR. 1

Total AS Degree Credits: **20**

ELEMENTARY EDUCATION FOUNDATIONS TRANSFER PATHWAY

Willmar Hutchinson Campuses

AS Degree - 60 Credits

Required Courses Credits

EDUC 1100 Drug Education. 2

EDUC 1120 Diverse Children and Family Relations 3

EDUC 1125 Child Growth and Development 3

EDUC 1135 Education Technology 2

EDUC 1200 Introduction to Education 4

Total Credits: **14**

Elective Courses

ECED 1105 Behavior Guidance 3

ECED 1110 Foundations of Language and Literacy 3

ECED 1150 Children's Mental Health. 2

ECED 1155 Crisis Intervention. 1

ECED 1410 Introduction to Autism Spectrum Disorder 2

ECED 1440 Creating an Inclusive Early Childhood Environment 1

ECED 2900 Internship. 3

EDUC 1115 Introduction to Special Education. 3

EDUC 2200 Educational Psychology 3

Total Credits: **2**

General Education courses

Complete at least **44 credits** in courses from the Minnesota Transfer Curriculum (MnTC), including all courses listed.

Complete all ten goal areas and maintain a cumulative 2.0 GPA for the entire MnTC. One course may satisfy more than one goal area, but the course credits may be counted only once.

Goal Area 1: Communication

CMST 2200 Public Speaking 3

ENGL 1209 or ENGL 1210 College Composition I 3

ENGL 1220 College Composition II 3

Total Credits: **9**

Goal Area 2: Critical Thinking

See your advisor to select courses that fulfill this requirement.

Goal Area 3: Natural Sciences

BIOL 1410 or ENVS 1410 - Environmental Science 4

Any other Goal 3 Group B course 4

Total Credits: **8**

Goal Area 4: Mathematical/Logical Reasoning

MATH 1000 Quantitative Reasoning 3

MATH 2100 Introduction to Modern Mathematics I 3

MATH 2110 Introduction to Modern Mathematics II 3

Total Credits: **9**

Goal Area 5: History and the Social/Behavioral Sciences

(Must include 2 disciplines)

HIST 1110 United States History to 1865. 3

OR HIST 1120 United States History 1865 to Present 3

PSYC 2630 Developmental Psychology (PSYC 2630 has a required pre-requisite of PSYC 1310, 4 credits). 3

Any other Goal 5 course. 3

Total Credits: **9**

Goal Area 6: The Humanities and Fine Arts (must include 2 disciplines)

ART 2260 Elementary Art Education. 3

ENGL 2110 Multicultural Literature 3

Any other Goal 6 course. 3

Total Credits: **9**

***Goal Area 7: Human Diversity - one course required**

***Goal Area 8: Global Perspective - one course required**

***Goal Area 9: Ethical & Civic Responsibility - one course required**

***Goal Area 10: People & the Environment - one course required**

*Many courses from Goal Areas 1-6 also meet Goals 7-10.

Total AS Degree Credits: **60**

SPECIAL EDUCATION TRANSFER PATHWAY

Willmar and Hutchinson Campuses

AS Degree - 60 Credits | Certificate 17 Credits

Students with unique needs require teachers who specialize in the strategies that help them succeed. Special education teachers work with students in grades kindergarten through 12. By differentiating and customizing their learning to assist students in meeting their goals. You can be the difference in the lives of these children and their families.

Ridgewater's history of educational excellence makes it a great choice for building a solid foundation in special education.

A course delivery blend of on-site experience and online convenience provides a perfect mix for students to succeed.

AS DEGREE

Required Courses Credits

EDUC 1115	Introduction to Special Education.	3
EDUC 1120	Diverse Children and Family Relations	3
EDUC 1135	Education Technology	2
EDUC 1200	Introduction to Education	4
EDUC 2200	Educational Psychology	3
Total Credits:		15

Electives

ECED 1105	Behavior Guidance	3
ECED 1150	Children's Mental Health.	2
ECED 1155	Crisis Intervention.	1
ECED 1410	Introduction to Autism Spectrum Disorder	2
ECED 1440	Creating an Inclusive Early Childhood Environment	1
ECED 2900	Internship.	3
EDUC 1100	Drug Education.	2
EDUC 1125	Child Growth and Development	3
Total Credits:		5

General Education Courses

Complete at least 40 credits in courses from the Minnesota Transfer Curriculum (MnTC), including all courses listed. Complete all ten goal areas and maintain a cumulative 2.0 GPA for the entire MnTC. One course may satisfy more than one goal area, but the course credits may be counted only once.

Goal Area 1: Communication

ENGL 1209 or ENGL 1210	College Composition I	3
ENGL 1220	College Composition II	3
Any Goal 1 CMST course		3
Total Credits:		9

Goal Area 2: Critical Thinking

See your advisor to select courses that fulfill this requirement.

Goal Area 3: Natural Sciences

BIOL 1410	Environmental Science.	4
Any other Goal 3 Group B course		4
Total Credits:		8

Goal Area 4: Mathematical/Logical Reasoning

Any Goal 4 MATH course.	3-4
Total Credits:	3

Goal Area 5: History and the Social/Behavioral Sciences (Must include 2 disciplines)

HIST 1110	United States History to 1865.	3
OR HIST 1120	United States History 1865 to Present	3
PSYC 2630	Developmental Psychology (PSYC 2630 has a required pre-requisite of PSYC 1310, 4 credits).	3
Any other Goal 5 course.		3
Total Credits:		9

Goal Area 6: The Humanities and Fine Arts (must include 2 disciplines)

ART 2260	Elementary Art Education.	3
ENGL 2110	Multicultural Literature	3
Any other Goal 6 course.		3
Total Credits:		9

*Goal Area 7: Human Diversity - one course required

*Goal Area 8: Global Perspective - one course required

*Goal Area 9: Ethical & Civic Responsibility - one course required

*Goal Area 10: People & the Environment - one course required

*Many courses from Goal Areas 1-6 also meet Goals 7-10.

Total AS Degree Credits: 60

Certificate - Education Foundations

Required Courses Credits

EDUC 1115	Introduction to Special Education.	3
EDUC 1120	Diverse Children and Family Relations	3
EDUC 1135	Education Technology	2
EDUC 1200	Introduction to Education	4
EDUC 2200	Educational Psychology	3
Total Credits:		15

Electives

ECED 1150	Children's Mental Health.	2
ECED 1410	Introduction to Autism Spectrum Disorder	2
ECED 2910	Early Childhood Special Education Internship	2
Total Credits		2
Total Certificate Credits		17

HEALTH CARE



ACTIVITY DIRECTOR

Online

AAS Degree/Certificate – 60/24 Credits

The Activity Director program offers career opportunities to work with the elderly. Activity professionals provide activity programming, planning, activity calendar development, intervention techniques, and volunteer management. An activity director manages the activity department, staff and program. Career opportunities are available for activity professionals in long-term care facilities, adult daycare centers, senior centers, assisted living, and senior housing facilities.

NOTE: This program is offered fully online.

Activity Director – AAS Degree

Required Courses	Credits
ADR 1015 Activity Ideas and Program Development	.4
ADR 1410 Community Agencies and Resources for Older Adults	.2
ADR 1420 Activity Intervention and Engagement Techniques	.4
ADR 1500 MEPAP 1 Basic Activity Course	.4
ADR 1520 MEPAP 2 Activity Management Course	.4
ADR 1760 Introduction to Dementia Care & Activity Services	.3
ADS 2015 Introduction to Project Management	.2
ADR 2900 Internship	10
GSIS 1403 Professional Development Skills	.3
GSIS 1502 Human Relations	.2
GSWS 1401 Employment Preparation and Retention	.1
Total Credits:	.39

General Education Required Courses

CMST 1210 Introduction to Communication	.3
CMST 2600 Organizational Communication	.3
Total Credits	6

Minnesota Transfer Curriculum

General Education courses will be selected from at least three (3) of the ten (10) goal areas of the Minnesota Transfer curriculum. See your advisor to select courses that fulfill this requirement.

Total Credits:	15
Total AAS Degree Credits:	60

Activity Director – Certificate

Required Courses	Credits
ADR 1015 Activity Ideas and Program Development	.4
ADR 1420 Activity Intervention and Engagement Techniques	.4
ADR 1500 MEPAP 1 Basic Activity Course	.4
ADR 1520 MEPAP 2 Activity Management Course	.4
ADR 1760 Introduction to Dementia and Activity Services	.3
ADR 2900 Internship	.5
Total Credits:	.24

EMERGENCY MEDICAL TECHNICIAN (EMT) PROGRAM

Customized Training/Continuing Education

This course is for law enforcement and emergency responder personnel, or people interested in becoming law enforcement or ambulance personnel. Upon successful completion of the Emergency Medical Technician basic course, you are eligible to take the National Registry of EMTs written examination.

NOTE: Ridgewater's comprehensive [Customized Training and Continuing Education](#) also offers recertification for Emergency Medical Technicians for both basic and paramedic levels.

HEALTH INFORMATION TECHNICIAN

Online

AAS Degree – 64 Credits

Health Information Technicians are an essential part of the health information and healthcare team. They control the use and release of health information in clinics, hospitals, nursing homes, government agencies, insurance companies - any place where medical information is generated, collected and stored. This career combines health, business and legal aspects into a promising future. Most program graduates obtain employment in coding, release of information, quality improvement, abstracting or supervision. This is a two-year program accredited by the Commission on Accreditation for Health Informatics and Information Management (CAHIM) in association with the American Health Information Management Association's Council on Accreditation. Graduates of an accredited program are eligible to take a national registration exam allowing them to become a Registered Health Information Technician (RHIT).

Programs of Study

Required Courses	Credits
HIMC 1100 Fundamentals of Health Information	3
HIMC 1110 Anatomy & Physiology for HIT (or MEDA 1010)	3
HIMC 1115 Anatomy & Physiology Applications for HIT	1
HIMC 1120 Medical Terminology (or MEDA 1113)	3
HIMC 1140 Pharmacology (or MEDA 2032)	3
HIMC 1150 Legal Aspects of Health Information	2
HIMC 1250 Health Info. Tech Experiential Foundations	2
HIMC 1320 Reimbursement Methodologies	3
HIMC 1330 Electronic Health Records	2
HIMC 1340 Health Records Documentation	1
HIMC 1350 Pathophysiology (or MEDA 1021, Disease Conditions)	3
HIMC 2001 CPT Coding	3
HIMC 2003 ICD Coding	3
HIMC 2004 Advanced Coding	3
HIMC 2006 ICD-10-PCS Coding	3
HIMC 2020 HIT Review	1
HIMC 2040 Quality Management and Healthcare Statistics	3
HIMC 2240 Supervision of Health Information	2
HIMC 2250 Health Info. Tech Experiential Capstone	2-3
HIMC 2270 Computerized Health Information	2
Total Credits	Minimum of 48

Elective Course: As needed to complete 49 credits of HIMC courses

HIMC 2252 Health Information Tech Internship	1
HIMC 2950 Special Projects/Topics	1-4
Total Credits:	49

Required General Education Courses

CMST Choose any CMST course	3
ENGL 1210 College Composition I	3
Total Credits:	6

General Education Electives

Select general education courses (9 credits) with recommendation from advisor. Selection must result in courses completed from 3 of the Minnesota Transfer Curriculum goal areas.

Total AAS Degree Credits: 64

NOTE: A grade of "C-" or above must be achieved for all required Health Information Technician/Medical Coding Specialist (HIT/MCS) programs and required general education courses in the HIT degree and MCS diploma to progress in the program.

HEALTHCARE ADMINISTRATIVE ASSISTANT

Hutchinson and Willmar Campuses

Diploma/AAS Degree – 48/60 Credits

See page 64 for complete education plans.

HEALTH SCIENCES BROAD FIELD

Hutchinson and Willmar Campuses

AS Degree – 60 Credits

Health care is an in-demand, broad career field with thousands of possibilities. How do you decide? Sometimes you simply need to start. With Ridgewater's Health Sciences Broad Field AS degree, you obtain a solid health science foundation. You can transfer it into a university bachelor's degree or apply it toward a two-year health degree like nursing.

Required Courses

BIOL 1000 Introduction to Biology	4
BIOL 2100 Human Anatomy	4
BIOL 2110 Human Physiology	4
BIOL 2150 Microbiology	4
CHEM 1010 Survey of Chemistry	4
CMST 1210 Introduction to Communications	3
ENGL 1210 College Composition I	3
MATH 1120 College Algebra	4
MATH 2010 Elementary Statistics	3
PHIL 1020 Introduction to Ethics	3
PSYC 1310 Introduction to Psychology	4
PSYC 2630 Developmental Psychology	3
PUBH 1070 Nutrition	3
SOC 1050 Introduction to Sociology	3

Electives

Based on intended major .11

Total AS Electives 60

MESSAGE THERAPY

Willmar Campus

Diploma/AAS Degree - 32/60 Credits

See page 71 for complete education plans.

MEDICAL ASSISTANT

Willmar and Hutchinson Campuses

Diploma/AAS Degree - 49/60 credits

As a professional and multi-skilled worker, a medical assistant performs administrative and clinical duties in the healthcare field. Medical assistants are classified as allied health practitioners and can be found in physician offices, outpatient clinics, ambulatory facilities and other related businesses. This program prepares graduates to take the national test for certification, allowing the student to become a certified medical assistant.

The American Association of Medical Assistants (AAMA) which is responsible for the certification of medical assistants, has varied restrictions that may affect persons with a history of felony convictions. Successful completion of the program does not guarantee eligibility to take the certification examination. Prospective students are encouraged to contact the AAMA at 800-228-2262 concerning questions they may have regarding their eligibility for certification.

Minnesota law requires that any person who provides services that involve direct contact with patients and residents at a Minnesota licensed healthcare facility have a background study. An individual who is disqualified from having direct patient contact as a result of the study, and whose disqualification is not set aside by the Commissioner of Health, will not be permitted to participate in a clinical placement. Failure to participate in a clinical placement required by the Medical Assistant program at Ridgewater College, will result in ineligibility to qualify for a diploma in medical assisting.

The Ridgewater College Medical Assistant diploma program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Medical Assisting Education Review Board (MAERB).

Commission on Accreditation of Allied Health Education Programs
25400 US Highway 19 North, Suite 158
Clearwater, FL 33763
Telephone: 727-210-2350

Diploma

Required Courses		Credits
HLTH 1130	Medical Terminology	3
HLTH 1160	Anatomy and Physiology for Allied Health	3
HLTH 1200	Disease Conditions	3
HLTH 1220	Pharmacology for Allied Health	3
MEDA 1002	Applied Communications/Scribing I	2
MEDA 1102	Applied Communications/Scribing II	2
MEDA 1110	Human Relations for Healthcare	2
MEDA 1135	Clinical Procedures I	3
MEDA 1225	Orientation to Medical Lab	3
MEDA 1235	Clinical Procedures II	3
MEDA 1313	Human Development for Allied Health	2
MEDA 1324	Laboratory Skills I	1
MEDA 1326	Laboratory Skills II	1
MEDA 1328	Certification Exam Review I	1
MEDA 1451	Practicum Seminar	3
MEDA 1540	Medical Office Procedures	3
MEDA 2020	Certification Exam Review II	1
MEDA 2100	Practicum	5
MEDA 2310	Laboratory Procedures I	1
MEDA 2320	Laboratory Procedures II	2
Total Diploma Credits		49

AAS Degree

Required Courses		Credits
HLTH 1130	Medical Terminology	3
HLTH 1160	Anatomy and Physiology for Allied Health	3
HLTH 1200	Disease Conditions	3
HLTH 1220	Pharmacology for Allied Health	3
MEDA 1110	Human Relations for Healthcare	3
MEDA 1135	Clinical Procedures I	3
MEDA 1225	Orientation to Medical Lab	3
MEDA 1235	Clinical Procedures II	3
MEDA 1313	Human Development for Allied Health	2
MEDA 1324	Lab Skills I	1
MEDA 1326	Lab Skills II	1
MEDA 1328	Certification Exam Review I	1
MEDA 1451	Practicum Seminar	3
MEDA 1540	Medical Office Procedures	3
MEDA 2020	Certification Exam Review II	2
MEDA 2100	Practicum	5
MEDA 2310	Laboratory Procedures I	1
MEDA 2320	Laboratory Procedures II	2
Total Credits		45

General Education Courses (0 credits required)

MEDA 1002	Applied Communications/Scribing I	2
MEDA 1102	Applied Communications/Scribing II	2

Goal Area 1: Communications

Choose one of the following courses:

CMST 1210	Introduction to Communications	3
ENGL 1210	College Composition I	3

Goal Area 4: Mathematical/Logical Reasoning

Choose any Goal 4 Math course

Goal Area 5: History, Social & Behavioral Sciences

Choose one of the following courses:

PSYC 1310	Introduction to Psychology	4
SOC 1050	Introduction to Sociology	3

General Education Electives

General Education courses will be selected from at least 3 of the 10 goal areas of the Minnesota Transfer curriculum. Elective courses may be taken from any of the 10 goal areas to complete a total of 15 General Education credits.

General Education Electives	15
Total Credits	60

MEDICAL CODING SPECIALIST

Online

Diploma – 50 Credits

A medical coding specialist is a vital part of a health care team. By analyzing medical record information and assigning the proper codes to diagnoses and procedures, financial reimbursement to health care facilities is made by insurance companies and government agencies. This is especially important because patient billings must be compliant with federal regulations. Students will become familiar with anatomy, physiology, medical terminology, pharmacology, and computers. There is an emphasis on completeness, accuracy, and quality in all work. Diploma graduates are eligible to take the Certified Coding Associate (CCA) credential exam from the American Health Information Management Association (AHIMA). Diploma graduates can easily continue their education by obtaining an advanced degree such as the Health Information Technician AAS degree also offered at Ridgewater College.

Required Courses

Required Courses		Credits
HIMC 1100	Fundamentals of Health Information	3
HIMC 1115	Anatomy & Physiology Applications for HIT	1
HIMC 1150	Legal Aspects of Health Information	2
HIMC 1320	Reimbursement Methodologies	3
HIMC 1330	Electronic Health Records	2
HIMC 1340	Health Records Documentation	1
HIMC 2001	CPT Coding	3
HIMC 2003	ICD Coding	3
HIMC 2004	Advanced Coding	3
HIMC 2030	CCA Review	1
HIMC 2040	Quality Management and Healthcare Statistics	3
HIMC 2260	Medical Coding Specialist Experiential Capstone	2-3
HLTH 1130	Medical Terminology	3
HLTH 1160	Anatomy and Physiology for Allied Health	3
HLTH 1200	Disease Conditions	3
HLTH 1220	Pharmacology for Allied Health	3
MEDA 1002	Applied Written Communications/Scribing I	2
CMST	Any CMST course	3
Total Credits:		Minimum of 47

Elective Courses (Minimum 3 credits required)

GSIS 1502	Human Relations	2
GSWS 1451	First Aid/CPR	1
HIMC 2240	Supervision of Health Information	2
HIMC 2262	Medical Coding Specialist Internship	1
HIMC 2270	Computerized Health Information	2
HIMC 2950	Special Projects	
MEDA 1102	Applied Written Communications/Scribing II	2

Total Credits:	Minimum of 2
Total Diploma Credits:	50

NOTE: A grade of "C-" or above must be achieved for all of the required Health Information Technician/Medical Coding Specialist programs (HIT/MCS) and required general education courses in the HIT degree and MCS diploma to progress in the program.

NURSING

Willmar and Hutchinson Campuses

Practical Nursing Program: 40-Credit Diploma

Associate Degree Nursing Program: 75-credit AS Degree

Ridgewater's Nursing program prepares the student to take the NCLEX licensure exam to become a practical nurse and/or professional nurse.

The PN program is approved by the Minnesota Board of Nursing.

Practical Nursing Program

Practical nurses are high-demand, entry-level nurses who work to prevent illness and to promote, restore or maintain good health. Under the supervision of registered nurses and physicians, Licensed Practical Nurses (LPNs) put the care in healthcare by working the frontline with patients.

The Ridgewater College Practical and Associate Degree Nursing Programs meet the state education requirements for a Practical or Professional nursing license in the state of Minnesota. Ridgewater College has not determined if the Practical and Associate Degree Nursing Programs at Ridgewater College meet the state education requirements in any other state, any U.S. Territory, or the District of Columbia.

The National Council of State Boards of Nursing (NCSBN) has resources that may be helpful.

- Link to [Nursing Practice Act](#)
- Link to [FAQs](#) regarding the impact of 34 CFR 668.43 on nursing programs

Practical Nursing Diploma

Required Courses: **Credits**

PRNU 1000	Foundations of Practical Nursing	6
PRNU 1200	Nursing Care of Older Adults	3
PRNU 1300	Pharmacology for the Role of the PN	2
PRNU 1400	Clinical I	3
PRNU 1617	Medical Terminology	1
PRNU 2100	Nursing of Adults	3
PRNU 2200	Nursing Care of Women/Newborn/Children	3
PRNU 2300	Transition to Practice	1
PRNU 2400	Psychosocial Nursing Care	1
PRNU 2500	Clinical II	6
Total Credits		29

Required General Education Courses

BIOL 1080	Human Biology	4
ENGL 1210	College Composition I	3
PSYC 1310	Introduction to Psychology	4
Total Credits		11
Total Program Credits		40

Approval/Accreditation

The PN program is approved by the Accreditation Commission for Education in Nursing, Inc. (ACEN). For information on the accreditation process, contact ACEN at 404-975-5000 or at www.acenursing.org.

NURSING - ASSOCIATES DEGREE & BACHELOR OF SCIENCE (RN)

Nursing AS Degree

Required Courses **Credits**

NURS 2700	Health Promotion and the Role of the Professional Nurse	9
NURS 2750	Nutrition & the Role of the Professional Nurse	2
NURS 2800	Chronic and Palliative Care	7
NURS 2820	Pharmacology & Role of Professional Nurse	3
NURS 2850	Applied Pathophysiology for Nursing I	2
NURS 2900	Acute and Complex Care	7
NURS 2920	Applied Pathophysiology for Nursing II	2
NURS 2950	Nursing Leadership I	3
Total Credits		35

Required General Education Courses:

BIOL 2100	Human Anatomy	4
BIOL 2110	Human Physiology	4
BIOL 2150	Microbiology	4
CHEM 1010	Survey of Chemistry	4
CMST	Any Goal 1 CMST course	3
ENGL 1210	English Composition I	3
ENGL 1220	English Composition II	3
PHIL 1020	Introduction to Ethics	3
PSYC 1310	Introduction to Psychology	4
PSYC 2630	Developmental Psychology	3
Total Credits		35

Elective General Education Courses:

Select one Anthropology/Sociology course	3
Elective General Education course	2
Credits	5
Total Credits	75

NOTE: This Associate of Science Degree plan is part of the Minnesota Alliance for Nursing Education (MANE) Bachelor's of Science in Nursing program.

NURSING AS DEGREE (FOR LPNS)

Advanced Standing Credit for LPN Coursework **5**

Required Courses:

NURS 2720	Transition to the Role of the Professional Nurse	4
NURS 2750	Nutrition & Role of the Professional Nurse	2
NURS 2800	Chronic and Palliative Care	7
NURS 2820	Pharmacology & the Role of Professional Nurse	3
NURS 2850	Applied Pathophysiology for Nursing I	2
NURS 2900	Acute and Complex Care	7
NURS 2920	Applied Pathophysiology for Nursing II	2
NURS 2950	Nursing Leadership I	3
Total Credits		35

Required General Education Courses:

BIOL 2100	Human Anatomy	4
BIOL 2110	Human Physiology	4
BIOL 2150	Microbiology	4
CHEM 1010	Survey of Chemistry	4
CMST	Any Goal 1 CMST course	3
ENGL 1210	English Composition I	3
ENGL 1220	English Composition II	3
PHIL 1020	Introduction to Ethics	3

PSYC 1310	Introduction to Psychology	4
PSYC 2630	Developmental Psychology	3
Total Credits	.....	35

Elective General Education Courses:

Select one Anthropology/Sociology course	3
Elective general education courses from MnTC Goal Area	2
Credits	5
Total Credits	75

NOTE: This Associate of Science Degree plan is part of the Minnesota Alliance for Nursing Education (MANE) Bachelor's of Science in Nursing program.

Approval/Accreditation

The AD programs are approved by the Accreditation Commission for Education in Nursing, Inc. (ACEN).

For information on the accreditation process, contact ACEN at 404-975-5000 or at www.acenursing.org.

The AD programs are approved by the Minnesota Board of Nursing.

Dean of Nursing and Allied Health of the PN and AD programs:

Mary Leyk, MSN, RN, NPD-BC

PARAMEDIC

Hutchinson and Willmar Campuses

Diploma/AAS Degree – 46/60 Credits

When a 911 call alerts the authorities of an emergency, paramedics are often the first at the scene. Whether it is an automobile accident, a medical emergency, a fire, or some other disaster, the paramedic is responsible to assess a patient's condition, give appropriate emergency medical treatment, and transport them to hospital.

Prior to beginning any EMSP courses, students must have current CPR for healthcare providers certification. Prior to participating in any clinical activities, students must have:

- Successful completion of MDH background study
- Submission of medical clearance for field and clinical activities (physical, immunizations)

NOTE: Program participants are subject to background checks according to Minnesota state law. See page 9 of the catalog for more specific information.

Diploma

Admission requirements include current EMT certification and at least 100 hours of EMT experience.

Required Courses Credits

BIOL 1080	Human Biology	4
EMSP 1120	Emergency Medical Technician	7
EMSP 1511	Introduction to Emergency Operations	2
EMSP 1512	Ambulance Operations 2	2
EMSP 1520	Patient Assessment and Pharmacology	4
EMSP 1540	Shock and Trauma Care	3
EMSP 1552	Airway and Pulmonology	2
EMSP 1554	Cardiology	4
EMSP 1560	Medical Emergencies	4
EMSP 1570	Special Populations	3
EMSP 1590	Clinical I - BLS	1
EMSP 1595	Clinical 2 - ALS	3
EMSP 1598	Clinical 3 - ALS	3

EMSP 1610	Paramedic Capstone	3
EMSP 1620	Paramedic Psychomotor Skills Synthesis	1
Total Diploma Credits:	.....	46

AAS Degree

Required Courses Credits

EMS 1120	Emergency Medical Technician	7
BIOL 1080	Human Biology	4
EMSP 1511	Introduction to Emergency Operations	2
EMSP 1512	Ambulance Operations II	2
EMSP 1520	Patient Assessment and Pharmacology	4
EMSP 1540	Shock and Trauma Care	3
EMSP 1552	Airway and Pulmonology	2
EMSP 1554	Cardiology	4
EMSP 1560	Medical Emergencies	4
EMSP 1570	Special Populations	3
EMSP 1590	Clinical 1 - BLS	1
EMSP 1595	Clinical 2 - ALS	3
EMSP 1598	Clinical 3 - ALS	3
EMSP 1610	Paramedic Capstone	3
EMSP 1620	Paramedic Psychomotor Skills Synthesis	1
Total Credits:	.....	46

General Education (14 credits required)

Choose at least one Goal 1 course 3

Choose at least one Goal 5 course 3

General Education Electives

A minimum of 9 credits of General Education courses are required for this degree. General education elective courses may be selected from any three MNTC goal areas. Elective courses should be selected with recommendation from advisor.

Total AAS Degree Credits: 60

PHLEBOTOMY

Hutchinson and Willmar Campuses

Certificate - 21 Credits

Required Courses Credits

HLTH 1130	Medical Terminology	3
HLTH 1160	Anatomy and Physiology for Allied Health	3
MEDA 1002	Applied Communications/Scribing I	2
MEDA 1102	Applied Communications/Scribing II	2
MEDA 1110	Human Relations for Health Care	3
MEDA 1225	Orientation to Medical Lab	3
MEDA 1324	Laboratory Skills	1
MEDA 1900	Phlebotomy Practicum	3
MEDA 2310	Laboratory Procedures I	1
Total Credits	.....	21

Recommended Electives

HLTH 1200	Disease Conditions	3
MEDA 1326	Laboratory Skills II	1
Total Certificate Credits	.....	21

INFORMATION TECHNOLOGY



COMPUTER PROGRAMMER

Hutchinson & Willmar Campuses, Online

Diploma/AAS Degree – 50/60 Credits

All areas of the private and public sectors are in need of computer programmers. This two-year degree prepares the student to enter the workforce as a computer programmer or continue on to a four-year degree. Learn to code using traditional hardware and innovative information technology (IT) tools. Ridgewater is an official testing site for such certifications as CompTIA A+, Network+, Security+, and Microsoft Certified Solutions Expert (MCSE). This program participates in Articulated College Credit partnerships. Refer to page 6.

Diploma

Required Courses	Credits
CST 1021 HTML and CSS (or MMDT 1021)	3
CST 1022 HTML II and Javascript (or MMDT 1022)	3
CST 1146 PHP Programming (or MMDT 1146)	3
CST 1600 Relational Database Design	3
CST 1602 Advanced Databases	3
CST 1620 C# Programming	4
CST 1640 Introduction to Java	3
CST 1700 CCNA R & S Introduction to Networks	3
CST 1794 Introduction to Programming	3
CST 2146 Data Driven Web (or MMDT 2146)	3
Total Credits:	31

Elective Courses

Choose 19 credits from any CST, General Studies, MnTC Goal 1 or MnTC Goal 4 courses as approved by your advisor.

Total Credits:	19
Total Diploma Credits:	50

AAS Degree

Required Courses	Credits
CST 1021 HTML and CSS (or MMDT 1021)	3
CST 1022 HTML II and Javascript (or MMDT 1022)	3
CST 1146 PHP Programming (or MMDT 1146)	3
CST 1600 Relational Database Design	3
CST 1602 Advanced Databases	3
CST 1620 C# Programming	4
CST 1640 Introduction to Java	3

CST 1700	CCNA R & S Introduction to Networks	3
CST 1794	Introduction to Programming	3
CST 2146	Data Driven Web (or MMDT 2146)	3
Total Credits:		31

Elective Courses

Select 14 credits from any CST courses as approved by advisor.

Total Credits:	11
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General Education Elective Courses

Goal 1 - Choose any Goal 1 CMST and 1 ENGL course

Total Credits:	6
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Goal Area 4 - Mathematical/Logical Reasoning

Select any Goal 4 Math course 1000 or higher

Total Credits:	3
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General Education Electives

General Education courses will be selected from at least three (3) of the ten (10) goal areas of the Minnesota Transfer Curriculum. See your advisor to select courses that fulfill this requirement. These courses are not required but are recommended.

ECON 1900	Personal Finance	3
PHIL 1100	Logical and Critical Thinking	3

Total Credits:	6
Total AAS Degree Credits:	60

COMPUTER SUPPORT TECHNICIAN

Hutchinson and Willmar Campuses

Diploma/AAS Degree – 50/60 Credits

All areas of the private and public sectors are in need of computer support technicians. This two-year degree prepares the student to enter the workforce as a computer support technician or continue on to a four-year degree. Graduates will learn how to maintain computer hardware and software, assist network managers, and provide customer service for a variety of users and environments. Graduates will also learn many modern Internet, operating systems, and server technologies. This program participates in Articulated College Credit partnerships. Refer to page 6.

Diploma

Required Courses Credits

CST 1072	Windows Workstation Support	.3
CST 1261	Applications Support	.3
CST 1510	System Diagnostics	.3
CST 1511	Storage Media Diagnostics	.3
CST 1600	Relational Database Design	.3
CST 1700	Fundamentals of Networking	.3
CST 1794	Introduction to Programming	.3
CST 1803	Help Desk Technologies	.3
CST 1861	Command Line and Registry	.3
CST 2284	Network Security	.3
CST 2504	A+ Certification Preparation	.2
CST 2505	Introduction to Linux	.3
CST 2895	Customer Service	.1
Total Credits:		.36

Elective Courses

Choose 14 credits from any CST, General Studies, MnTC Goal 1 or MnTC Goal 4 courses as approved by your advisor.

Total Credits:14

Total Diploma Credits: 50

AAS Degree

Required Courses Credits

CST 1072	Windows Workstation Support	.3
CST 1261	Applications Support	.3
CST 1510	System Diagnostics	.3
CST 1511	Storage Media Diagnostics	.3
CST 1600	Relational Database Design	.3
CST 1700	Fundamentals of Networking	.3
CST 1794	Introduction to Programming	.3
CST 1803	Help Desk Technologies	.3
CST 1861	Command Line and Registry	.3
CST 2284	Network Security	.3
CST 2504	A+ Certification Preparation	.2
CST 2505	Introduction to Linux	.3
CST 2895	Customer Service	.1
Total Credits:		.36

Elective Courses

Choose 9 credits from any CST courses as approved by advisor.

Total Credits:9

Goal Area 1

Goal 1 - Choose any Goal 1 CMST and ENGL course6

Goal Area 4 & 9

These courses are not required but are recommended.

ECON 1900	Personal Finance (Goal 9)	.3
PHIL 1100	Logic & Critical Thinking (Goal 4)	.3

Elective General Education Courses

Choose from at least two of the MnTC Goal Areas 2-10.9

General Education courses will be selected from at least three (3) of the ten (10) Goal areas of the Minnesota Transfer Curriculum. Elective courses may be taken from any of the ten (10) Goal areas.

Total AAS Degree Credits: 60

Certificate - Helpdesk

Required Courses Credits

CST 1025	Network Basics (or MMDT 1025)	.2
CST 1072	Windows Workstation Support	.3
CST 1261	Applications Support	.3
CST 1510	System Diagnostics	.3
CST 1511	Storage Media Diagnostics	.3
CST 1600	Relational Database Design	.3
CST 1794	Introduction to Programming	.3
CST 1802	Helpdesk Diagnostics	.1
CST 1861	Command Line and Registry	.3
CST 2284	Network Security	.3
CST 2504	A+ Certification Preparation	.2
CST 2802	Helpdesk Management	.1
CST 2895	Customer Service	.1
Total Credits		30

Certificate - Linux Administrator

Required Courses Credits

CST 1025	Network Basics	.2
CST 1026	TCP/IP Routing	.1
CST 1611	Web Server Administration	.3
CST 1615	Introduction to Perl	.3
CST 1794	Introduction to Programming	.3
CST 1802	Helpdesk Diagnostics	.1*
CST 2505	Introduction to Linux	.3
CST 2608	Advanced Linux Administration	.3
CST 2950	Special Projects/Topics	.1*
Total Credits:		20

NETWORK ADMINISTRATION AND SECURITY

Hutchinson and Willmar Campuses

Diploma/AAS Degree – 50/60 Credits

All areas of the private and public sectors are in need of Network Systems Administrators. This two-year degree prepares the student to enter the workforce as a Network Systems Administrator or continue on to a four-year degree. Graduates will learn how to maintain computer hardware and software, install and manage various server platforms, and provide customer service for a variety of users and environments. Graduates will also learn many modern database, Internet, operating system, and server technologies. This program participates in Articulated College Credit partnerships. Refer to page 6.

Diploma

Required Courses Credits

CST 1072	Windows Workstation Support	3
CST 1611	Web Server Administration	3
CST 1700	CCNA R & S Introduction to Networks	3
CST 1701	CCNA R & S Routing & Switching Essentials	3
CST 1803	Help Desk Technologies	3
CST 1861	Command Line and Registry	3
CST 2274	Windows Server Install and Configure	3
CST 2276	Windows Server Advanced Services	3
CST 2284	Network Security	3
CST 2608	Linux Server Administration	3
CST 2800	Cloud Services	3
CST 2823	Network Intrusion	3
CST 2840	Wireless LAN Networking	3

Total Credits:39

Elective Courses

Select 11 credits from any CST, General Studies, MnTC Goal 1 or MnTC Goal 4 courses as approved by your advisor.

Total Credits: 11

Total Diploma Credits: 50

AAS Degree

Required Courses Credits

CST 1072	Windows Workstation Support	3
CST 1611	Web Server Administration	3
CST 1700	CCNA R & S Introduction to Networks	3
CST 1701	CCNA R & S Routing & Switching Essentials	3
CST 1803	Help Desk Technologies	3
CST 1861	Command Line and Registry	3
CST 2274	Windows Server Install and Configure	3
CST 2276	Windows Server Advanced Services	3
CST 2284	Network Security	3
CST 2608	Linux Server Administration	3
CST 2800	Cloud Services	3
CST 2823	Network Intrusion	3
CST 2840	Wireless LAN Networking	3

Total Credits:39

Elective Courses

Choose 6 credits from any CST courses as approved by advisor.

Total Credits6

General Education Required Courses

Choose any CMST course3

Choose any ENGL course3

Total Credits:6

General Education Electives

The AAS Degree requires Minnesota Transfer Curriculum from at least three different goal areas. See your advisor to select courses that fulfill this requirement.

The following courses are not required but are recommended:

ECON 1900 Personal Finance3

PHIL 1100 Logic & Critical Thinking3

Total Credits:9

Total AAS Degree Credits: 60

Certificate - Windows Administrator

Willmar and Hutchinson Campuses

Certificate - 20 Credits

Required Courses Credits

CST 1026	TCP/IP Routing	1
CST 1072	Windows Workstation Support	3
CST 1802	Helpdesk Diagnostics	1
CST 1861	Command Line and Registry	3
CST 2274	Windows Server Install and Configure	3
CST 2276	Windows Server Advanced Services	3
CST 2284	Network Security	3
CST 2823	Network Intrusion	3

Total Certificate Credits 20

WEB DEVELOPER

Hutchinson & Willmar Campuses, Online

Diploma - 50 Credits | AAS Degree - 60 Credits

Webmasters are people who manage online content and the servers from which it is distributed. Students have the opportunity to learn how to design interactive web sites and to manage the content and servers that supports the web site. Concentrations are provided for electronic Interactive Authoring and designing web graphics. This program participates in Articulated College Credit partnerships. See page 6.

Diploma

Required Courses Credits

CST 1794	Introduction to Programming	.....3
MMDT 1021	HTML and the Web (or CST 1021)	.....3
MMDT 1022	HTML II and Javascript (or CST 1022)	.....3
MMDT 1124	Web Publishing.	.....3
MMDT 1126	Advanced Web Development.	.....3
MMDT 1142	Interface Design	.....3
MMDT 1144	Multimedia and the Web (or CST 1144)	.....3
MMDT 1146	PHP Programming	.....3

Total Credits: 21

Elective Courses (29 credits required) Choose from any MMDT, CST, General Studies, MnTC Goal 1 or MnTC Goal 4 courses as approved by your advisor

Recommended technical electives for Design Path

MMDT 1002	Graphic Visualization	.....3
MMDT 1008	Introduction to Computer Graphics.	.....3
MMDT 1010	Typography & Color Theory	.....3
MMDT 1051	Image Editing	.....3

Recommended technical electives for Programming Path

CST 1640	Introduction to Java	.....3
CST 2641	Introduction to Mobile Applications.	.....3
MMDT 2146	Data Driven Web (or CST 2146)	.....3

Total Technical Required Courses 21

Total Technical Electives 29

Total Diploma Credits 50

AAS Degree

Required Core Courses Credits

CST 1794	Introduction to Programming	.....3
MMDT 1021	HTML and CSS	.....3
MMDT 1022	HTML II and JavaScript	.....3
MMDT 1124	Web Publishing.	.....3
MMDT 1126	Advanced Web Development.	.....3
MMDT 1142	Interface Design	.....3
MMDT 1146	PHP Programming	.....3

Total Credits: 21

Elective Courses (24 elective credits required)

Choose 24 credits from any MMDT, CST, or GSWS courses as approved by your advisor.

Total Credits: 24

Recommended technical electives for Design Path

MMDT 1002	Graphic Visualization	.....3
MMDT 1008	Introduction to Computer Graphics.	.....3
MMDT 1010	Typography and Color Theory	.....3
MMDT 1051	Image Editing	.....3

Recommended technical electives for Programming Path

CST 1640	Introduction to Java	.....3
CST 2641	Introduction to Mobile Applications.	.....3
MMDT 2146	Data Driven Web (or CST 2146)	.....3

Required General Education Courses

GOAL 1:

ENGL - Choose any Goal 1 ENGL course3

CMST - Choose any Goal 1 CMST course3

GOAL 4 - any Goal 4 MATH course3

Elective General Education Courses

At least one MnTC course must be from a goal area other than Goal 1 or 4 as recommended by advisor6

Required Technical Core Credits..... 21

Required Technical Elective Credits..... 24

Total General Education Credits..... 15

Total AAS Degree Credits: 60

LIBERAL ARTS



Liberal arts typically refers to subjects like fine arts, literature, history, political science, languages, philosophy, math, and psychology. These subjects are intended to give students a well-rounded education that incorporates a variety of different knowledge areas. Liberal arts degrees give students the abilities to function in a variety of settings. Liberal arts students are prepared for the future. Liberal arts students are valuable employees. Their educational experiences prepare them for a wide variety of jobs. Students who graduate with liberal arts degrees increase their employability by combining their degrees, skills, and knowledge to work in specific careers.

Communication skills
Reading comprehension
Analytical abilities
Cultural understanding

Ridgewater College has a strong history of educating students in liberal arts. Our classes are taught by instructors who are passionate in their fields and are engaged in their student's education. Ridgewater offers a wide variety of liberal arts classes at a very affordable price, allowing students to explore their interests and discover their passions. Earn your AA Degree at Ridgewater and transfer to a four-year institution to finish your degree. Students who earn AA Degrees have completed courses certified by Ridgewater College as meeting the goals and student competencies agreed upon by all public higher education systems in Minnesota (all Minnesota State Colleges and Universities and the University of Minnesota). To ensure that you are taking the correct courses specific to your intended major and transfer school, you should work with your academic advisor before registering for classes.

BUSINESS TRANSFER PATHWAY

Hutchinson and Willmar Campuses

AS Degree - 60 Credits

Required Courses		Credits
ACCT 1810	Introduction to Accounting	3
BUS 1010	Business and American Economy	3
BUS 1400	Business Computers	3
or		
CSCI 1400	Business Computers	3
BUS 2000	Principles of Management	3
BUS 2010	Legal Environment of Business	3
BUS 2100	Principles of Marketing	3
BUS 2240	Managerial Accounting	4
Total Program Area Courses.		26



MNTC Goal Area Courses

ENGL 1210	College Composition I (Goal 1)	3
ENGL 1220	College Composition II (Goal 1)	3
Any CMST course (Goal 1, 6, 7, 8, 9)		3
Any Goal 3 Science course		3
Math 1120	College Algebra (Goal 4)	4
Math 2070	Statistics and its Applications (Goal 4)	4
ECON 2060	Principles of Microeconomics (Goals 5, 10)	3
ECON 2070	Principles of Macroeconomics (Goals 5, 8)	3
Any Goal 6 course (recommend PHIL 1020, Intro to Ethics)		3
Total Required MNTC Goal Area Courses		30

Elective MNTC Goal Area

Any MNTC Goal Area course(s)		4
Total AS Degree Credits		60

COMMUNICATION STUDIES TRANSFER PATHWAY

Willmar and Hutchinson Campuses

AA Degree - 60 credits

Goal Area 1: Communications (take 1 CMST & 1 ENGL course) ... Credits

CMST 2200	Public Speaking	3
CMST 2250	Small Group Communication	3
* CMST 1210 is not included in this degree, so it will not count toward the major nor transfer as a major course		
ENGL 1210	College Composition I	3
ENGL 1220	College Composition II	3
Total Credits:		9

Goal Area 2: Critical Thinking (Infused)

Goal Area 3: Natural Sciences

See your advisor to select courses that fulfill this requirement.

Total Goal 3 Credits 8

Goal Area 4: Mathematics/Logical Reasoning

See your advisor to select courses that fulfill this requirement.

Total Goal 4 Credits 3

Goal Area 5: History and the Social/Behavioral Sciences
See your advisor to select courses that fulfill this requirement.
Total Goal 5 Credits9

Goal Area 6: Humanities and Fine Arts
(Must include two disciplines.) See your advisor to select courses that fulfill this requirement.
Total Goal 6 Credits9

Goal Area 7: Human Diversity (1 course required)
See your advisor to select courses that fulfill this requirement.

Goal Area 8: Global Perspective (1 course required)
See your advisor to select courses that fulfill this requirement.

Goal Area 9: Ethical and Civic Responsibility (1 course required)
See your advisor to select courses that fulfill this requirement.

Goal Area 10: People and the Environment (1 course required)
See your advisor to select courses that fulfill this requirement.

MNTC Elective Courses (0 - 2 credits)
See your advisor to select courses that fulfill this requirement.
Total MNTC Credits 40

Health and Wellness2 credits
PE Activity Courses (1020-1400)
PE 2200 First Aid/CPR2
PUBH 1050 Personal and Community Health.....2
PUBH 1070 Nutrition.....3
PUBH 1100 Drug Ed in Contemporary Society2

Elective Courses18
See your advisor to select courses that fulfill this requirement.
Total Credits 60

Within these 60 credits, you must complete the following required courses for the AA Communication Studies Transfer Pathway:

- CMST 2200 Public Speaking (3)
- CMST 2250 Small Group Communication (3)
- CMST 2260 Interpersonal Communication (3)
- CMST 2270 Intercultural Communication (3)

Ridgewater CMST courses other than the above four are not included in this degree and are not guaranteed to transfer to a CMST major at a Minnesota State University. Before registering for a CMST class not listed here, contact the CMST Department at the university you want to transfer to and ask if the course(s) will count in their major.

**COMMUNICATION STUDIES
CERTIFICATE**

Required Courses		Credits
CMST 2200	Public Speaking	3
CMST 2250	Small Group Communication	3
CMST 2260	Interpersonal Communication	3
CMST 2900	Communication Studies Certificate Capstone	1
Total Credits:		10

Elective Courses		
CMST 2230	Listening	3
CMST 2270	Intercultural Communication	3
CMST 2280	Argument and Reasoning	3
CMST 2400	Gender and Communication	3
CMST 2500	Computer-Mediated Communication	3
CMST 2600	Organizational Communication	3
Total Elective Credits:		6
Total Certificate Credits:		16

EARLY CHILDHOOD EDUCATION
Willmar and Hutchinson Campuses, Blended Online
Transfer Pathway AS Degree 60 Credits | Certificates – 16/19 Credits
See complete education plan on page 75.

ENGLISH TRANSFER PATHWAY
Hutchinson and Willmar Campus, Online
AA Degree - 60 credits

Learn to express yourself better, write academic research, or study classic or modern literature. Ridgewater’s dedicated English faculty can prepare you to write your club’s minutes or advance you to your next challenge at a transfer university. We have a strong developmental English sequence, but also student-centered, challenging humanities options. Through class dialogue, varied class structures, and available faculty, we strive to help students become productive citizens who understand English so they may use it for successful communication.

Goal Area 1: Communications 9 Credits
OPTION 1: 9 credits/3 courses
***Must take 1 CMST and 2 ENGL courses**

CMST 1210	Introduction to Communication	3
CMST 2200	Public Speaking	3
CMST 2250	Small Group Communication	3
ENGL 1210	College Composition I	3
ENGL 1220	College Composition II	3

Option 2: 9 credits/3 courses
***Must take 1 CMST and 2 ENGL courses**

CMST 1210	Introduction to Communication	3
CMST 2200	Public Speaking	3
CMST 2250	Small Group Communication	3
ENGL 1210	College Composition I	3
ENGL 1230	Scientific and Technical Writing	3

Goal Area 2: Critical Thinking (Infused)

Goal Area 3: Natural Sciences 8 credits
See your advisor to select courses that fulfill this requirement.

Programs of Study

Goal Area 4: Mathematics/Logical Reasoning 3 credits

See your advisor to select courses that fulfill this requirement.

Goal Area 5: History and the Social/Behavioral Sciences 9 credits

(Must include two disciplines)

ANTH 1010	Introduction to Cultural Anthropology	3
HIST 1120	United States History 1865 - Present	3
Electives	.....	3

See your advisor to select courses that fulfill the electives.

Goal Area 6: Humanities and Fine Arts..... 9 credits

Must include two disciplines

ENGL 1500	Introduction to Literary Studies	3
ENGL 2200	Creative Writing.....	3
Electives	.....	3

Goal Area 7: Human Diversity (1 course required)

ENGL 2110	Multicultural Literature	3
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Goal Area 8: Global Perspective (1 course required)

ENGL 1900	British Writers: Modern and Post-Modern.....	3
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Goal Area 9: Ethical and Civic Responsibility (1 course required)

ENGL 1800	American Writers: Modern & Contemporary	3
POLS 1320	American National Government	3

Goal Area 10: People and the Environment (1 course required)

See your advisor to select courses that fulfill this requirement.

Total MNTC Credits 40

Health and Wellness.....Minimum 2 credits required

PE Activity Courses (1020-1400)

PE 2200	First Aid/CPR	2
PUBH 1050	Personal and Community Health.....	2
PUBH 1070	Nutrition.....	3
PUBH 1100	Drug Ed in Contemporary Society	2

Elective Courses6-11

See your advisor to select courses that fulfill this requirement.

Total Credits 60

**** One course from each of the four Pathways Content Areas as identified on this plan is a degree requirement. Additionally, ENGL 1600, 1700, 2320, and 2390, for a maximum of 16 credits, are approved for Pathways. Courses other than those listed are not included in the degree and are not guaranteed to transfer to an ENGL major at a Minnesota State University. Before registering for an ENGL course not listed here, contact the ENGL department at your transfer institution for transferability.

Total Required Credits.....7

GLOBAL STUDIES

Hutchinson and Willmar Campuses, Online

Certificate – 16 credits

The Global Studies certificate provides a multi-disciplinary approach, offering the student a global perspective in understanding issues that affect today's world. Successful completion of the certificate will give students the ability to integrate information from a variety of disciplines, broaden their understanding of the world, and prepare them to become citizens of that world. The certificate offers students the perspective and knowledge to better understand globalization, cultural differences, and the history, as well as the future of cross-cultural interaction. Global Studies is therefore the study of us and the world we share from a variety of perspectives. This certificate complements many academic fields and any career which benefits from a global/international perspective.

Required Courses (two courses) Credits

GLST 1010	Introduction to Global Studies	3
GLST 2010	Global Studies Capstone	1

Total Credits4

Language Electives (one course)

CHIN 1010	Beginning Chinese I	5
CHIN 102	Beginning Chinese II	5
CMST 2270	Intercultural Communications	3
SPAN 1070	Beginning Spanish I	4
SPAN 1080	Beginning Spanish II	4
SPAN 2070	Intermediate Spanish III	4
SPAN 2080	Intermediate Spanish IV	4

Total Credits3-5

Goal 8: Global Perspective (2 courses)

ANTH 1010	Introduction to Cultural Anthropology	3
CHIN 1200	Chinese Culture	3
CMST 2500	Computer-Mediated Communication	3
ECON 2070	Principles of Macro-Economics	3
ECON 2080	Intro to International Business/Economics	3
ENGL 1700	World Literature	3
GEOG 1400	Introduction to Geography	3
GEOG 1410	World Regional Geography	3
HIST 1010	World History I	3
HIST 1020	World History II	3
HIST 2100	East Asian History	3
HIST 2220	Western Civilization II	3
MUSC 1210	From Bach to Broadway	3
MUSC 1400	Music in World Cultures	3
POLS 13500	International Relations	3
POLS 29500	Special Topics	3
SOC 2420	Racial and Cultural Minorities	3

Electives

BIOL/ENVS 1410	Environmental Science	4
BIOL/ENVS 1510	People, Sustainability & the Environment	4
ESCI 1140	Natural Disasters	4
HIST 2950	Holocaust	2
HIST/BIOL/ENVS 2470	International Study	1-3

Total Credits16

LIBERAL ARTS & SCIENCES

Willmar and Hutchinson Campuses, Online

AA Liberal Arts – 60 credits

The liberal arts programs at Ridgewater College are designed to prepare students for transfer to baccalaureate majors at four-year colleges and universities. For those students who have already decided on a major, the programs described in this section of the catalog will provide guidelines to make sure that the relevant elements of the Minnesota Transfer Curriculum are satisfied and that the usual first two years of a major curriculum have been completed. Those students who are undecided about a specific major may wish to examine the programs described in this section as a way to explore some of the academic possibilities that Ridgewater College has to offer.

Even if you are undecided about your major or career plans, you should be careful to follow the requirements of the Minnesota Transfer Curriculum to ensure completion of your basic general education requirements before going on to a four-year institution.

In either case, decided or undecided, you are strongly urged to consult with one of our academic counselors and with your advisor early in your academic career to set goals and to plan your college education.

Courses in the liberal arts and sciences at Ridgewater College may be used to complete the lower division requirements for the following popular areas of study:

Accounting	English	Nursing
Anthropology	History	Philosophy
Art	Human Services	Political Science
Biological Sciences	Journalism	Pre-Law
Business	Law Enforcement	Psychology
Communications	Library Science	Sociology
Computer Sciences	Mass Science	Speech
Economics	Mathematics	Theology
Education	Music	Theater Arts
Elementary Education		

If you cannot find a program in this section that suits your goals, our counselors are prepared to discuss options with you and provide you with additional assistance and information.

Minnesota Transfer Curriculum (40 credits minimum)

Goal Area 1: Communications - 9 credits required Credits

CMST 1210	Introduction to Communication	.....3
ENGL 1210	College Comp I	.....3
ENGL 1220	College Comp II	.....3

Goal Area 2: Critical Thinking - covered across curriculum

This goal will be satisfied by completing one course each from MnTC Goal Areas 1, 3, 4, 5 and 6.

Goal Area 3: Natural Sciences - 8 credits required

Two disciplines required - one from Group A and one from Group B.
See your advisor to select courses that fulfill this requirement.

Goal Area 4: Mathematics/Logical Reasoning - 3 credits required

See your advisor to select courses that fulfill this requirement.

Goal Area 5: History & the Social/Behavioral Sciences - 9 credits required

Two disciplines required. See your advisor to select courses that fulfill this requirement.

Goal Area 6: The Humanities and Fine Arts - 9 credits required

Two disciplines required. See your advisor to select courses that fulfill this requirement.

Goal Area 7: Human Diversity - 1 course required

See your advisor to select courses that fulfill this requirement.

Goal Area 8: Global Perspective - 1 course required

See your advisor to select courses that fulfill this requirement.

Goal Area 9: Ethical and Civic Responsibility - 1 course required

See your advisor to select courses that fulfill this requirement.

Goal Area 10: People and the Environment - 1 course required

See your advisor to select courses that fulfill this requirement.

Health and Wellness - 2 credits required

PE Activity Courses (1020-1400)	1
PE 2200 First Aid/CPR	2
PUBH 1050 Personal and Community Health	2
PUBH 1070 Nutrition	3
PUBH 1100 Drug Education	2
Total Credits:	2

Elective Courses-18 credits required

Total AA Liberal Arts Degree Credits: 60

PHYSICAL EDUCATION TEACHING & COACHING

Willmar Campus

Certificate – 10 credits

The certificate upon completion, will meet/exceed the requirements set forth by the Minnesota State High School League (MSHSL) and Minnesota Rule 3512.3100 for a person to be a head varsity coach of an interscholastic sport in a senior high school.

Required Courses (10 credits required) Credits

PE 2050	Prevention and Care of Athletic Injuries	.....2
PE 2150	Coach Practicum	.....2
PE 2200	CPR/First aid	.....2
PE 2300	Sport Psychology	.....2

Choose one of the following 2-credit courses:

PE 2100	Football Skills and Officiating	.....2
PE 2110	Volleyball Skills and Officiating	.....2
PE 2120	Wrestling Skills and Officiating	.....2
PE 2130	Basketball Skills and Officiating	.....2
PE 2140	Softball/Baseball Skills and Officiating	.....2

Total Certificate Credits:10

PSYCHOLOGY TRANSFER PATHWAY

Willmar and Hutchinson Campuses

AA Degree - 60 credits

Required Psychology Courses Credits

PSYC 1310	Intro to Psychology	4
PSYC 2080	Statistics for Social and Behavioral Sciences	4
PSYC 2630	Developmental Psychology	3
or		
PSYC 2750	Abnormal Psychology	3

Any additional Psychology course listed below (1-3 credits; this may also be from the last two options listed above)

PSYC 1650	Psychology of Women	3
PSYC 2120	Psychology of Aging	3
PSYC 2800	Psychology of Adjustment	3
PSYC 1320	Laboratory in Introductory Psychology	1
PSYC 1680	Behavior Modification	2
PSYC 2000	Counseling Techniques	3
PSYC 2020	Group Process	3
PSYC 2310	Pharmacology	3

Goal Area 1: Communications (take 1 CMST & 1 ENGL course)... Credits

CMST 1210	Introduction to Communication	3
ENGL 1210	College Composition I	3
ENGL 1220	College Composition II	3
Total Credits:		9

Goal Area 2: Critical Thinking (Infused)

See your advisor to select courses that fulfill this requirement.

Goal Area 3: Natural Sciences (Group A and Group B required)

A Lab Science

B Lab Science

See your advisor to select courses that fulfill this requirement.

Total Goal 3 Credits **8**

Goal Area 4: Mathematics/Logical Reasoning

MATH 1120 College Algebra

or MATH 2010 Statistics

Total Goal 4 Credits **3**

Goal Area 5: History and the Social/Behavioral Sciences

Must include two disciplines. See your advisor to select courses that fulfill this requirement.

Total Goal 5 Credits **9**

Goal Area 6: Humanities and Fine Arts

Must include two disciplines. See your advisor to select courses that fulfill this requirement.

Total Goal 6 Credits **9**

Goal Area 7: Human Diversity (1 course required)

See your advisor to select courses that fulfill this requirement.

Goal Area 8: Global Perspective (1 course required)

See your advisor to select courses that fulfill this requirement.

Goal Area 9: Ethical and Civic Responsibility (1 course required)

See your advisor to select courses that fulfill this requirement.

Goal Area 10: People and the Environment (1 course required)

See your advisor to select courses that fulfill this requirement.

MNTC Elective Courses (0 - 2 credits)

See your advisor to select courses that fulfill this requirement.

Total MNTC Credits **44-46**

Health and Wellness 2 credits

PE Activity Courses (1020-1400)

PE 2200 First Aid/CPR

PUBH 1050 Personal and Community Health

PUBH 1070 Nutrition

PUBH 1100 Drug Ed in Contemporary Society

Elective Courses See your advisor to select courses that fulfill this requirement.

Total Elective Credits **12-14**

Total Credits **60**

SPECIAL EDUCATION TRANSFER PATHWAY

Willmar and Hutchinson Campuses

AS Degree - 60 Credits | Certificate 17 Credits

See complete education plan on page 75.

HEALTH SCIENCES BROAD FIELD

Hutchinson and Willmar Campuses

AS Degree - 60 Credits

See complete education plan on page 77.

MATHEMATICS, SCIENCE & ENGINEERING



AUTOMATION AND ROBOTIC SYSTEMS TECHNOLOGY

Hutchinson Campus

Diploma/AAS Degree – 64/67 credits

Certificates - 30/16 credits

The Automation and Robotic Systems Technology program brings the modern manufacturing environment into the classroom. Graduates are equipped with the skills needed to enter the advanced manufacturing industry. The program also offers current manufacturing employees an opportunity to update their skills and create opportunities for promotion to better paying jobs. This program participates in Articulated College Credit partnerships. **See complete education plans on page 39.**

NONDESTRUCTIVE TESTING TECHNOLOGY (NDT)

Hutchinson Campus

Diploma/AAS Degree – 64 Credits

Nondestructive testing is the examination of an object or material using nondestructive means which does not affect its future usefulness. Career opportunities exist in the aerospace, power, petrochemical, construction and manufacturing industries. Students study the theory of each NDT method and spend much of their time working in a fully equipped lab. They receive hands-on training in the methods of x-ray and isotope radiography, ultrasonics, eddy current, liquid penetrant, magnetic particle, and visual inspection. This program is recognized by the American Society for Nondestructive Testing as one of the leading college programs in the country. **See complete education plan on page 43.**

LIBERAL ARTS & SCIENCES

Willmar and Hutchinson Campuses, Online

AA Liberal Arts – 60 credits

The liberal arts programs at Ridgewater College are designed to prepare students for transfer to baccalaureate majors at four-year colleges and universities. For those students who have already decided on a major, the programs described in this section of the catalog will provide guidelines to make sure that the relevant elements of the Minnesota Transfer Curriculum are satisfied and that the usual first two years of a major curriculum have been completed. Those students who are undecided about a specific major may wish to examine the programs described in this section as a way to explore some of the academic possibilities that Ridgewater College has to offer. **See complete education plan on page 88.**

OCCUPATIONAL SKILLS



OCCUPATIONAL SKILLS

Willmar Campus

Diploma – 32 Credits

This program offers students with disabilities post-secondary training in a variety of career options. Community-based training is paired with classes in personal management and job seeking/ keeping skills. This is a program that offers high support as well as a high degree of flexibility. Course offerings are determined by the OSP faculty.

Diploma

Technical Courses	Credits	Credits
OSP 1000	Job Keeping Skills	.2
OSP 1100	Job Seeking Skills	.2
OSP 1200	Career Assessment and Planning	.2
OSP 1700	SOT Related Seminar	.2
OSP 1750	Supervised Occupational Training I	1-8
OSP 1850	Internship I	1-8
OSP 1900	Applied Job Search	4-8
Required Credits		.23

Technical Electives

GSCI 1301	Introduction to Computers	.1
GSCI 1302	Introduction to Computers	.2
GSCI 1312	Industry Computer Applications	.1
GSCM 1122	Oral/Written Communications	2-3
GSWS 1462	Industry Skills	.2
NA 1612	Nursing Assistant	.3
OSP 1300	Consumer Skills	.2
OSP 1320	Communications	.2
OSP 1340	Personal Development	.2
OSP 1360	Relationships	.2
OSP 1390	Community and Leisure Resources	.1
OSP 1400	Transition to Independent Living	.2
OSP 1600	Topics in Occupational Skills	.1
Total Technical Electives:		0-7

General Studies Courses

GSIS 1502	Human Relations	.2
GSWS 1452	First Aid/Safety	.2
Total Required Credits:		.4
Total Diploma Credits:		32

Certificate

Required Courses

OSP 1000	Job Keeping Skills	.2
OSP 1100	Job Seeking Skills	.2
OSP 1700	SOT Related Seminar	.2
OSP 1750	Supervised Occupational Training I	1-8
OSP 1850	Internship I	1-8
OSP 1900	Applied Job Search	4-8
Total Required Credits:		19

Electives

OSP 1200	Career Assessment and Planning	.2
OSP 1300	Consumer Skills	.2
OSP 1320	Communications	.2
OSP 1340	Personal Development	.2
OSP 1360	Relationships	.2
OSP 1390	Community and Leisure Resources	.1
OSP 1400	Transition to Independent Living	.2
OSP 1600	Topics in Occupational Skills	.1
NA 1612	Nursing Assistant	.3
GSCI 1301	Introduction to Computers	.1
GSCI 1302	Introduction to Computers	.2
GSCM 1122	Oral/Written Communications	2-3
GSWS 1462	Industry Skills	.2
GSIS 1502	Human Relations	.2
GSWS 1452	First Aid/Safety	.2
Total Electives		0-9
Total Required Credits:		28

PEACE OFFICER, LEGAL & EMERGENCY SERVICES



CRIMINAL JUSTICE TRANSFER PATHWAY

Willmar Campus

AS Degree – 60 Credits

The Criminal Justice Transfer Pathway is designed to prepare graduates for careers in probation, crime prevention, community corrections or counseling. Through a Minnesota State partnership, you can complete a Criminal Justice Pathway AS Degree at Ridgewater and transfer it completely into a bachelor program at one of our partner universities and enter the program as a junior.

AS Degree

Required Courses Credits

LAW 1030	Introduction to Criminal Justice	3
LAW 1050	Introduction to Correction	3

Component II Elective A (6 credits required, pick 2 of the following)

LAW 2310	Peace Officer and Community.....	3
LAW 2470	Juvenile Justice	3
SOC 2410	Criminology.....	3

Component III Elective B (3 credits required)

SOC 2420	Racial and Cultural Minorities	3
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Component IV MNTC Courses (42 credits required)

*must include credits from at least six of the ten Minnesota Transfer

Curriculum (MnTC) Goal Areas

ENGL 1210	College Composition I (Goal 1)	3
ENGL 1220	College Composition II (Goal 1)	3
CMST	Choose any CMST course (Goal 1, 6, 7, 8, 9).....	6
MnTC	Any Goal 3A area science course (Goal 3)	4
MnTC	Any Goal 3B area science course (Goal 3)	4
MnTC	Any Goal 4 area course	4
PSYC 1310	Introduction to Psychology (Goals 5, 7)	4
SOC 1050	Introduction to Sociology (Goals 5 & 7) or	
SOC 1060	General Social Problems (Goal 5 & 9) or	
SOC 1070	Marriage and Family Living (Goals 5 & 7).....	3
MnTC	Any Goal 6 MnTC elective course	3
MnTC	Any MnTC courses	9

Component V Professional Elective Courses (3 credits required, choose 1)

LAW 2510	Law Enforcement and Human Behavior	3
LAW 2450	Police Ethics and Leadership	3

Total AS Degree Credits: 60

EMERGENCY MEDICAL TECHNICIAN (EMT) PROGRAM

Customized Training/Continuing Education

This course is for law enforcement and emergency responder personnel, or people interested in becoming law enforcement or ambulance personnel.

Upon successful completion of the Emergency Medical Technician basic course, you are eligible to take the National Registry of EMTs written examination.

NOTE: Ridgewater's comprehensive **Customized Training and Continuing Education** also offers recertification for Emergency Medical Technicians for both basic and paramedic levels.

LEGAL ASSISTANT

Online

Diploma/AAS Degree – 48/60 Credits

See complete education plan on page 65.

PARAMEDIC

Willmar and Hutchinson Campuses

Diploma/AAS Degree – 46/60 Credits

See complete education plan on page 80.

PEACE OFFICER

Willmar Campus, Online

AAS - 67 Credits

The Law Enforcement/Professional Peace Officer Education program at Ridgewater College is an established and successful two-year college degree program with many graduates pursuing successful careers. The curriculum, designed to prepare students to pass the Minnesota Peace Officer's Standards and Training (POST) Board's examinations, follows the objectives established by the POST board and has been certified by it. Work closely with your academic advisor to select courses that will best suit your educational goals.

Associate in Applied Science Degree

Component I

Required Courses Credits

LAW 1030	Introduction to Criminal Justice	3
LAW 1130	Minnesota Statutes	3
LAW 2010	Criminal Procedures	3
LAW 2230	Peace Officer Communications & Employment Prep	3
LAW 2310	Peace Officer and Community	3
LAW 2410	Criminal Investigations	3
LAW 2430	Homeland Security	3
LAW 2450	Police Ethics and Leadership	3
LAW 2470	Juvenile Justice	3
LAW 2510	Police Officer and Human Behavior	3
LAW 2950	POST Seminar	1
LAW 1010	Law Enforcement Practicum	12

Total Credits: 43

Elective Courses

(select 2 credits from the courses below)

EMS 1016	Emergency Medical Technician - Basic	6
EMS 1033	First Responder	2
EMS 2008	EMT Blended Learning	6
EMS 2009	First Responder Blended Learning	2

Total Credits: 2

Component II

General Education Required Courses

ENGL 1210	College Composition I	3
PSYC 1310	Introduction to Psychology	4
SOC 2410	Criminology	3
SOC 2420	Racial and Cultural Minorities	3

Total Credits: 13

General Education Elective Courses

SOC 1050	Introduction to Sociology	3
SOC 1060	General Social Problems	3
SOC 1070	Marriage and Family Living	3

Total Credits: 3

General Education Elective Courses

Choose any CMST course	3
Choose any MnTC elective course	3

Total Credits: 6

Total AAS Degree Credits: 67

PEACE OFFICER TRANSFER PATHWAY

Willmar Campus, Online

AS Degree - 68 Credits

This program is designed for the student who is pursuing a career as a peace officer.

Component I

Required Courses Credits

LAW 1010	Law Enforcement Practicum (skills component)	12
LAW 1030	Introduction to Criminal Justice	3
LAW 1130	Minnesota Statutes	3
LAW 2010	Criminal Procedures	3
LAW 2310	Peace Officer and Community	3
LAW 2410	Criminal Investigations	3
LAW 2470	Juvenile Justice	3
LAW 2510	Peace Officer and Human Behavior	3
LAW 2950	POST Seminar	1
Choose one:	EMS 1033, 2009, 1016, or 2008	2

Total Credits: 36

Component II

Required Courses Credits

ENGL 1210	College Composition I	3
ENGL 1220	College Composition II	3
CMST	Any CMST course (Goal 1, 6, 7, 8, 9)	6
MnTC	Any Goal 3 area science course (Goal 3)	4
PSYC 1310	Introduction to Psychology (Goals 5 and 7)	4
SOC 1050	Introduction to Sociology (Goals 5 and 7)	
or		
SOC 1060	General Social Problems (Goals 5 and 9)	3
or		
SOC 1070	Marriage and Family Living (Goals 5 and 7)	3
SOC 2410	Criminology (Goals 5 and 9)	3
SOC 2420	Racial and Cultural Minorities (Goals 5 and 8)	3
MnTC	Any Goal 6 MnTC elective course (Goal 6)	3
MnTC	Any MnTC elective	3

Total Credits: 32

Total AS Credits: 68

ACCOUNTANT (ACCT)

ACCT 1001 1 Credit

Basic Accounting Concepts I

This course is an introduction to the fundamental accounting concepts and principles, which are used in a business environment to analyze, and record transactions through a complete accounting cycle using the accrual method of accounting. The course focus is on fundamental concepts of accounting for business or nonbusiness students.

ACCT 1002 1 Credit

Basic Accounting Concepts II

This course is a continuation of the study of basic financial accounting concepts as used in business and management. The content of the course includes the completion of an accounting cycle and financial statements.

ACCT 1800 2 Credits

Business Law

This is an introductory course in the principles of law as they apply to citizens and businesses.

ACCT 1810 3 Credits

Introduction to Accounting

This course is an introduction to Generally Accepted Accounting Principles (GAAP). Students are introduced to the accounting equation and the accounting cycle. This course includes a discussion of the following: a review of the accounting cycle, the conceptual framework of accounting, and the basic financial statements including the income statement and balance sheet.

ACCT 1812 2 Credits

Payroll Preparation

This course includes the study of the various state and federal laws pertaining to payment of salaries and wages, including preparation of employment records, payroll registers, employee earnings records, time cards, and state and federal reporting requirements.

ACCT 1814 3 Credits

Payroll Accounting

This course is a study of the various state and federal laws pertaining to payment of salaries and wages, including preparation of employment records, payroll registers, employee earnings records, time cards, and state and federal reporting requirements. This course includes incorporating payroll liabilities and expenses into the general ledger and the subsequent reporting in financial statements and reports.

ACCT 1815 4 Credits

Principles of Accounting I

This course is an introduction to the fundamental accounting concepts and principles which are used in a business environment to analyze and record transactions through a complete accounting cycle using the accrual method of accounting.

ACCT 1816 4 Credits

Principles of Accounting II

This course covers an analysis and the recording of transactions relating to partnerships, inventory methods, receivables, temporary investments, current and contingent liabilities, plant assets, intangible assets, the budget process, management reports, and corporate organizations. Prerequisite: ACCT 1815 or BUS 2240

ACCT 1831 3 Credits

Accounting Math and Calculators

In this course students will apply math functions to the solution of business problems using a calculator.

ACCT 1834 3 Credits

Computer Accounting Applications I

This course is an introduction to the use of the computer for general ledger accounting functions for a typical business organization. The course deals with training software in a structure mode and the use of general ledger production software and simulated source documents. Prerequisite: ACCT 1815 or BUS 2240 or consent of instructor

ACCT 1837 3 Credits

Spreadsheet Concepts & Applications

This course covers the basic concepts of spreadsheet construction and use, using Lotus 1-2-3 and EXCEL. Included is cell contents, the use of spreadsheet commands, creation of reports, and printing of graphs to convey general business information.

ACCT 1842 4 Credits

Income Tax

This course will cover an explanation and an interpretation the Internal Revenue Code for preparation of individual federal tax return.

ACCT 2814 4 Credits

Cost Accounting I

This course is an introduction to the principles and concepts used to account for materials, labor and factory overhead in a manufacturing entity using job order costing. It includes an introduction to the management implications of cost accounting.

ACCT 2821 4 Credits

Intermediate Accounting I

This course provides an overview of financial accounting. Students will review the accounting process and the basic financial statements: income statement, balance sheet and statement of cash flows. It also begins the study of specific assets/cash and temporary investments and receivables and temporary investments, receivables, and inventories. Prerequisites: ACCT 1815 or BUS 224 and ACCT 1816

ACCT 2823 4 Credits

Intermediate Accounting II

A continuation in the comprehensive study of financial accounting theory and concepts/plant and intangible assets, long-term investments, current and long-term liabilities, leases, pensions, owners' equity, and accounting for income taxes. Prerequisite: ACCT 2821

ACCT 2833 2 Credits

Database Concepts & Applications

This course covers the utilization of a professional database system to emphasize the components, structure, and application of database concepts in accounting and business applications. Prerequisite: ADS 1030

ACCT 2845 4 Credits

Auditing

This course is a study of the methods and procedures used in financial audits to attest to the completeness and reliability of financial statements of a business or other economic entity. Students will examine the issues of internal control procedures, audit sampling techniques and legal liability. Prerequisite: ACCT 2821

Course Descriptions

ACCT 2847

3 Credits

Fund/Non-Profit

This class is a study of the application of generally accepted accounting principles for governmental and not-for-profit entities.

ACTIVITY DIRECTOR (ADR)

ADR 1015

4 Credits

Activity Ideas for Program Development

This course will cover the foundation of activity program development and implementation across the continuum of care. Topics include the organization and function of the activity department, planning, leading and evaluating programs, and ideas and resources for supporting a quality activity program.

ADR 1410

2 Credits

Community Agencies and Resources for Older Adults

This course explores agencies, organizations and resources available for the aging population. Topics covered include funding and regulatory issues. Professional organizations and other aging service issues are also covered.

ADR 1420

4 Credits

Activity Interventions and Engagement Techniques

This course will cover the various intervention and engagement techniques that activity professionals use in working with the elderly. Topics discussed include communication, sensory stimulation, reality orientation, validations therapy, reminiscing, and nontraditional activity programming. The course will also include an introduction to therapeutic modalities such as music, pet, art, aromatherapy, horticulture, and others.

ADR 1500

4 Credits

MEPAP Part 1: Basic Activity Course

This course is approved by the National Certification Council for Activity Professionals (NCCAP #218005) and meets the modular education program required for certification. The four main units will provide the student with the basics of planning and delivering activities across the continuum of care, understanding of health and social issues in aging, care planning for quality of life and the evolution of the activity professional and healthcare organizations.

ADR 1520

4 Credits

MEPAP Part 2: Activity Management Course

This course is approved by the National Certification Council for Activity Professionals (#218005) and meets the modular education program required for certification. The four main units will provide the student with the basics in managing the activity department, evaluation of the activity program and services, leadership, communication and volunteer management.

ADR 1760

3 Credits

Dementia Care and Activity Services

This course is specifically designed for individuals working with persons living with dementia including Alzheimer's disease and other types of dementia. An explanation of Alzheimer's disease and other dementias will be covered as well as behavioral reactions, problem solving, ADL assistance, effective communication, intervention techniques, and promoting quality of life.

ADR 2900

1-10 Credits

Internship

This course is a cooperative internship between the Ridgewater College Activity Director program and an eldercare facility. This opportunity allows the student a hands-on experience to apply the knowledge and skills learned throughout the program courses.

ADR 2950

1-6 Credits

Special Topics/Projects

This course allows the student to complete a course of study on a special topic or project with the approval of the instructor. Under direction of the instructor, the student will complete assigned projects.

ADMINISTRATIVE SUPPORT CAREERS (ADS)

ADS 1007

2 Credits

Keyboarding

This course introduces the development of keyboarding techniques using the touch method. Emphasis is on building speed and accuracy using proper keyboarding techniques. Basic formatting concepts and proofreading skills are introduced through the use of a word processing program.

ADS 1008

2 Credits

Keyboarding II

This course focuses on advanced word processing functions to format business correspondence, tables, reports with graphics, columns, and other design enhancements, as well as administrative and employment documents. Continued development of keyboarding skill and accuracy and proofreading skills are included.

ADS 1012

3 Credits

Business Presentations

This course covers the development of business presentations. Students will plan, write and deliver presentations on various topics using appropriate media and presentation software.

ADS 1014

3 Credits

Written Business Communications

This course will expose students to the necessary written communication requirements for various business settings. Emphasis is on purpose, planning, content, and writing business correspondence using a variety of styles. Strategies will also include writing in the digital age such as workplace instant messaging and texting, making Podcasts and Wikis work for business, blogging for business and Social Media.

ADS 1016

1 Credit

Excel I

This course utilizes Microsoft Excel spreadsheet software for business applications. Procedures used include: document creation, storage and retrieval, major editing, printing, merging of documents, segments and variables.

ADS 1017

1 Credit

Excel II

This course introduces the student to managing work books, creating charts and maps, managing data, macros, and analyzing worksheet data. It is recommended that students have a basic knowledge of spreadsheets equivalent to the learning outcomes in ADS 1016 - Excel I or have taken ADS 1016.

ADS 1018**2 Credits****Personal Finance**

This course covers personal money philosophies, decisions and investment alternatives. Topics covered include personal financial statements, forecasting income, planning and recording expenses, setting up a budget, balancing a checkbook, financial institutions/services, health/life/auto/liability insurances and housing decisions.

ADS 1020**3 Credits****Administrative Office Procedures**

This course covers the integration of office tasks with office equipment. Topics covered include knowledge of office equipment, telephone/voice mail procedures, e-mail procedures, electronic calendaring, filing, computer file management, meeting arrangements, ethics, daily mail routine, and business document preparation. Virtual office environments and work environments will also be covered. It is recommended that students have basic keyboarding skills.

ADS 1027**2 Credits****Business Environment**

This course includes topics that orient office professionals to the current business environment. Included is foundational knowledge in the area of business ethics, accounting concepts, the global marketplace, cultural diversity, workplace safety, and other topics relevant to the business office environment.

ADS 1028**1 Credit****Excel III**

This is the third course in a sequence of one-credit Microsoft Excel courses designed primarily for students wishing to learn Microsoft Excel spreadsheet software in one-credit increments. Students will work with external data sources, consolidate data and link workbooks, create PivotTables and PivotCharts, and work with templates. It is recommended that students have a moderate knowledge of spreadsheets equivalent to the learning outcomes in ADS 1016 Excel I and ADS 1017 Excel II or have taken ADS 1016 Excel I and ADS 1017 Excel II.

ADS 1042**3 Credits****PowerPoint**

This course covers the creation of professional-quality slide presentations. It covers Microsoft PowerPoint which is a software program that helps students organize and present information to an audience. The student will be able to create audience handouts, speaker notes, and computer-based slide presentations. The student will build presentations quickly using professionally designed templates and will be able to enhance the presentations with pictures, charts, sound and video. Prerequisite: Knowledge of Microsoft Windows

ADS 1053**3 Credits****Excel**

This course is designed to teach fundamental spreadsheet skills to beginning and intermediate level students. The course will focus on learning how to input data, perform calculations, control text, numeric and graphic elements; as well as creating charts, graphics, and macros.

ADS 1110**3 Credits****Anatomy and Physiology**

This is a one-semester introductory level Human Anatomy and Physiology course designed to assist the student in developing a basic understanding of the normal structure and function of the anatomy and physiology of the major body systems as well as a basic structure of the human body from the cellular level to the tissue level. Such knowledge is basic to understanding common disease processes.

ADS 1120**3 Credits****Medical Terminology**

This course shows students how to recognize and build medical terms after learning the meaning of the word parts, prefixes, and suffixes. The course is based on a body systems approach with a focus on spelling, definitions and pronunciation of commonly used medical terms. Students will also learn how to interpret and use common medical abbreviations and symbols.

ADS 1140**3 Credits****Pharmacology**

This course introduces the coding student to basic pharmacology concepts and drug categories as related to current coding guidelines. A review of basic math, drug information sources, drug standards and legislations, pharmaceutical preparations and prescriptions will also be covered. Students will also learn the study of drugs according to classification and/or body systems. Emphasis is placed on commonly used drugs and their effects on body systems. Drug reference utilization is included. Prerequisite: HIMC 1110 or ADS 1110

ADS 1201**4 Credits****Civil Litigation and Criminal Law**

This course covers the legal terminology, procedures, and documents used in the practice of civil litigation and criminal law.

ADS 1202**3 Credits****Corporate and Real Estate Law**

This course covers the legal procedures, documents, and terminology relating to real estate and corporate law. Real estate law includes ownership methods, legal descriptions, transfer and financing documents. Corporate law includes major business ownership structures and the documents and formalities followed in each.

ADS 1203**4 Credits****Family Law and Estate Planning/Probate**

This course covers the legal terminology, procedures, and documents used in the practice of family law and estate planning and probate administration.

ADS 1204**3 Credits****Legal Documentation**

This course covers the drafting and editing of mailable legal documents and transcription of dictated material using word processing software. Emphasis will be on utilizing legal forms and materials, legal terminology, building accuracy in document keying, editing, and proofreading. Prerequisite: ADS 1007 or passing keyboarding testing score. Co-requisites: ADS 1201, ADS 1202, ADS 1203.

ADS 1205**3 Credits****Legal Office Management**

This course is an integration of legal office tasks into the electronic office setting. Emphasis will be placed on computer software applications used in legal office scheduling, docket control, time and expense records, and billing. It is recommended that students have a basic knowledge of office procedure or have taken ADS 1200 or ADS 1020.

ADS 1303**3 Credits****Pharmacology in the Medical Office**

This is an advanced course in medical terminology with emphasis placed on definitions of medical/pharmaceutical words as well as accurate spelling of medical/pharmaceutical terminology. Laboratory, X-ray, and pharmacology terminology will be explored in detail. Students will also have the opportunity to practice the pronunciations of medical and pharmacology terminology in a lab setting. Prerequisites: ADS 1300 and ADS 1301 or equivalent or ADS 1300 and BIOL 2100 or equivalent

Course Descriptions

ADS 1310

3 Credits

Medical Transcription, Quality Management and Production

This introductory course to medical transcription provides students an understanding of the various medical reports used, transcribing and formatting them into usable medical documents. Emphasis is directed toward accuracy, building speed, proofreading, correcting errors and quality and production management techniques. Prerequisites: ADS 1300 and ADS 1301 or instructor approval

ADS 1312

3 Credits

Medical Transcription II

This course covers the transcription of advanced dictated medical material using word processing equipment into a variety of usable medical documents. Emphasis will be on building accuracy and speed, advanced editing, proofreading, and correcting errors. Prerequisite: ADS 1310 or instructor approval

ADS 1320

3 Credits

Medical Office Management

This course is an integration of medical office tasks into the electronic office setting. Topics covered include medical office management career opportunities and advancement, professionalism, confidentiality, medical law and ethics, telephone techniques, appointment scheduling, professional office activities/responsibilities.

ADS 1323

4 Credits

Electronic Health Record Technology

This course presents both manual and electronic records management application and principles in the administrative, financial, reimbursement, and clinical patient environments including generally-accepted business practices. Emphasis is placed on legal, regulatory, and accrediting guidelines for security, control, ownership, and access to records including HIPAA and HITECH standards for hospitals, clinics, and alternative healthcare delivery systems utilizing an electronic health record. Role of the health information professional and how AHIMA's role is integral to the healthcare delivery system is discussed. Student will be required to collect, maintain, manage, and utilize EHR functions for patient care, reimbursement, financial and administrative purposes. Student will be required to apply and practice HIPAA, ROI, and legal requirements in a simulation patient care setting utilizing an EHR. Co-requisite: GSCI 1401

ADS 2010

2 Credits

Desktop Publishing

This course covers the theory and application of design principles. The student will use Microsoft Publisher to enhance the readability of documents such as letterheads, business cards, flyers, brochures, newsletters and promotional materials. Prerequisite: ADS 2030

ADS 2015

2 Credits

Introduction to Project Management

This course covers concepts of project management. A project plan will be created which provides the road map to develop, implement, control and close your project. The importance of establishing timelines and budgets will be covered, as well as the methods used to monitor and control schedules. The need for time management and team building will be covered as they relate to project management.

ADS 2030

3 Credits

Word

This course introduces the students to word processing features and techniques. Students will learn to create, edit, format, save, print, and retrieve documents. Students will create common business documents that include the creation of tables, columns, use of templates, as well as produce mail merged

documents. Inserting and formatting of graphics and charts are introduced. It is recommended that students have a basic business keyboarding skill equivalent to ADS 1016 and ADS 1007 or be concurrently enrolled in this course and ADS 1007

ADS 2045

3 Credits

Advanced Word Processing

This course introduces the student to desktop publishing using advanced word processing features and design concepts. Designed for students already familiar with word processing, students will learn how to create professional-looking documents. Students will plan, design, and evaluate their own documents and integrate decision-making and problem-solving skills throughout the course. Prerequisite: ADS 2030

ADS 2090

2-6 Credits

Administrative Support Internship

This course is designed to provide the student with a purposeful occupational experience in the administrative support field. Each internship is an individualized experience related to the skills and knowledge acquired in the program. Prerequisite: Consent of instructor

ADS 2201

3 Credits

Legal Research

This course covers the resources available in a legal office. Resources for legal research stressed include texts, computerized research, and Internet access to legal information. The course also covers the procedures followed on appeal and citation usage. It is recommended that students have a basic knowledge of civil litigation equivalent to the learning outcomes in ADS 1201 or have taken ADS 1201.

ADS 2202

2 Credits

Advanced Legal Practices

This course covers advanced legal procedures; use of terminology; and document preparation relating to civil actions, worker's compensation, alternative dispute resolution and bankruptcy proceedings in Minnesota. It is recommended that students have a basic knowledge of civil litigation procedures equivalent to the learning outcomes pertaining to civil litigation in ADS 1201.

ADS 2290

2-6 Credits

Legal Assistant Internship

This course is designed to provide the student with a purposeful occupational experience in the legal administrative assistant field. Each internship is an individualized experience related to the skills and knowledge acquired in the program. Prerequisite: Instructor approval

ADS 2313

3 Credits

Medical Machine Transcription III

This course covers the transcription of advanced dictated medical material into a variety of usable medical documents using word processing equipment. Emphasis will be on building speed and accuracy, advanced editing, proofreading, and correcting errors. Prerequisite: ADS 1312 or instructor approval

ADS 2322

3 Credits

Medical Insurance and Reimbursement

This course covers the insurance/financial aspect of management of the medical office. Topics covered include preparation, processing, and auditing of insurance claims via electronic methods; medical insurance terminology; understanding of different insurance programs and payment systems; coding for reimbursement systems; accounts payable; accounts receivable; credit and collections; and miscellaneous banking activities.

ADS 2390**Healthcare Administrative Assistant Internship**

This course is designed to provide the student with a purposeful occupational experience in the medical secretary field. Each internship is an individualized experience related to the skills and knowledge acquired in the program. Prerequisite: Instructor approval

ADS 2950**1-3 Credits****Special Projects/Topics**

This course provides an opportunity for a student to study topics delivered either on an individual or course basis. A student must show a special need to be able to enroll in this course.

AGRICULTURE (AGRI)

AGRI 1001**2 Credits****Ag Orientation**

This course teaches those skills that contribute to the success of an Ag department student and future employee in the field of agriculture. The student will better define career objectives using goal setting and decision-making strategies.

AGRI 1201**1 Credit****Applied Mathematics for Agricultural Careers**

This course is designed for students preparing for agricultural careers. Topics covered include numbers, decimals, fractions, percentages, ratios and proportions, area, volume, English and metric measurements, and basic algebra, geometry, and trigonometry in the practical application for mathematics to farm and/or agri-business situations, including the areas of agronomy, animal science, agribusiness, and farm buildings.

AGRI 1210**3 Credits****Dairy Cattle Breeding and Reproduction**

This course provides an overview of the dairy industry. Topics include dairy cattle anatomy, physiology, genetics, corrective mating, linear evaluation, reproduction and records. Emphasis is placed on production, costs, marketing and management, DHIA records, and production records.

AGRI 1211**1 Credit****Artificial Insemination for Cattle**

This course covers artificial insemination of dairy and beef cattle and is presented by an artificial insemination company representative.

AGRI 1212**1 Credit****Dairy Evaluation**

This course covers on-site evaluation of dairy management including business, housing, feeding, reproduction, health, equipment, cattle, and milking management. This is a repeatable course for up to 2 credits.

AGRI 1220**3 Credits****Dairy Facilities and Equipment**

This course covers dairy cattle housing and related equipment such as building requirements, ventilation, layout, stall sizes and types, cow comfort and feed handling/storage. Also covered is milking equipment and related dairy facilities. The National Mastitis Council milking equipment evaluation will be taught.

AGRI 1230**2 Credits****Raising Dairy Replacements**

This class covers all aspects of dairy heifer raising and management from pre-birth and the calving process to calving at 24 months.

AGRI 1240**3 Credits****Dairy Cattle Anatomy, Physiology & Health**

The anatomy and physiology of dairy cattle as it relates to health. All major dairy cattle diseases will be covered: description, symptoms, prevention, and treatment.

AGRI 1241**2 Credits****Cattle Health Lab**

This course covers health management techniques for dairy and beef cattle. Students will be involved in on farm exercises such as physicals, hoof care and trimming, ketosis diagnosis, monitoring rumen function, DA diagnosis, urine pH, identifying and diagnosing sick cattle injections, drawing blood, administering IVs, dehorning, castrating, administering drugs, and other activities associated with the health of animals. Students will perform data entry, and generate and analyze reports using Dairy Comp 305 and PC Dart. Students will be able to apply what they learn using data from their own farms. Co-requisite: AGRI 1240

AGRI 1242**1 Credit****Palpation and Ultra-sounding of Dairy Cattle Lab**

Principles of palpation and ultra-sounding dairy cattle for pregnancy diagnosis will be covered.

AGRI 1243**1 Credit****Embryo Transfer**

Principles of embryo transfer will be covered, including hormone therapy. Students will learn how to transfer both frozen and fresh embryos to recipient cattle. Equipment lease service fee. Prerequisite: AGRI 1211

AGRI 1244**1 Credit****Hoof Trimming**

Upon successful completion of this course, the student will understand the anatomy of the lower leg and hoof, understand the major cause of lameness, develop skills on functional hoof trimming, blocking, and treatment protocols. Students will work on cadaver hooves and live animals.

AGRI 1260**1 Credit****Dairy Seminar I**

Dairy professionals will present information on the latest technologies in the dairy industry.

AGRI 1261**1 Credit****Dairy Seminar II**

Dairy professionals will present information on the latest technologies in the dairy industry.

AGRI 1270**3 Credits****Dairy Nutrition**

Students will learn the proper feeding and management of replacement heifers, dry cows, transition cows, fresh cows and lactating cows. They will also learn how to balance rations.

AGRI 1301**2 Credits****Poultry Nutrition, Feeds, and Feeding**

This course is designed to provide students with an understanding of feed nutrients, the nutrient composition of feed ingredients, the physiological effects of nutrients on poultry health and performance, feeding schedules, and feed processing.

Course Descriptions

AGRI 1303**3 Credits****Environmental Management for Poultry Production**

This course is designed to provide students an understanding of the management of the surrounding air environment to achieve proper poultry health and performance. The basic principles of temperature, moisture, and ammonia control with mechanical and natural ventilation systems will be taught.

AGRI 1305**3 Credits****Managing Poultry Health**

This course is designed to determine the symptoms to identify diseases in poultry. Prevention and treatment of diseases will be discussed. The examination of postmortem poultry will occur. Other topics include: poultry sampling for laboratory analysis, barn preparation, and sanitation procedures.

AGRI 1520**3 Credits****Computers in Agriculture**

This course will cover Excel operations and applications as they relate to agribusiness and farm use. Topics include: use of math, logical and statistical functions, exploration of templates, editing and creation of spreadsheets.

AGRI 1521**3 Credits****Computers/Spreadsheets**

Students will learn how to use spreadsheets as a tool. The class will begin with basic spreadsheet functions and operations and move to more complex database management. Microsoft Excel will be used to teach students the many agricultural applications for which spreadsheets can be used. Students should have a good understanding of the Windows operating system and basic computer skills before enrolling in the class.

AGRI 1540**1 Credit****Personnel Management for Agricultural Producers**

Personnel management techniques for farm managers are presented in this course. These include recruiting, hiring, evaluation, documentation, promotion and termination of farm workers. Employee motivation, delegation and conflict resolution are also discussed.

AGRI 1550**2 Credits****Introduction to Ag Business**

This course provides an introduction to the business of agriculture. and an overview of the food and fiber industry on both the U.S. and global levels. Students will be introduced to basic management concepts and the types of agribusinesses with an emphasis on cooperatives.

AGRI 1551**3 Credits****Ag Business Procedures and Records**

This course covers the following business procedures common to agri-business: preparation of sales tickets, discount policies, computer coding, accounts receivable records, product pricing, inventory records, sales tax, and purchase orders. An agri-business procedure simulation is included using Agvance software.

AGRI 1552**2 Credits****Ag Business Credit and Finance**

This course will cover financial statements as they relate to agribusinesses. Students will learn how agribusinesses use financial statements to analyze the financial health of a business. This course will give students a basic understanding of how to manage working capital and obtain financing. This is a basic accounting class for non-financial managers.

AGRI 1553**3 Credits****Agri-Business Management & Marketing**

This course provides the foundation of business knowledge that can enable students to utilize their talents. It introduces the tools used in organizing, planning, and managing a business - including preparing a business plan.

AGRI 1580**3 Credits****Ag Sales & Service**

This course will cover the basic principles and techniques for selling agricultural products and services and providing customer service. Selling skills will emphasize the problem-solving approach.

AGRI 1621**3 Credits****Farm Management I**

This course will cover the general principles involved in the organization, operation, and decision making of a farm business. Basic accounting principles will be applied by entering financial and production data on computer farm record keeping systems. Calculation procedures used in partial and enterprise budgets in a farm business will be covered.

AGRI 1622**3 Credits****Farm Management II**

The procedures used in whole farm budgeting, checking on farm efficiencies, along with expansion alternatives of a farm business will be implemented. The projected whole farm cash flow budgets will be evaluated. The structure, organization and requirements for different sources of agriculture credit available for a farm business will be covered.

AGRI 1623**3 Credits****Farm Management III**

This class is an introduction to basic estate planning options, life insurance, probate process, wills and the economic impact of selected estate plans within a farm business. Students will use goals to analyze partnerships, corporations, operating agreements and land ownership. Also covered is the handling of farm employees in a farm business.

AGRI 1624**3 Credits****Farm Management IV**

This course will cover the use of farm records for income tax management and year-end analysis. Estimates of tax liability and procedures in filing income tax will be developed. Students will learn how to open and keep records with a computerized record keeping system. Financial records will be studied for measures of earnings and success factors related to farm earnings. The Annual Report of the Farm Business Management Program will be reviewed.

AGRI 1628**1 Credit****Applied Farm Records**

Students will work independently keeping records on a home farm. They will develop an opening inventory, beginning balance sheet and depreciate schedule. Students will record the first, second, third and fourth quarter financial and production entries and will calculate an ending inventory and ending balance sheet. Students will submit their records for analysis and a one-on-one review of their year-end report.

AGRI 1640**3 Credits****Ag Commodity Marketing**

The basic agricultural commodity marketing concepts, terminology, applications and the mechanics of futures and options on the Chicago Mercantile Exchange are covered. Market outlets, forward pricing, hedging and other market alternatives are evaluated.

AGRI 1645**3 Credits****Farm Direct Marketing**

This course covers foundational items for individuals interested in the direct market agricultural products, services, and/or information. In this course, students will learn to analyze the marketplace and identify market opportunities. Students will segment customers and identify market channels to serve various segments. Regulations associated with direct marketing will be identified along with opportunities for value-added production opportunities.

AGRI 1650 Soils and Fertility Management This course covers the concepts of soil formation, soil types, soil conservation, soil and water relationships, soil fertility, and basic soil chemistry. Soil test information provided by the student will be used to develop fertility plans which utilize various sources of fertility such as crop rotations, manure, and chemical fertilizers.	3 Credits	AGRI 1721 Fall Agriculture Field Experience Lab An on-farm implementation of farming practices as it relates to field crops including but not limited to corn, soybeans, small grains, and alfalfa. The course will be organized to model as closely as possible real world production decisions and implementation. The students (with instructor oversight and guidance) will plan fall harvest, fall tillage methods, input amounts and timing. Students will also be required to (when applicable) complete the actual task i.e. harvest, tillage, collection of plot data. Students may repeat this course, earning up to three credits.	1 Credit
AGRI 1660 Introduction to Agronomy This course is an introduction to basic agronomy and covers the plant growth and development of monocot and dicot plants. Students will learn the basic plant anatomy and growth stages, methods of plant reproduction and seed production, plant response to weather and other environmental factors.	3 Credits	AGRI 1722 Spring Agriculture Field Experience Lab An on-farm implementation of farming practices as it relates to field crops including but not limited to corn, soybeans, small grains, and alfalfa. The course will be organized to model as closely as possible real world production decisions and implementation. The students (with instructor oversight and guidance) will plan crop rotation, spring tillage methods, input amounts and timing. Students will also be required to (when applicable) complete the actual task, i.e. planting, tillage, spraying, cultivating, plot layout. Students may repeat this course, earning up to three credits.	1 Credit
AGRI 1665 Agroecology This course covers a whole systems approach to agriculture and food systems development based on traditional knowledge, alternative agriculture and local food system experiences. This course will focus on a whole systems approach to food, feed, and fiber production that balances environmental soundness, and economic viability. Topics covered in this course will include the conservation of soil, soil fertility, water and energy as well as the management of ecological relationships as they relate to agriculture.	3 Credits	AGRI 1730 Forage Production This course covers forage management of legumes and grasses with emphasis on alfalfa and corn silage production and management topics of establishment, winter survival, fertilization, cutting management, varieties and harvesting equipment.	3 Credits
AGRI 1670 Integrated Pest Management This course covers various methods of pest control and their alternatives. Safe and responsible handling of crop protection products is stressed. Growth habits and identification of common weeds, insects, and diseases will be reviewed as well as the calibration of broadcast and band applicators. The content of this course is designed to prepare students to take their commercial or private applicator test.	3 Credits	AGRI 1740 Specialty Crops This course covers the management practices for the production of sugarbeets and edible beans. Planting, fertilization, pest control and harvest are covered.	2 Credits
AGRI 1680 Crop Scouting Techniques This course covers an identification of grass and broadleaf seedlings and the prominent insect pests of corn, soybeans, and alfalfa. It will also cover herbicide injury symptoms, a review of nutrient deficiency symptoms and weather related crop injuries. Field scouting techniques will also be discussed. Co-requisite: AGRI 1660	2 Credits	AGRI 1761 Agricultural Water Management Water management will be taught as it relates to irrigation, drainage, and wetland conservation. Information presented will cover government regulations, water-scheduling, economics, and water, soil, plant interactions. AGRI 1110 or AGRI 1650 (dual-numbered courses)	2 Credits
AGRI 1681 Crop Scouting Techniques Lab This course consists of crop scouting activities done in the field at various locations throughout the summer to give the student practical field experience. Prerequisite: AGRI 1680	1 Credit	AGRI 1770 GIS Applications In this course students are trained on the uses of "SST" GIS software. Students will create field boundary maps, yield maps and recommended maps. Prerequisite: AGRI 1771	3 Credits
AGRI 1700 Crop Protection Products In this course students will use crop protection guides and pesticide labels to develop recommendations for the cost effective control of weeds, insects, and diseases in corn, soybeans, and other crops. Students will practice determining the best product application rate, application timing and application method. Product modes of action, additives and resistant weeds will also be discussed.	2 Credits	AGRI 1771 Introduction to Precision Agriculture This course introduces the framework for understanding global positioning systems and related components. Topics include precision farming, positioning systems, yield monitoring, GIS systems, and variable rate technologies. This course should be taken prior to other courses related to GPS/GIS technology.	2 Credits
AGRI 1720 Corn & Soybean Production This course covers management practices in corn and soybean production - including plant development stages, varietal selection, seedbed preparation, planting and replanting decisions, fertilization options, weed control programs, and harvesting options. Prerequisites: AGRI 1120, AGRI 1550, AGRI 1660, AGRI 1670, AGRI 1680	3 Credits	AGRI 1772 Remote Sensing/Image Analysis This course will introduce the use of Ariel and satellite imagery in a GIS program. Special attention will be paid to resolution, projection, and bringing imagery into a GIS system correctly.	2 Credits

Course Descriptions

AGRI 1773

3 Credits

GIS Problem Solving

Students will be assigned real world problems from a partnering business (i.e. local farms, retail) to work on. Students will be required to identify the problems and develop recommendations using a GIS system. For instance, students may develop yield correlation maps based on soil nutrient levels, using a variety of interpolation methods.

AGRI 1774

3 Credits

Electronics Components and Troubleshooting

This course will cover precision agriculture equipment identification, installation, calibration, and troubleshooting. Students will be introduced to several different brands of precision equipment.

AGRI 1776

3 Credits

GIS for Agricultural Producers

GIS software is used along with GPS receivers to collect data as soil sample information and then converted into data layers or maps. Recommendations are applied to application rate maps. Students will use the GIS to help plan current year's crop. Prerequisite: AGRI 1771

AGRI 1780

2 Credits

Grain Handling and Storage

The principles of grain handling, drying and storage are covered in this course. Methods of achieving high grain quality are stressed. Commercial grain grading practices, discounts and quality factors are used.

AGRI 1781

1 Credit

Grain Handling Principles

The principles of grain handling, drying, and storage are covered in this course. Methods of achieving high grain quality are stressed. Corn and soybeans are the primary crops discussed in this course.

AGRI 1810

3 Credits

Introductory Animal Science

This course provides an overview of the livestock industry with emphasis on the production and management of meat and dairy producing animals. Other topics covered include reproduction, nutrition, and market classification and grading of livestock.

AGRI 1811

3 Credits

Sustainable Livestock Management

This course covers the integration of livestock as part of a sustainable farming system with emphasis on small-scale production for niche markets and pasture. Topics included are appropriate breed selection, sources of nutrition and living requirements for livestock such as dairy cattle, beef cattle, goats, hogs, sheep and poultry. Upon completion of this course, students should recognize appropriate breeds for their farm needs and demonstrate an understanding of the role of livestock in a sustainable production system.

AGRI 1815

3 Credits

Meat Animal Reproduction

Students in this course are provided with the basic principles of reproductive physiology of livestock species. Students will learn about the female and male reproductive systems, hormones, and applied concepts of livestock reproduction.

AGRI 1820

3 Credits

Animal Nutrition

This course provides basic information about the fundamentals of nutrition and the essential nutritional requirements of livestock, classifications and nutritional characteristics of feedstuffs, and methods of evaluating feedstuffs, and comparative study of digestive system of farm animals.

AGRI 1830

2 Credits

Beef Cow Calf

This course focuses on the cow/calf segment of the beef industry. Students will become familiar with the structure and organization of the beef industry, gain an understanding of cow/calf management practices related to calf management, selection of cattle, herd replacement, genetics, health, nutrition and facilities.

AGRI 1840

2 Credits

Beef Feedlot

This course focuses on the feedlot segment of the beef industry. Students will become familiar with the structure and organization of the beef industry and gain an understanding of feedlot management practices related to daily lot management, facilities, health and nutrition.

AGRI 1870

3 Credits

Swine Breeding and Farrowing

This course includes an overview of the pork industry with an emphasis on the breeding and farrowing segment. Students will learn about specific characteristics of the major swine breeds in the United States as it relates to breeding programs and how to best manage the breeding and farrowing herd through gilt selection, reproduction management, nutrition, health, behavior and environment. Students will also learn proper piglet management

AGRI 1871

3 Credits

Swine Nursery and Finishing

This course includes an overview of the pork industry with an emphasis on the nursery through finishing segment. Students will learn how to best manage the nursery through finishing herd by learning about current production and management practices, nutrition, health, and behavior of swine as it relates to their environment.

AGRI 1900

1 Credit

Sheep Management

This course provides an overview of basic sheep management principles through the study of the year-round management and production cycle of a sheep enterprise. Students will learn how each production stage influences profitability as well as its relationship to the business goals of the enterprise.

AGRI 2100

2 Credits

Farm Shop Repair Skills

In this course students will learn to interpret specifications and use various hand and power tools following basic safety practices. They will repair different types of farm machinery (excluding tractors).

AGRI 2123

3 Credits

Agricultural Communications and Leadership

Students will develop speaking and writing skills needed in farm management and agribusiness occupations, while improving their understanding of agricultural, environmental and related issues.

AGRI 2130 Small Engine Repair In this course students will learn the principles of the operation of small gasoline and diesel engines including tune-up and reconditioning of two- and four-cycle small engines and their agricultural applications.	2 Credits	AGRI 2147 HVAC for Ag Power Systems This course will cover service, trouble shooting and repair of heating, ventilation and air conditioning systems in agricultural equipment and heavy trucks. Students will be prepared to earn the EPA certification for the use and handling of freon. Prerequisites: AGRI 2100, AGRI 2140	2 Credits
AGRI 2135 Ag Electricity Electricity fundamentals including safety and adequacy of farm and home electric power distribution are covered in this course. Selection and maintenance procedures of electric motors and practical wiring exercises consisting of switches, outlets, and starting switches, using approved wire and fusing for 120- and 240-volt service are included.	2 Credits	AGRI 2148 Ag Shop Procedures Study in this course will allow students to practice estimating, ordering, scheduling, customer communication, and computer applications. OSHA and EPA compliance requirements will be practiced. Co-requisite: AGRI 2141, Prerequisites: AGRI 2100, AGRI 2140	1 Credit
AGRI 2140 Ag Power Maintenance and Repair Students will learn about gasoline and diesel tractors including engine construction, injection pumps, operation of turbochargers, lubrication systems, cooling systems, electrical systems, and transmissions. Additionally students will learn preventive maintenance, and about precision farming equipment and how to operate testing equipment.	3 Credits	AGRI 2150 Harvesting and Fall Tillage Equipment Student will learn the proper operation, maintenance, repair and adjustments for fall field machinery with an emphasis on combines and fall tillage equipment.	2 Credits
AGRI 2141 Agriculture Power Maintenance and Repair Lab This course covers the preventative maintenance of modern gasoline and diesel engines including diagnosis and adjustment. Proper use of testing equipment, cleaning, troubleshooting, and tune-up of tractors and engines will be included. Students can use own tractor.	4 Credits	AGRI 2151 Forage Harvesting/Fall Tillage This course covers the operation, maintenance, adjustment and repair of forage equipment with emphasis on hay and silage equipment and fall tillage equipment. Student will learn how to identify crop loss in the field and determine the adjustment needed. They will also learn how fall tillage equipment and operation affects residue cover as well as determine residue remaining after tillage.	2 Credits
AGRI 2142 Hydraulics for Ag Power Systems Study in this course will allow student to develop greater knowledge of pressure and flow compensated hydraulics systems as related to agricultural power system needs. Operation and troubleshooting of pressure and flow-compensated hydraulics systems will also be covered. Prerequisites: AGRI 2100, AGRI 2140	3 Credits	AGRI 2160 Planters & Spring Tillage This class will cover different types of tillage and planting systems and meters. Topics include the impact of field compaction, weight transfer of tractors, proper balance of farm tractors, and proper tire selection on plant health will be discussed. Students will learn the operation, adjustment and maintenance of planting equipment; the calibration of sprayers; and calibration, repairs, and troubleshooting of planters.	3 Credits
AGRI 2143 Fuel Systems and Emissions for Ag Power Systems This course will cover the service, trouble shooting and repair of fuel systems in ag equipment and heavy trucks, including injection pumps, turbochargers, and EGR systems. Prerequisites: AGRI 2100, AGRI 2140	3 Credits	AGRI 2180 Agricultural Machinery Management The purpose of this class is to determine of machinery capability including theoretical and effective field capacities of farm machinery. Students will also develop a machinery purchase and trading schedule based on age, hours, and farming practice.	2 Credits
AGRI 2144 Electrical Systems for Ag Power This course will cover service, trouble shooting and repair of electrical systems in agriculture equipment and heavy trucks. Prerequisites: AGRI 2100, AGRI 2140	3 Credits	AGRI 2191 CDL - Preparation for Written Test This course is designed to give students information needed to complete the written tests required to obtain a learner permit for the basic CDL license. Co-requisite: AGRI 2192	2 Credits
AGRI 2145 Powertrains for Ag Power Systems Study in this course will allow students to develop greater knowledge of the operation and power flow of mechanical, power shift, hydrostatic, and IVT/CVT transmissions. Repair, adjustments, and maintenance of these transmissions will be covered. Prerequisites: AGRI 2100, AGRI 2140	3 Credits	AGRI 2192 CDL - Preparation for Road Test Students will learn the knowledge and skills necessary to complete a pre-trip inspection, vehicle handling, and on-road driving tests needed to obtain the basic CDL license and employment as a truck driver in the agriculture industry. Co-requisite: AGRI 2191	1 Credit
AGRI 2146 Engines for Ag Power Systems Study in this course will allow student to develop greater knowledge of engine design, construction and operation. Engine diagnostics and repair will also be covered. Emphasis will be on diesel engines. Prerequisites: AGRI 2100, AGRI 2140	3 Credits	AGRI 2200 Farm Building and Structures A study of popular types of farm buildings including common construction materials, procedures and building floor plans. Learn farmstead zoning principles and experience lab work in framing, roofing and enclosing a farm building.	2 Credits

Course Descriptions

AGRI 2210

3 Credits

Ag Industry Machinery Maintenance

This course covers the principles of servicing and maintaining agricultural industry equipment with emphasis on power units, fertilizer and chemical equipment, pickups and trucks, including hydraulic, diesel systems, engine repair and electrical systems.

AGRI 2221

3 Credits

Medium and Heavy Duty Truck Repair

This course will cover the basic service, troubleshooting, maintenance, and repair of medium and heavy duty trucks/semis used in the agriculture industry. Students would be prepared to test for the DOT medium- and heavy-duty truck certification.

AGRI 2240

3 Credits

Pesticide & Fertilizer Equipment

This course covers the principles of calibration, adjustment and maintenance of gas, liquid and granular plant food and crop protection equipment. It will also cover protective equipment and personal safety.

AGRI 2250

2 Credits

Basic Custom Application

This course covers the calibration, operation, and basic maintenance of Ag Chem Terra Gator, air spreader and rogator equipment. It also includes an introduction to the set-up and operation of on-board controller and the monitoring of systems.

AGRI 2251

2 Credits

Advanced Custom Application

This course includes the calibration, operation and advanced maintenance of the Ag Chem Terra Gator, air spreader and rogator equipment. It also includes in-depth set up and operation of an on-board control system.

AGRI 2260

3 Credits

Ag Energy/Alternative Fuels

This course covers the development and purposes of modern fuels and lubricants from the refinery to the market, including propane, ethanol, and biodiesel.

AGRI 2402

2 Credits

Employment Preparation for Ag Professionals

This course covers topics essential to gain and maintain successful employment in the agricultural industry. Students will examine and prepare job application documents such as a resume, cover letter, application form, and career portfolio. Topics covered include interviewing and job-keeping skills related to self-assessment, presenting a professional image, work attitudes, diversity in the workplace, stress management, conflict resolution, team building, and dealing with criticism and work performance appraisals.

AGRI 2700

1 Credit

Computer Applications for Veterinary Technicians

Veterinary clinic management software (Cornerstone) is used to help students manage patient, client, inventory, and accounting procedures.

AGRI 2800

3 Credits

Agriculture Internship

This course is a four-week internship experience at an agribusiness or agriculture production-related facility or farm. Students will perform tasks as directed by their employers. Students will complete training plans and four weekly reports. Evaluations will be conducted by the employer and supervising faculty member. Prerequisite: Enrolled in a Ridgewater College Agriculture program major

AGRI 2950

1-6 Credits

Special Projects/Topics

This course provides an opportunity for a student to study topics delivered either on an individual or course basis. A student must show a special need to be able to enroll in this course.

ANTHROPOLOGY (ANTH)

ANTH 1010

3 Credits

Introduction to Cultural Anthropology

MnTC Goals 5, 8

An introduction to the study of human beings and their culture. After an introduction to the broad discipline of anthropology, the course focuses on cultural anthropology. Major components of cultural systems are examined. The impact of rapid global culture change is considered at length.

ART (ART)

ART 1040

3 Credits

Survey in Art

MnTC Goals 6, 7

Survey in Art is a general survey of the visual arts. The techniques of painting, sculpture, architecture and printmaking are examined as well as various philosophies of art, elements of form, design, creativity and the artistic process. A survey of many of the important periods of art history are examined as well as numerous artists who have influenced the development of art in western, non-western and minority cultures. *This is not a studio course although some hands-on studio activities will enhance discussions.

ART 1060

3 Credits

History of Modern Art

MnTC Goals 6, 7

History of Modern Art is the study of the artists and major movements in contemporary painting and sculpture from the 19th Century to the present. A major theme of the course is how Modernism has shaped the world of art, the influence of culture on art, the influence of art on culture and how Post- Modernism has changed our outlook on art.

ART 1070

2 Credits

Women in Art

MnTC Goals 6, 7

Women in Art is an introductory course that examines the various roles and contributions of women in the visual arts. The course includes such topics as woman as symbol and metaphor, the changing image of women in art, the woman's movement as it relates to art and the contemporary woman artist.

ART 1200

3 Credits

Introduction to Art Studio

MnTC Goal 6

Art Structure is an introductory studio course for all students. It is designed to acquaint the student with the materials and techniques of the visual artist, principles of design, creativity and the artistic process. Students will explore and produce works in various traditional and contemporary media in the visual arts such as drawing, painting, collage, printmaking and sculpture.

ART 1250 Art of Digital Photography MnTC Goal 6 An introduction to the art and principles of digital photography. Students will explore various genres in digital photography including nature, portraiture and abstraction. This course focuses on photography from an art perspective including non-traditional photography and the elements of design: line, shape, color, texture, value.	3 Credits
ART 1300 Printmaking I MnTC Goal 6 An introductory course focusing on three primary printmaking methods: relief printing, monoprinting and water-based etching. Students will learn the basic techniques in each area and will produce a series of prints based on their own individual ideas.	3 Credits
ART 1400 Drawing I MnTC Goal 6 This is an introductory course in the elements of the art of drawing. The student will examine and experiment with traditional and contemporary media and techniques. Elements of two-dimensional composition, intense observation, creative problem solving and development of a personal approach to drawing will be emphasized.	3 Credits
ART 1440 Watercolor This course is an introduction to the basic skills and techniques of watercolor painting. The special characteristics of watercolor application will be explored to create both traditional and abstract results.	3 Credits
ART 1500 Digital Studio MnTC Goal 6 Introduction to the computer as a means for expression, design, and artistic problem solving. Exposure to digital media, digital design history, and current creative computer applications.	3 Credits
ART 2260 Elementary Art Education MnTC Goal 6 Elementary Art Education is a course for all liberal arts students. It is also a course for those students interested in teaching, parenting, care-giving and those who have an interest in the artistic development of children. Students will explore the artistic development of children, experiment with art mediums suitable for young children, develop lesson plans/activities, and learn how to enhance the creative experience.	3 Credits
ART 2300 Visual Design I MnTC Goal 6 Visual Design I is a studio course in the elements of black and white and two-dimensional form. Students will discuss and explore line, shape, value and texture as they pertain to significant form and meaning. Students will be introduced to design as a creative process and as a means for creative problem solving.	3 Credits
ART 2310 Three Dimensional Design and Color MnTC Goal 6 3D Design and Color is a studio course in color theory and design in three dimensions. Significant form and meaning will be explored in this context.	3 Credits

Students will explore creativity and the design process in problem solving situations resulting in the production of sculptures in three dimensions. Students will examine, explore, and discuss the various aspects of color theory.

ART 2600 Ceramics MnTC Goal 6 Ceramics is a course in which students will explore the many phases of ceramic art. This will include design, wheel throwing and hand building methods of construction, studio procedures, glazing and firing. Students will participate in discussions and critiques of contemporary and traditional ceramics.	3 Credits
ART 2610 Painting MnTC Goal 6 Painting is an introductory studio course in the elements of traditional and contemporary oil painting. Students will explore and discuss the various techniques and methods basic to the creation of paintings. Students will participate in the discussions and critiques of traditional and contemporary paintings and explore the creative process via the medium of oil paint.	3 Credits

AUTO BODY (ABOD)

ABOD 1002 Automotive Trades Skills In this course students will learn basic skills necessary to be successful in a career in either Auto Body or Auto Mechanics. These skills will include safety, automotive tools and usage, electrical skills, and repair order completion.	2 Credits
ABOD 1111 Minor Body Repair In this course, students learn to repair minor vehicle body damage. Topics covered include the characteristics of sheet metal and other body materials, how damage affects the properties and structural shape of these materials, and methods/technologies for repairing small damaged areas.	6 Credits
ABOD 1112 Welding Processes & Corrosion Repair Procedures This course covers set-up and operations of MIG welding equipment as applied to the auto body industry. Students will practice welding automotive sheet metal in flat, vertical, horizontal, and overhead positions. Students will also practice welding aluminum and silicon bronze and compression welding. Students will also be given instructions in welding automotive plastics. In addition, students will practice corrosion repairing methods. Related safety practices and topics will be emphasized.	6 Credits
ABOD 1113 Vehicle Preparation This course covers the use of automotive reconditioning equipment and products. Students will practice methods of reconditioning automobiles to meet industry standards. Instruction will also cover products necessary to prepare a vehicle's surface for a final topcoat.	3 Credits
ABOD 1124 Body and Glass Service This course covers the application of various types of automotive trim and hardware. Students will learn safe removal and installation of glass on both	1 Credit

Course Descriptions

domestic and imported cars. Students will make repairs to vehicles that have problems such as wind noise, dust leaks, water leaks, and other body service problems.

ABOD 1125

4 Credits

Automotive Refinishing

In this course, students will be instructed on the proper preparation and application of primers, sealers and top coats. Students will also learn how to examine automobile surface conditions to determine the proper refinish procedures. The course will allow students the chance to practice painting using modern technology.

ABOD 1126

9-11 Credits

Refinishing Lab

In this course, students will apply concepts learned in previous courses by working on vehicles and vehicle components in the auto body shop. This course will also give students the opportunity to practice and perfect skills used in the collision repair industry. Students are instructed in identification and calculations of refinishing and collision damage using manuals and computerized estimating systems. Students will analyze damage that will determine the cost to repair vehicles to their pre-accident condition.

ABOD 2131

4 Credits

Color Matching and Blending

This course provides instruction in industry recommended procedures for correction of color mismatching and general spot repairs. Students will have hands-on practice painting base coat, clear coat, and tri-coat finishes using current color tinting procedures. Students will also be given instruction on how color is affected by various light sources. Prerequisite: Successful completion of all Semester 1 and 2 courses, or authorization from Auto Body department instructor(s)

ABOD 2132

2 Credits

Collision Refinishing and Estimating

In this course, students are instructed in identification and calculations of refinishing and collision damage, using manuals and computerized estimating systems. Students will analyze damage that will determine the cost to repair vehicles to their pre-accident condition. Prerequisite: Successful completion of all Semester 1 and 2 courses, or authorization from Auto Body department instructor(s)

ABOD 2133

4 Credits

Collision Damage Replacement

In this course, students learn to replace automotive sheet metal and structural components using current industry recommended procedures. In addition, topics related to safe removal and replacement of mechanical components as they relate to the collision repair industry will be covered. Prerequisite: Successful completion of all Semester 1 and 2 courses, or authorization from Auto Body department instructor(s)

ABOD 2135

9 Credits

Wheel Alignment and Mechanical Systems

In this course, students will learn about the theory, design and construction and of Unibody, suspension and associated mechanical/ structural systems and how to properly repair damage to the system. In the classroom, major topics will include four wheel alignment, structural alignment and their relationship to collision damage. In the lab, students apply skills and concepts covered in this and previous classes related to the proper and safe removal and replacement of mechanical components as they relate to the collision repair industry. Prerequisite: Successful completion of all Semester 1 and 2 courses; or authorization from Auto Body department instructor(s)

ABOD 2145

5 Credits

Major Collision Repair Lab

This course covers repairs to unitized and frame type vehicles. Students will practice measuring the structural components of vehicle using mechanical and computerized measuring systems. This course will also cover methods used to anchor and pull vehicles to their pre-accident condition. Prerequisite: Successful completion of all Semester 1 and 2 courses; or authorization from Auto Body department instructor(s)

ABOD 2146

2-8 Credits

Skillbuilding Lab

Students will work in a lab setting performing skills and objectives learned in related courses. Prerequisite: Successful completion of all Semester 1 and 2 courses; or authorization from Auto Body department instructor(s)

ABOD 2155

3 Credits

Collision Repair Business Operations

This course provides an introduction to the study of small business operations. Topics covered include electronic record keeping for small businesses, marketing, managing, business organizational structure, laws and regulations, employee and employer rights and responsibilities, and components of developing a business plan. At the end of this course students will develop their own cover letter, resume, and follow up letter. We will also cover job applications and interviewing.

ABOD 2900

1-6 Credits

Auto Body Internship

This course provides an educational internship focused on collision repair, painting, and/or related work within the auto body industry. Concepts and skills learned in previous course work will be applied in a work setting. Specific tasks to be completed by the student will be identified in an individual training program. Prerequisite: ABOD 1126

AUTOMATION & ROBOTIC SYSTEMS TECHNOLOGY (ENGT)

ENGT 1103

2 Credits

Mechanical Systems

This course covers mechanical systems including gears, pulleys, cams, bearings, clutches, conveyors, and other items associated with manufactured products and manufacturing machines.

ENGT 1110

2 Credits

Fundamentals of Low Pressure Boilers

This course introduces students to boiler functions, operations, safety, controls, hot water systems, steam systems, and the identification of boiler fittings. The course is designed to help prepare students for a special engineer's license exam.

ENGT 1203

3 Credits

Control Systems I

This course covers machine control systems, their operation, and application. Topics covered include PLC control, PC control, MMI's, I/O systems, transducers, and system trouble shooting.

ENGT 1205 **3 Credits**
Electro Mechanical Devices I
 This course covers electro-mechanical devices. Topics include: safety, basic electricity, electrical print reading, control wiring, and components such as sensors, solenoids, electrical actuators, timers, counters, indicators, motors and controllers, and transducers.

ENGT 1211 **3 Credits**
Industrial Electricity
 This course covers topics in electricity and electronics that are used on industrial machines. The topics include: solid state devices, digital theory, electrical machinery, and AC/DC devices.

ENGT 1221 **2 Credits**
Process Controls I
 This course covers the fundamentals of process controls for the following variables: pressure, temperature, flow, level, and analytical. Within each of these areas, the properties, control and instrumentation of a system is covered.

ENGT 1230 **3 Credits**
Fundamentals of Machine Vision
 This course provides students with practical hands-on experience as a companion to learning the fundamentals of machine vision. The course includes machine vision simulation as well as applications with industrial automated vision systems. Topics covered include system components, imaging acquisition and processing, machine image software, and measurement and testing applications.

ENGT 1240 **3 Credits**
Fundamentals of Robotics
 This course allows students to program, setup and operate robots and robotic equipment. The use of a simulator program as well as actual robots helps the student to learn concepts quickly. Integration of robots with machine tools, conveyors and other applications will also be explored.

ENGT 1301 **2 Credits**
Fluid Power
 This course covers fundamental principles of hydraulic and pneumatic systems, their operation, and design.

ENGT 1505 **2 Credits**
Predictive Maintenance
 This course covers various methods used in predictive maintenance. This includes vibration analysis, thermography, oil analysis, ultrasonic detection and measurement, along with other methods. Preventive maintenance aspects will also be included.

ENGT 1701 **2 Credits**
Industrial Networking
 This course focuses various types of industrial networks including serial-based systems like RS-232, RS-422, RS-485, USB, 12C and TCP-based systems, and use various configuration and troubleshooting utilities for optimum network performance.

ENGT 2105 **3 Credits**
Motion Controls I
 This course introduces students to motion control software and hardware with simulated, analog, and digital control systems. Students will learn how to setup and configure systems and gain an understanding of setup parameters and limitations, applications of motion control systems in industry, and troubleshooting methodology. Prerequisites: ENGT 1203, ENGT 1221

ENGT 2203 **3 Credits**
Control Systems II
 This course covers machine control systems, their operation, and application. This course builds on the knowledge learned in ENGT 1203 - Control Systems I. Students use this knowledge to program, run and troubleshoot machine problems. Topics covered include PC components, PC control, PLC control, MMI's, I/O systems, transducers, and system trouble shooting.

ENGT 2900 **1-5 Credits**
Internship
 This course is designed to provide the student with a purposeful occupational experience in the automation engineering technology 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.

ENGT 2950 **1-6 Credits**
Special Projects/Topics
 This course provides the opportunity for students to pursue topics and/or projects concentrating on concepts of current interest to Automation and Robotic Systems studies. The course will include research and project work in a mentored setting. The topics studied, and the projects chosen by the instructor and the students, will develop concepts that integrate and further develop skills and concepts essential to the Automation and Robotic Systems program.

AUTOMOTIVE SERVICE TECHNOLOGY (AUTO)

AUTO 1002 **2 Credits**
Automotive Trades Skills
 In this course students will learn basic skills necessary to be successful in a career in either Auto Body or Auto Mechanics. These skills will include safety, automotive tools and usage, electrical skills, and repair order completion.

AUTO 1104 **4 Credits**
Vehicle Maintenance
 The emphasis of this course is to develop skills in preventative maintenance and vehicle service procedures. Along with oil changes, lubrication and minor service, students will be taught to recognize various potential failures which might lead to unsafe conditions and costly repairs.

AUTO 1114 **4 Credits**
Engine Repair and Diagnosis
 This course covers engine theory, parts identification, disassembly, wear measurements, wear locations, and rebuilding of cylinder block, crankshaft, and cylinder heads. Students will gain experience using specialized tools while performing numerous engine repairs. This course will also include diagnosis of mechanical engine problems.

AUTO 1134 **4 Credits**
Drivetrain and Axles
 A basic overview of standard automotive and light truck clutches including design, adjustment, overhaul, diagnosis and repair. Also includes drive shaft phasing, alignment and balance as well as drive axle and CV joint service.

AUTO 1142 **2 Credits**
Suspension 1
 This course teaches suspension systems using leaf springs, coil springs, McPherson struts and torsion bars, along with the various procedures required to check and adjust wheel alignment angles such as caster, camber and toe.

Course Descriptions

AUTO 1152

2 Credits

Brakes 1

This course includes basic principles of brakes, hydraulic system basics, disc and drum brakes, parking brakes and power assist units. Emphasis will be placed on operation, diagnosis and repair of various types of braking systems.

AUTO 1162

2 Credits

Electrical Systems 1

This course teaches basic fundamentals of electricity and electronics, sources of electricity, circuits, magnetism, resistance, coils, capacitance, instruments, diodes and solid-state devices. Safety, construction, operation, charging, servicing, and testing of lead acid batteries will also be covered. Students will also study the general application of automotive computers used in the industry today.

AUTO 1182

2 Credits

Engine Performance 1

The theory and diagnosis of ignition systems will be covered. An introduction to scan tools, computer sensors and actuators, and OBD II will also be presented.

AUTO 1202

2 Credits

Safety and Service Information

In this course students will learn automotive shop safety procedures, how to correctly complete customer work orders and repair orders. Students will also learn how to correctly care for customer vehicles during the repair process. Use of service information systems such as Shopkey, Alldata, etc. will also be covered.

AUTO 1234

4 Credits

Manual Transmission

This course covers both front wheel drive and rear wheel drive vehicles. Identification, diagnosis and overhaul of 3-, 4-, 5-speed transmissions/transaxles/transfer cases will be covered. Gear ratios, designs, lubricants, shifters, and removal will also be addressed.

AUTO 1364

4 Credits

Electrical Systems 2

This course covers the construction, operation, and testing of starting and charging systems. Diagnosis and troubleshooting of other basic vehicle electrical systems will also be performed.

AUTO 2105

5 Credits

Service and Shop Operations

In this course students will work on customer vehicles in a live shop environment. They will be involved in every aspect of shop operations from talking with the customer, to diagnosing vehicle problems and also the needed repairs. The students will be preparing documents for customers as well as the information needed for ordering parts and other documentation necessary in operating a repair shop.

AUTO 2124

4 Credits

Automatic Transmission

This course includes basic theory of torque converters, planetary gears, clutches, bands, hydraulics and power flow. Basic overhaul techniques and special tool and gauge usage are taught.

AUTO 2174

4 Credits

Air Conditioning

This course covers the principals of air conditioning, heating systems, and mechanical and electronic air handling systems. Practical shop experiences will include evacuation, recharging, performance testing, compressor service, parts replacement, and diagnosis, service and repair of air handling systems. Computerized air conditioning diagnostics will also be covered.

AUTO 2224

4 Credits

Transmission and Transaxle Diagnostics

In this class, students will make all necessary checks and adjustments of a transmission/transaxle. Students will also test transmission/transaxle control systems. Removal of a transmission/transaxle will also be completed.

AUTO 2342

2 Credits

Suspension 2

This is a continuation of Suspension 1. Various steering systems, suspension systems, and alignment angles will be discussed and repaired or adjusted. Checks and adjustments of steering gears and rack and pinion systems will be discussed.

AUTO 2352

2 Credits

Brakes 2

Diagnosis and repair of antilock brake systems, traction control, and newer braking systems will be presented. Actual diagnosis and repair of systems will be applied.

AUTO 2384

4 Credits

Engine Performance 2

This course will include fuel system theory and diagnosis. Fuel properties, fuel pumps, and fuel injection will be covered. OBD 2 diagnostics will also be included with some emphasis on General Motors vehicles. Scan tool diagnostics will be a large part of this course.

AUTO 2584

4 Credits

Engine Performance 3

This course covers the use of various test equipment with an emphasis on advanced diagnostic equipment and emission testing. Students develop skills in diagnosing, testing, and correcting problems related to engine performance. This course concentrates on computer controlled systems. Students have an opportunity to hone their skills on today's high-tech automobiles using the latest techniques and diagnostic equipment.

AUTO 2664

4 Credits

Electrical Systems 3

This course covers the operation, troubleshooting and repair of air bag/passive restraints, cruise control, power windows/seats, vehicle communications, and other advanced body electronic systems.

AUTO 2950

1-6 Credits

Special Projects/Topics

This course provides the opportunity to cover topics and/or projects of interest to Automotive Service industry. The topics studied and the projects chosen by the instructor and the students will develop concepts that integrate and further develop skills and concepts essential to the Automotive Service Technology program. Prerequisite: Instructor approval

BIOLOGY (BIOL)

BIOL 1000

Introduction to Biology

MnTC Goals 3A, 10

This course is an introduction to the concepts which provide the basis for modern biological science. Includes basic biochemistry, cell structure and function, and the six kingdoms of life. A general education course for the liberal arts major. Lecture - 3 hours/week. Lab - 2 hours/week.

4 Credits

BIOL 1040

Introduction to Human Genetics

MnTC Goal 3A

Students will observe principles and applications of genetics, genetic variation, family genomes, as well as medical illnesses. The course will look at the role that genes play in diseases, physical characteristics, and behavior. We will explore DNA sequencing, genetic testing, and emerging treatments for genetic disorders. This course is designed to encourage critical and ethical evaluation of genetic information.

4 Credits

BIOL 1080

Human Biology

MnTC Goal 3A

This course is an introduction to the structure and function of the human body. Topics will be covered utilizing a systems approach (i.e. nervous system, cardiovascular system, etc). The course begins with the topics of basic biochemistry, cell structure and function, and tissues of the human body. This course is designed as a general education course for the liberal arts major. Lecture - 3 hours/week. Lab - 2 hours/week.

4 Credits

BIOL 1410

Environmental Science

MnTC Goals 3A, 10

An examination of the scientific and technical problems of renewable and non-renewable natural resources. Stresses the problems and impact of energy, air, water, chemicals, solid waste, noise, radioactivity and population on the environment. The laboratory will emphasize observation, data collection, quantitative measurement and drawing conclusions. Lecture - 3 hours/week. Lab - 2 hours/week.

4 Credits

BIOL 1510

People, Sustainability, and the Environment

MnTC Goals 3A, 10

Discussion and evaluation of current environmental biology topics, including the wise use of renewable resources with an emphasis on human impacts and sustainable living. This course is designed to encourage critical evaluation of biological information, providing students with the knowledge to make sustainable decisions affecting their own lives and the well being of society. Lecture - 3 hours/week. Lab - 2 hours/week.

4 Credits

BIOL 2000

General Biology I

MnTC Goal 3A

This course is the first in a two-semester general biology course. This course will include biochemistry, genetics, cytology, evolution, and kingdom surveys of Archaeobacteria, Eubacteria, Protista, and Fungi. Lecture - 4 hours/week. Laboratory - 3 hours/week.

5 Credits

BIOL 2010

General Biology II

MnTC Goals 3A, 10

This course is the second in a two-semester general biology course. This course will include botany (plant anatomy and physiology, life cycles, and classification), zoology (animal anatomy and physiology, life cycles and classification), behavior and ecology. Lecture - 4 hours/week. Laboratory - 3 hours/week. Prerequisite: BIOL 2000 or consent of instructor

5 Credits

BIOL 2100

Human Anatomy

MnTC Goal 3A

This course is a comprehensive study of the structure of the human body from the cellular to organ system level, and includes the integumentary, digestive, muscular, skeletal, nervous, endocrine, cardiovascular, respiratory, urinary and reproductive systems. Labs include slides, models, computer/lab activities, and dissections.

4 Credits

BIOL 2110

Human Physiology

MnTC Goal 3A

This course is a comprehensive study of the function of the human body from the molecular to organ system level, and includes the integumentary, digestive, muscular, skeletal, nervous, endocrine, cardiovascular, respiratory, renal and reproductive systems. Labs consist of hands-on physiology lab exercises, as well as interactive computer-based simulations. Prerequisites: BIOL 2100, CHEM 1010 (or higher)

4 Credits

BIOL 2120

Human Anatomy and Physiology I

MnTC Goal 3A

A study of the structure and function of the following body systems: integumentary, skeletal, articular, muscular, nervous and endocrine. Labs supplement the lecture by using histology slides, skeletal materials and cat dissection. Prerequisites: Prefer high school biology and/or chemistry, a college chemistry, or consent of instructor.

4 Credits

BIOL 2130

Human Anatomy and Physiology II

MnTC Goal 3A

A continuation of Biology 0212 which covers the remaining systems: circulatory, respiratory, digestive, urinary and reproductive. Body systems once analyzed individually are integrated into the body as a whole. Dissections are continued as well as the usual physiology-related labs. Several computer interface labs are included. Prerequisite: BIOL 2120

4 Credits

BIOL 2150

Microbiology

MnTC Goal 3A

This course will focus on the immune system, including specific and nonspecific host defenses, microbial offense, and a survey of the microbial world (bacteriology, parasitology, mycology and virology). Further topics will include practical application of immunological principles and diagnostics. Prerequisites: BIOL 1000 or higher, CHEM 1010

4 Credits

BIOL 2300

Genetics

MnTC Goal 3A

Topics include both classical and molecular genetic approaches of studying organisms. This course also covers medical genetics, cloning population genetics, genetic manipulation of organisms, mutations, and selection. Prerequisite: BIOL 2000

4 Credits

Course Descriptions

BIOL 2880

2 Credits

Applied Structural Genomics

This course is an undergraduate research opportunity applying the basic concepts of biotechnology. Students will utilize the equipment and techniques of a typical biotechnology laboratory including pipetting skills, agarose electrophoresis, aseptic technique, SDS-PAGE, polymerase chain reaction (PCR), transformation, and cloning. The research project will begin with identification of genes of interest, securing oligos, and amplifying the genes through PCR. Cloning processes will create entry plasmids to be introduced into destination vectors leading to protein expression. The expressed proteins will then be isolated and examined by SDS-PAGE. Prerequisites: BIOL 200 and CHEM 1510 or consent of instructor

BUSINESS (BUS)

BUS 1010

3 Credits

Business and the American Economy

A course designed to acquaint the student with the American economy by surveying the organization, internal structure, operational functions, and regulations governing the several types of business organizations. Overview of management, marketing, economics, entrepreneurship, information systems, law, finance, international affairs and other topics as they relate to business.

BUS 1200

3 Credits

Business Communications

Emphasis is placed on the study of writing business reports and proposals. Also included is instruction in composing different types of effective business memorandums and letters including bad news messages, good news messages, persuasive messages, collection letters, goodwill messages, resumes, and application letters. Other business communications skills developed are oral presentations and job-hunting skills.

BUS 1400

3 Credits

Business Computers

This is an introductory course in computers, including basic hardware and software, information systems, computers in the business world, security issues, and their societal impact. An introduction to computer applications is also studied using word processing, spreadsheets, data base programs, and the Internet. Dual numbered with CSCI 1400.

BUS 1600

3 Credits

Business Leadership

This course is designed to provide knowledge about the skills an individual needs to be a successful leader of others and themselves in the business world. The student will be introduced to theories proposed by business leaders in areas such as: strategies to promote positive business relationships, self-management, change management and professionalism.

BUS 1950

3 Credits

Introduction to Economics

This course is designed for the non-business, non-economics major who wishes to further his/her knowledge of the economic problems facing the United States and world. A non-mathematical survey of macro- and microeconomic topics including demand, supply, modern and historic economic systems, pollution, government regulation, taxes, unemployment and inflation. The impact of economic policy and market choice from social, personal, and ethical perspectives will be examined. This is a terminal course and should not be taken after ECON 2060 and/or ECON 2070.

BUS 2000

3 Credits

Principles of Management

This course will provide the student with an overview of basic management principles and practices. Topics include operation management, decision-making, ethics and corporate responsibility, planning resource management, labor relations, workgroups, leadership, organizational design and development, and strategic management.

BUS 2010

3 Credits

Legal Environment of Business

A study of the legal environment in which a business must operate including topics such as the legal system, constitutional considerations in business dealings, federal regulatory agencies, torts, contracts, agency, antitrust laws, labor and international issues, as well as ethical and environmental issues affecting a business.

BUS 2070

4 Credits

Statistics and Its Applications

This course is designed to give students a conceptual introduction to the field of statistics and its variety of applications. The class is applications-oriented and is presented with the needs of the nonmathematician in mind. Topics covered may include: data collection, summarizing and describing data, estimation and hypotheses testing, statistical inference, goodness of fit, analysis of variance, regression analysis, time series, forecasting, and quality control. Prerequisite: MATH 0980 or two years of high school algebra with a score on the math placement exam to qualify for college level math

BUS 2080

3 Credits

Intro to International Business/Economics

A first course in international business aimed at providing a clear introduction to the essentials of international business and the environmental forces that impact on it. Relationships between business, education and government organizations as well as the financial, physical, sociocultural, political and economic forces of the international environment will be studied.

BUS 2100

3 Credits

Principles of Marketing

This course presents a basic understanding of marketing concepts including product, pricing, distribution, and promotion. Focus is on the universal concerns of managers who are responsible for marketing decisions.

BUS 2240

4 Credits

Financial Accounting

Basic principles of recording business transactions and the preparation and interpretation of financial statements. Development of the accounting cycle. For both service and merchandising organizations.

BUS 2250

4 Credits

Managerial Accounting

This course includes the study of cash flow, cost accounting systems, manufacturing operations, budgeting, standard costs and capital budgets. Prerequisite: BUS 2240 or ACCT 1816 or consent of instructor

BUS 2950

1-4 Credits

Special Topics in Business

Current topics as they relate to the modern business environment. This course provides an opportunity for a student to study topics delivered either on an individual or course basis. Can be repeated up to 4 credits.

CAREER ORIENTATION (CAOR)

CAOR 1010

1 Credit

Career Exploration and Planning

This course introduces students to a process of career exploration and decision making that begins with an individual assessment of interests, strengths, skills and values and culminates in the establishment of a specific educational/career search plan. Students utilize occupational information, resources, and trends to explore their work and education options.

CAREER SUCCESS SKILLS (CMAE)

CMAE 1514

2 Credits

Safety Awareness

This course aligns with the Manufacturing Skill Standards Council's (MSSC) assessment and certification system for Safety. The curriculum is based upon federally endorsed national standards for production workers including Occupational Safety Health Administration (OSHA) standards relating to Personal Protective Equipment (PPE), lockout/tagout (LOTO), Hazardous Material (HAZMAT), tool safety, and confined spaces.

CMAE 1518

2 Credits

Manufacturing Processes and Production

This course aligns with the Manufacturing Skill Standards Council's (MSSC) assessment and certification system for Manufacturing Processes. The curriculum is based upon federally endorsed national standards for production workers emphasizing lean manufacturing principles, basic supply chain management, communication skills, and customer service.

CMAE 1522

2 Credits

Quality Practices

This course aligns with the Manufacturing Skill Standards Council's (MSSC) assessment and certification system for Quality Practices. The curriculum is based upon federally endorsed national standards for production workers. Emphasis is placed on Continuous Improvement concepts and how they relate to a quality management system. Students will be introduced to a quality management system and its components. These include corrective actions, preventative actions, control of documents, control of quality records, internal auditing of processes, and control of non-conforming product.

CMAE 1526

2 Credits

Maintenance Awareness

This course aligns with the Manufacturing Skill Standards Council's (MSSC) assessment and certification system for Maintenance Awareness. The curriculum is based upon federally endorsed national standards for production workers. The course introduces the concepts of predictive and Total Productive Maintenance (TPM) with the fundamental principles of lubrication, electricity, hydraulics, pneumatics, and power transmission systems.

CMAE 1528

1 Credit

Career Success Skills

This is an introductory career success skills course. The primary goal of this course is to help individuals acquire a solid foundation in the basic skills for a successful career. This course will identify the skills important to businesses and help the students assess his/her level of skill. The course will provide suggestions for how the student can improve his/her level of skill.

CHEMISTRY (CHEM)

CHEM 1000

4 Credits

Introduction to Chemistry

MnTC Goals 3B, 10

This introductory course emphasizes elementary principles and applications in chemistry and is intended for non-science majors and as preparation for the Principles of Chemistry sequence. Topics include matter, measurement, atomic theory, bonding theory, nomenclature, stoichiometry and the mole concept, reactions, liquids and solids, solutions, and acid-base chemistry.

CHEM 1010

4 Credits

Survey of Chemistry

MnTC Goals 3B, 10

An introductory one-semester course designed for liberal arts and pre-health science students. Topics covered are atomic structure, energy, phase changes, solutions, acid-base concepts and use of pH, gas laws, nuclear chemistry, carbon compound families and typical reactions and macromolecules of biological importance, such as carbohydrates, lipids and proteins and their metabolism. Prerequisite: MATH 0970 or MATH 0990 or math placement exam score for MATH 0980 or above

CHEM 1020

4 Credits

General Chemistry I

MnTC Goals 3B, 10

The first semester of a two-semester sequential course designed for liberal arts and pre-health science students. The course covers the fundamental principles and concepts of chemistry including structure, bonding, acid-base chemistry, oxidation-reduction, elementary thermodynamics and kinetics and equilibrium chemistry. Prerequisites: High school chemistry, algebra and/or CHEM 1000

CHEM 1030

4 Credits

General Chemistry II

MnTC Goal 3B

The second semester introduces the families and reactions of carbon (organic) chemistry. The major emphasis is on nomenclature and structure of organic compounds, the macromolecular structures of biochemistry including carbohydrates, lipids and proteins. Prerequisite: CHEM 1020 or consent of instructor

CHEM 1510

5 Credits

Principles of Chemistry I

MnTC Goal 3B, 10

The first course in a two-semester sequence is a study of the basic concepts of chemistry. Topics include: measurement, nomenclature, reactions, stoichiometry, atomic theory, periodicity, thermodynamics, chemical bonding, molecular structure, gases, and intermolecular forces. The laboratory emphasizes basic laboratory skills including observation, organization, and data analysis. Prerequisite: MATH 0980 with a grade of C or better or placement into MATH 1120 or higher. CHEM 1000 or high school chemistry is recommended.

CHEM 1520

5 Credits

Principles of Chemistry II

MnTC Goal 3B

CHEM 1520 is a continuation of the first semester basic chemistry emphasizing chemical kinetics, equilibrium, precipitation reactions, acids and bases, entropy and free energy, complex ions, oxidation-reduction, electrochemistry, nuclear, and organic chemistry. Laboratory experiments emphasize observation, organization of data, analysis of data, and communication of results. Prerequisite: CHEM 1510

Course Descriptions

CHEM 2610

5 Credits

Introduction to Organic Chemistry I

An initial course in organic chemistry with the emphasis on the classification, structure, isomerism, and the fundamental reactions and preparations of the families of carbon compounds. Topics include covalent bonding, alkanes, stereochemistry, free radical mechanisms, alkyl halides and spectroscopy. Laboratory introduces students to basic laboratory procedures of organic chemistry relative to properties, preparations, analysis and synthesis. Prerequisite: CHEM 1520

CHEM 2620

5 Credits

Introduction to Organic Chemistry II

A continuation of Chemistry 261. The topics include alcohols, alkenes, alkynes, aromatics, aldehydes, ketones and organic acids and their derivatives. Macromolecules including carbohydrates, lipids, proteins and polymers. The laboratory work will include examples of these reactions and the chemical and instrumental identification of organic compounds. Prerequisite: CHEM 2610

COLLEGE SUCCESS (COLL)

COLL 1000

3 Credits

College Success: Get On Course

This course will help students create greater success in college and in life. Students will learn many proven strategies for creating greater academic, professional, and personal success. Students will explore these strategies and will learn to express themselves more effectively. This class will help students enhance emotional intelligence and improve the creative and critical thinking skills necessary for success both in college and beyond.

COMMUNICATION STUDIES (CMST)

CMST 1210

3 Credits

Introduction to Communication

MnTC Goal 1

A course designed to develop an understanding and to improve (by performance) the total communication process of the student. Attention is placed on interpersonal communication, group communication and public communication.

CMST 2200

3 Credits

Public Speaking

MnTC Goal 1

Study of communication principles to develop skills in finding, adapting and delivering material which will inform or persuade an audience; practice in a variety of speech situations.

CMST 2230

3 Credits

Listening

MnTC Goal 7

A general overview of listening and its function in effective communication. The focus is on understanding the components of the listening process and using effective listening behaviors in a variety of settings.

CMST 2250

3 Credits

Small Group Communication

MnTC Goal 1

The study and development of communication skills for working in small group situations, including group dynamics and leadership functions as they relate to effective collaborative problem solving.

CMST 2260

3 Credits

Interpersonal Communications

MnTC Goals 1, 7

The study of communication in one-to-one relationships through learning concepts and practicing skills. Attention is given to identifying communication problems in relationships and to learning strategies to manage those relationships more effectively.

CMST 2270

3 Credits

Intercultural Communication

MnTC Goal 7

An introduction to communication among people from different cultures. This course explores the relationship between culture and communication, gaining an intellectual framework to understand cultural patterns, verbal and nonverbal codes in intercultural interpersonal relationships. Attention is given to obstacles to and skills for competent intercultural communication.

CMST 2280

3 Credits

Argument and Reasoning

MnTC Goals 6, 9

An introduction to the field of argumentation, addressing the basic structure, types, and critical analysis of argument. Students will learn types of reasoning, argument structure, common fallacies, and refutation, and will apply this knowledge in the construction of arguments.

CMST 2400

3 Credits

Gender and Communication

MnTC Goal 7

The study of how gender affects communication. The student will learn the physiological and cultural basis for gender, and how those gender differences impact social perception and communication styles.

CMST 2500

3 Credits

Computer-Mediated Communication

MnTC Goal 8

The analysis of the relational and social dynamics of technology-based communication, and the identification of strategies for using mediated communication more effectively.

CMST 2600

3 Credits

Organizational Communication

MnTC Goal 9

The study of communication in businesses and organizations. Students will learn about approaches to organizational communication, and understand how culture, organizational climate, technology, leadership style, teams, and networks impact the vitality of a business or organization, and the subsequent impact on society.

CMST 2900**1 Credit****Communication Studies Certificate Capstone**

The Communication Studies Certificate Capstone is the culminating course for students pursuing the Communication Studies Certificate. Students will identify core skills they have attained in Public Speaking, Interpersonal Communication, and Small Group Communications, and write a significant research paper synthesizing their knowledge in the discipline of Communications Studies.

Prerequisites:

- Completion (at a grade of C or higher) of the core Communication Studies courses: CMST 2200 (Public Speaking), CMST 2250 (Small Group Communication), and CMST 2260 Interpersonal Communication).
- Evidence of a significant writing example (substantial paper) completed in one of the prerequisite courses.
- Consent of capstone advisor.

COMPUTER AIDED DRAFTING AND DESIGN (DRFT)

DRFT 1001**1 Credit****Principles of Engineering/Engineering Technology**

This course helps students understand the field of engineering/ engineering technology. Exploring various technology systems and manufacturing processes help students learn how engineers and technicians use math, science and technology in an engineering problem solving process to benefit people. The course also includes concerns about social and political consequences of technological change.

DRFT 1002**2 Credits****Fundamentals of Parametric Design**

This course provides instruction on producing solid models and drawings from those solid models using the parametric software, Solidworks®. This course will cover the fundamentals and basic concepts of parametric modeling as well as creating part and assembly drawings from those models.

DRFT 1500**2 Credits****Drafting Basics**

This course addresses the fundamentals of engineering drawing including lettering, line work, scaling, applied geometry, orthographic projections, auxiliary views, section views, and threaded and miscellaneous fasteners. The lab portion emphasizes neatness, correctness, and skills using scales and drawing instruments or CAD. Co-requisite: DRFT 1502

DRFT 1502**2-3 Credits****CAD I**

Basic AutoCAD 2-dimensional commands will be covered in this course. This course addresses the fundamentals of computer-aided drawing utilizing AutoCAD software, the Windows platform, and system networking. The student will learn to utilize drawing and editing commands to create, store, and output single and multiview drawings.

DRFT 1503**2 Credits****Interpreting Engineering Drawings**

A basic course exposing students to drawings used in manufacturing industries enabling them to interpret the intent and meaning of a variety of industrial prints. Visualization, reading dimensions, and interpreting special symbology are stressed.

DRFT 1504**2 Credits****Technical Sketching**

This course familiarizes students with objectives and methods of technical sketching. Emphasis for this course will be placed on how to sketch an object by looking at a blueprint, the object itself, or a photograph and maintain its proportions. Drafters, engineers, and illustrators must communicate their ideas to coworkers, bosses, or a board of directors. A sketch must communicate its technical and geometric data exactly. The skills and construction techniques will be developed into creating pictorial drawings and illustration. Proper lettering techniques will also be discussed.

DRFT 1506**2 Credits****Manufacturing Processes**

This course familiarizes students with shop safety and basic fabrication processes. The student is introduced to and operates equipment such as a press brake, shear, plasma table, wire feed, tig and stick welders. This course also requires the student to manufacture a project from raw material to a final weldment, utilizing the shop equipment available.

DRFT 1508**2 Credits****Applied Math**

This course introduces the fundamentals of applied geometry and trigonometry as applied to drafting and manufacturing math problems. Topics covered include angles, circles, functions, right and oblique triangles, and compound angles. Exercises will be presented using the textbook exercises and a series of worksheets, with an emphasis on actual shop calculations. This course is dual-listed with MACT 1508.

DRFT 1510**3 Credits****CAD II**

This course is a continuation of the study of AutoCAD software to include additional input modes and applications, pictorial drawing, and an introduction to three-dimensional AutoCAD drawing. Prerequisite: DRFT 1502

DRFT 1511**3 Credits****Intersections and Development**

This course provides a study of descriptive geometry as it pertains to sheet metal pattern developments. Various methods are utilized to construct flat patterns and scale models of 3-dimensional objects. Sheet metal bend allowances are also studied as they pertain to different gauges of metal. Prerequisite: DRFT 1500

DRFT 1512**3 Credits****Dimensioning Principles**

This course introduces the student to dimensioning and tolerancing. Size, location, and tolerances of features are covered as well as the principles of making parts. Prerequisite: DRFT 1500

DRFT 2500**4 Credits****Design Drafting I**

A study of manufacturing materials, forming processes including castings, forgings, weldments, design concepts, pipe drafting, and structural drafting. Detail and assembly drawings are developed. Prerequisite: DRFT 1500

DRFT 2501**2-3 Credits****Geometric Dimensioning and Tolerancing**

This course covers the use of geometric tolerancing per the ANSI/ ASME Y14.5 Standard on Dimensioning and Tolerancing. Included are rules, datums, geometric controls, and calculations of positional tolerances. (2-credit option for Machine Tool Tech students)

Course Descriptions

DRFT 2502

2 Credits

Fixture Design and Tooling

This course covers basic principles and procedures for the design of jigs and fixtures used for machining applications, related automated loading equipment, and associated tooling.

DRFT 2503

3 Credits

Parametric Design I

This course introduces the student to the basics of Solidworks, a parametric, feature-based solid modeling system. Prerequisite: DRFT 1500 or instructor approval

DRFT 2504

2 Credits

Electronic and Electrical Drawings

This course covers logic diagrams, schematic diagrams, printed circuit board drawings, and the symbology used to create them.

DRFT 2505

2 Credits

Computer Aided Manufacturing

This course introduces the student to drafting opportunities in the manufacturing engineering field. The student will create manufacturing programs from the stand-alone station and also utilize computer-aided manufacturing software. Students will program fabrication equipment such as a CNC (Computer Numerical Control) mill, plasma cutting table, and a robotic welder. Prerequisite: DRFT 1510

DRFT 2506

2 Credits

Sheet Metal Design

This course introduces the basics of sheet metal design. Students will learn to apply bend equations to sheet metal and plate steel. In addition, they will calculate flat patterns for 90- and non-90-degree bends, cones, transitions and tubing necessary to develop formed components to specific dimensions. Class assignments will entail bending calculations, develop flat-pattern layouts, bending notches, orthographic drawings, and create a single part from a weldment. Prerequisite: DRFT 1502, DRFT 2503, DRFT 2513, and DRFT 2515 or instructor approval

DRFT 2510

4 Credits

Design Drafting II

A study of power transmissions is covered in this course. Topics to be covered include belts, chains, gears, couplings, bearings, seals, cams, linkages, and actuators. Prerequisite: DRFT 1500

DRFT 2512

2 Credits

Technical References

A study of resource materials used in the engineering/drafting field to include: Internet resourcing, Machinery Handbook, ASME Y14.5M-1994 Standard on Dimensioning and Tolerancing, the Thomas Register, Sweets Catalogs, Ryerson Steel Catalog, and other standards and vendor catalogs.

DRFT 2513

3 Credits

Parametric Design II

This course introduces the student to the basics of the Pro Engineer software, a parametric, feature-based solid modeling system.

DRFT 2515

3 Credits

Parametric Design III

This course introduces the student to the basics of the Inventor software, a parametric, feature-based solid modeling system.

DRFT 2516

3 Credits

Advanced Parametrics

This course will give the students advanced training using Solidworks, a parametric design software. The course will cover advanced modeling topics such as creating multibody parts, advanced revolving tools, flex bending, using sweep and guide curves, creating lofts and boundaries, surfaces, simulation and top down assembly techniques. Prerequisite: DRFT 2503

DRFT 2900

1-6 Credits

Internship

This course provides students with a work-based learning experience within the field of drafting or design for credit. The worksite and the internship agreement must be approved by the instructor. The work must be applicable to the field of mechanical drafting and design utilizing a computer-aided drafting and design software.

DRFT 2950

1-6 Credits

Special Projects/Topics

This course provides the opportunity for students to pursue topics and/or projects concentrating on concepts of current interest to Computer Aided Drafting and Design studies. The course will include research and project work in a mentored setting. The topics studied, and the projects chosen by the instructor and the students, will develop concepts that integrate and further develop skills and concepts essential to the Computer Aided Drafting and Design program.

COMPUTER SCIENCE (CSCI)

CSCI 1400

3 Credits

Business Computers

This is an introductory course in computers, including basic hardware and software, information systems, computers in the business world, security issues, and their societal impact. An introduction to computer applications is also studied using word processing, spreadsheets, data base programs, and the Internet. Dual numbered with BUS 1400.

COMPUTER SYSTEMS TECHNOLOGY (CST)

CST 1021

3 Credits

HTML and CSS

This course is designed to give students the basic skills they need to design web pages. Students will develop the skills they need to write, understand, and use HTML and CSS code in the creation of web pages. Course content addresses topics such as the use of HTML coding, HTML versions, browser differences, and CSS for page layout and design. In addition, students will navigate the World Wide Web and understand how web pages are delivered.

CST 1022

3 Credits

HTML II and Javascript

This course covers advanced topics in the use of the Hyper Text Markup Language (HTML). Students will develop the skills they need to create forms for data entry, embed multimedia, use cascading style sheets for printing, and the use of JavaScript to enhance page function. Javascript code will be written by hand and then debugged and managed using Macromedia Dreamweaver. Dreamweaver. Prerequisite: CST 1021 or MMDT 1021 and CST 1794

CST 1072 **3 Credits**
Windows Workstation Support
The purpose of this course is to address the implementation and desktop support needs of customers who are planning to deploy and support current Microsoft Windows desktop operating system in a variety of stand-alone and network operating system environments. It provides in-depth, hands-on training for Information Technology (IT) professionals responsible for the planning, implementation, management, and support of Microsoft Windows.

CST 1146 **3 Credits**
PHP Programming
In this course students will design and write programs using PHP, a widely used programming language used to make dynamic web sites and web applications. Students will write PHP programs to solve real world problems. PHP code will be written by hand and then debugged and managed using Adobe Dreamweaver. Students will be running their projects on an actual web server with PHP and MySQL installed. Prerequisites: CST 1794 and CST or MMDT 1021

CST 1261 **3 Credits**
Applications Support
In this class students will learn how to install, configure, and support a basic user's computer software, and Microsoft Office application software used in businesses and by other employers of computer technicians.

CST 1510 **3 Credits**
System Diagnostics
This course is designed for the student entering the computer systems field who desires an understanding of basic computer hardware architecture, and troubleshooting techniques. Students will learn about the system hardware and practical troubleshooting skills. This is done through textbook study and hands-on lab work.

CST 1511 **3 Credits**
Storage Media Diagnostics
In this course students will learn about computer system hardware and practical troubleshooting skills. Topics covered in this course include the following: hard drive storage, optical storage, solid state storage, other static storage devices, video output, video cards, audio output, audio cards, and power supplies.

CST 1600 **3 Credits**
Relational Database Design
This course is designed for a student entering the computer systems field who desires an understanding of relational databases. Students will apply relational database concepts and principles using MySQL. Topics covered in this course are: relational database design, tables, records, fields, data normalization, data types, primary and foreign keys, relationships, and queries. This course is based on the use of textbook study and hands-on structured labs assigned by the Instructor.

CST 1602 **3 Credits**
Advanced Databases
This course is designed to introduce students to SQL and PL/SQL functions for database management systems. Students will learn how to create and maintain database objects, and how to store, retrieve, and manipulate data. Students will also create PL/SQL blocks of application code that can be shared in multiple forms, reports, and data management applications. Prerequisite: CST 1600 or prior knowledge of relational databases

CST 1611 **3 Credits**
Web Server Administration
This course is designed for a student entering the network administration field who desires an understanding of web server administration. Students will learn the skills they need to install and administer a web server in an Internet or Intranet environment using Apache web server. Topics covered include: installation, configuration, maintenance, security, and uses of the web server.

CST 1620 **4 Credits**
C# Programming
This course covers both design and programming using the programming language Microsoft C#, a graphical derivative of C, which is a widely used object-oriented language. The student will develop many programs using C#. Prerequisite: CST 1794 or equivalent.

CST 1640 **4 Credits**
Introduction to Java
The course covers both design and programming using Java, which is an object-oriented language. The student will develop programs using Java. Prerequisite: CST 1794 or equivalent.

CST 1700 **3 Credits**
CCNA R & S Introduction to Networks
Cisco Certified Network Associate Routing and Switching, Introduction to Networks is a theory course in networking technologies and implementation. Topics include the OSI reference model, network protocols, transmission media, topologies, access methods, and networking hardware and software.

CST 1701 **3 Credits**
CCNA R & S Routing and Switching Essentials
Cisco Certified Network Associate Routing and Switching, Routing and Switching Essentials, is the second of four semester courses designed to provide students experience in current and emerging networking technology. Instruction includes safety, networking, network terminology and protocols, network standards, LANs, WANs, OSI models, Ethernet, Token Ring, Fiber Distributed Data Interface, TCP/IP Addressing Protocol, dynamic routing, routing, and the network administrator's role and function. Particular emphasis is given to the use of decision making and problem solving techniques in applying science, mathematics, communication, and social studies concepts to solve networking problems. Instruction is provided in the proper care, maintenance, and use of networking software, tools, and equipment and all local, state and federal safety, building, and environmental codes and regulations. Prerequisite: CST 1700.

CST 1794 **3 Credits**
Introduction to Programming
This course is designed to introduce the student to the principles and techniques involved in programming. In the process of teaching programming principles, the student will be taught structured programming approaches. Students will be introduced to computer related math, number systems, and logic to provide foundations for later programming principles. Students will be taught the fundamentals of I/O programming, looping, functions, and will be introduced to data structure related concepts. Students will be exposed to the processing of disk files. Upon completion of this course the student should be prepared to write basic code and should have the foundations for further learning as it relates to programming.

CST 1803 **3 Credits**
Help Desk Technologies
This course focuses on key information and skills for user support professionals, including troubleshooting and problem solving, successful communication with users, documentation, determining a client's specific needs, and training end users. For those considering entering the field, alternate career paths for

Course Descriptions

user-support workers are covered. With balanced coverage of both people skills and technical skills, this course is an excellent resource for those in or preparing for the technical-support field.

CST 1861 3 Credits

Command Line and Registry

This course covers the use of command line commands, Windows shell scripts, and the Windows Registry. Computer technicians and network administrators are given the skills they need to use command line commands, write shell scripts to enhance their work, and manage the registry.

CST 2146 3 Credits

Data Driven Web

This course is designed to give students the advanced skills they need to design a data driven web site. Topics covered in this course are: dynamically created web pages using data obtained from a database, the use of PHP as a server-side language to create the pages, and the use of MySQL as the database to store and obtain the data. Students will construct a business web site or application. Students will be running their projects on an actual web server with PHP and MySQL installed. This course is based on the use of textbook study and hands-on structured labs assigned by the Instructor. Prerequisites: CST 1146 or MMDT 1146

CST 2274 3 Credits

Windows Server Install and Configure

This course provides students with the knowledge and skills to manage accounts and resources in a Microsoft Windows Server environment. The course is intended for systems administrator and systems engineer candidates who are responsible for managing accounts and resources. These tasks include managing user, computer, and group accounts; management access to network resources; managing printers; managing an organizational unit in a network based on Active Directory services.

CST 2276 3 Credits

Windows Server Advanced Services

The objective of this course is to teach students the knowledge and skills needed to install, configure, and administer Cloud-based Application services on the Windows Server platform. This course is intended for IT professionals who will administer private, public, and hybrid cloud based application services on the Windows server platform.

CST 2284 3 Credits

Network Security

In this course, students learn general security concepts including authentication methods, cryptography basics, and how to recognize how to safeguard against common network attacks. Students will learn to create secure communications for remote access, email, the Internet, directory and file transfer, and wireless communications. In addition, students will develop an appreciation for and plan for the implementation of physical security and disaster recovery. Prerequisite: CST 1072

CST 2504 2 Credits

A+ Certification Prep

This course prepares students to troubleshoot and repair microcomputer systems and their peripherals. This goal is achieved through a three-part effort which includes: 1) solid theory presentation, 2) hands-on operation and exploration in lab experiments, and 3) troubleshooting applications in lab procedures. It also prepares the student to pass the Comp TIA A+ certification exam. Prerequisites: CST 1861, CST 1511, CST 1072, CST 1025, CST1510 and CST 1261

CST 2505 3 Credits

Introduction to Linux

This course covers administration basics of the UNIX operating system. Network administrators are given the skills they need to install, configure, optimize, and use the UNIX operating system.

CST 2608 3 Credits

Linux Server Administration

This course provides the core foundation for supporting the Linux operating system in a server environment. The goal of this course is to provide support professionals with the skills necessary to install, configure, customize, optimize, network, integrate, and troubleshoot a Linux server.

CST 2646 3 Credits

Software Project Management

An introduction to project management techniques focusing on the software development process. A study of different project management methodologies including Prototyping, the Water-Fall Model, Unified Software Development Process, Agile Development, and other modern project management techniques yielding a capstone project.

CST 2702 2 Credits

CCNA R & S Scaling Networks

Cisco Certified Network Associate Routing and Switching, Scaling Networks, is the third in the series of four courses required to prepare the student for the Cisco CCNA certification exam. Topics covered in this course include VLSM, RIP v2, VPN's, LAN Technology, LAN Switching, VLAN, LAN Design, IGRP and LAN troubleshooting. Prerequisite: CST 1700, CST 1701

CST 2703 2 Credits

CCNA R & S Connecting Networks

Cisco Certified Network Associate Routing and Switching, Connecting Networks, introduces WAN converged applications and quality of service (QoS). It focuses on WAN technologies including PPP, Frame Relay, and broadband links. WAN security concepts are discussed in detail, including types of threats, how to analyze network vulnerabilities, general methods for mitigating common security threats and types of security appliances and applications. The students will learn the principles of traffic control and access control lists (ACLs) and describes how to implement IP addressing services for an Enterprise Network, including how to configure NAT and DHCP. IPv6 addressing concepts are also discussed. Students will learn how to use Cisco Router and Security Device Manager (SDM) to secure a router and implement IP addressing services. Finally, students learn how to detect, troubleshoot and correct common Enterprise Network implementation issues. Prerequisite: CST 1700, CST 1701, and CST 2702

CST 2800 3 Credits

Network Intrusion

This course will cover basic cloud services used in the Information Technology support of business infrastructure. It will give students exposure to many typical cloud services, applications and technologies business uses. Students will learn how to convert existing stand-alone business IT models to a web based hosted application or hybrid application. Theory on basing a cloud-based model on the business models currently in place will be introduced.

CST 2823**3 Credits****Network Intrusion**

This course examines ethical hacking and information systems security auditing. Students will focus on the current security threats, advanced attack vectors, and practical real time demonstration of the latest hacking techniques, methodologies, tools, tricks, and security measures. The course will explore pentesting (Penetration Testing), hacking and securing systems. The lab intensive environment provides student's in-depth knowledge and practical experience with the current security systems. Foundational concepts include how perimeter defenses work and scanning and attacking networks. Students will learn how intruders escalate privileges and what steps can be taken to secure information technology system. Content topics include: intrusion detection, policy creation, social engineering, Distributed Denial-of-Service (DDoS) attacks, buffer overflows, and virus creation. Prerequisite: CST 2284

CST 2824**3 Credits****Advanced Network Defense**

This course examines theoretical understanding of network security principles as well as the tools and configurations available. The course will emphasize the practical application of skills needed to design, implement, and support network security. Students will develop critical thinking and complex problem solving skills using simulation-based scenarios that promote the exploration of networking security concepts, allowing students to experiment with network behavior and ask "What if" questions. Students will be equipped with the knowledge and skills needed to prepare for entry-level security specialist careers. The course will cover modern network security threats, securing network devices, authentication, authorization and accounting, firewall technologies, intrusion prevention, cryptography, implementing virtual private networks, managing a secure network, and implementing the cisco adaptive security appliance. Prerequisite: CST 2284

CST 2826**3 Credits****Security Capstone**

This course allows students to develop their professional competency in cyber-security by working on a semester-long project. Students will research the SysAdmin, Audit, Networking and Security (SANS) Institute 20 critical security controls. Using the SANS model, students will be required to design, deploy, manage, identify and fix security risks in a virtual network of their design. Prerequisite: CST 2284

CST 2840**3 Credits****Wireless LAN Networking**

This course 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: CST 1700

CST 2881**1-10 Credits****CST Internship**

This course is a cooperative work study program between Ridgewater Computer Systems Technology Department and a company dealing with the field of computers which allows the student an employment-like work experience.

CST 2895**1 Credit****Customer Service**

Help desk and customer service skills are presented in this course. Participants will develop skills needed to meet the requirement of customer satisfaction in a helpdesk setting.

CST 2950**1-6 Credits****Special Projects/Topics**

This course provides an opportunity for a student to study topics delivered either on an individual or course basis. A student must show a special need to be able to enroll in this course.

COSMETOLOGY (COS)

COS 1403**1 Credit****Cosmetology Fundamentals Hair Track**

This course covers esthetic procedures used in a salon and day spa environment. Students will perform acne and aging treatment procedures. Topics covered include advanced massage techniques, aroma therapy, photography make up, along with the application and removal of eyelash extensions.

COS 1404**1 Credit****Cosmetology Fundamentals Spa Track**

This course introduces foundational content essential to hair, skin, and nail services. The course is designed to meet the theoretical and application needs in preparing for licensure and employment in the broad field of cosmetology services.

COS 1405**4 Credits****Pre-Clinic Haircutting**

In this course, students will learn the basic elements and principles of hair cutting design to establish a foundation for seeing, thinking, creating and adapting as a designer. In addition, students will demonstrate the theoretical and practical skills required to provide appropriate hair sculpture services to meet the needs of a variety of clients.

COS 1407**3 Credits****Pre-Clinic Nail Care**

This course covers salon fundamentals for nail technology. Students will study manicuring, pedicuring, and applying artificial nails using a variety of professional products. This course also covers related massage techniques, product knowledge and client consultations.

COS 1409**3 Credits****Pre-Clinic Chemical Control**

This course offers instruction on creating curl in straight hair and removing from existing curl patterns. Students will study the scientific principles of hair properties and the artistic principles of texture, form and design. In addition, the use of relaxers and reformation curls, product chemistry and safety, and client home care maintenance steps will be covered.

COS 1411**3 Credits****Pre-Clinic Skin Care**

This course covers salon fundamentals for estheticians. Students will study skin types, skin conditions and skin treatment procedures. Additional topics covered include massage techniques, product knowledge, make-up applications and client consultations.

COS 1413**3 Credits****Pre-Clinic Hair Color**

This course covers products and techniques used for temporary, semi-permanent, demi-permanent, and permanent hair coloring agents. In addition, this course covers techniques for lightening hair, color correcting and design techniques, and the depositing and lifting abilities of color products.

Course Descriptions

COS 1415

2 Credits

Pre-Clinic Hair Design

This course covers the artistic and scientific principles of hair design theory, concept, and application as they apply to design systems and design classics. Students will learn how to mold, scale and set hair with rollers, pincurls, fingerwaves, air forming, and curling iron techniques. In addition, comb-out techniques including backcombing and backbrushing, as well as pressing and curling the hair will be covered.

COS 1417

2 Credits

Pre-Clinic Hair Care

This course focuses on the study of trichology and covers fundamental of hair theory, phases of hair growth, common hair and scalp disorders, and common causes and treatments of hair loss. Additional topics covered include hair care, draping, shampooing, scalp massage, thermal styling techniques and client consultations.

COS 1418

2 Credits

Design Forum

This course covers the latest fashion trends and uses the Pivot Point's Design Forum Collections to integrate salon techniques and training. Also included in this course are topics focused on developing "people skills" which integrate salon communication, client consultations, and retailing.

COS 1419

1 Credit

Salon Success I

This course focuses on essential life skills that create the personal foundation for career success using skills for character development, interpersonal relationships, professional communication, career planning and self-management.

COS 1435

2 Credits

Minnesota Laws and Rules

Upon successful completion of this course, students will have the necessary qualifications for Cosmetology licensure. Along with a review of essential theories, Minnesota state rules and regulations will be covered to prepare students for national written examinations and salon ownership.

COS 1451

1-3 Credits

Extra Clinic or Out-of-State Hours

This clinical course provides students additional hours to meet state license requirements. Students apply skills learned in Pre-Clinic courses for various styles using the latest equipment, technology and products necessary to be successful in the salon and day spa industries. Students will be required to complete the state required quotas needed for licensure and prepare for practical certification testing exams.

COS 1460

4 Credits

Salon Fundamentals for Nail Technology

This course includes information needed to complete the licensure requirements through the Minnesota Department of Commerce. It will prepare students for the written Minnesota Manicurist Exam issued by the state.

COS 1461

3 Credits

Salon Fundamentals for Estheticians I

This course covers esthetic procedures used in a salon and day spa environment. Students will perform acne and aging treatment procedures. Topics covered include advanced massage techniques, aroma therapy, photography make up, along with the application and removal of eyelash extensions.

COS 1462

2 Credits

Salon Fundamentals for Estheticians II

This course builds on content introduced in Salon Fundamentals for Estheticians I. Topics covered are essential for success in the field of Esthetics including practical salon requirements, professional behavior, and theory related to safety, sanitation and healthy skin. In addition, the course content addresses the Minnesota and national licensure exams.

COS 1500

1-3 Credits

Clinical

This course provides hands-on clinical experiences in the Ridgewater College Salon and Day Spa. Students apply skills learned in Pre-Clinic courses using the equipment, technology, products and services necessary to be successful in the salon and spa industries. Students will be required to complete quotas established by the Minnesota Board of Cosmetology for licensure, and will prepare for practical certification testing exams. This is a variable credit course (1-3 credits). This course may be repeated in increments of 1-3 credits to meet the credit requirements of the Cosmetology diploma or degree.

COS 1502

1-3 Credits

Clinical

This course provides hands-on clinical experiences in the Ridgewater College Salon and Day Spa. Students apply skills learned in Pre-Clinic courses using the equipment, technology, products and services necessary to be successful in the salon and spa industries. Students will be required to complete quotas established by the Minnesota Board of Cosmetology for licensure, and will prepare for practical certification testing exams. This is a variable credit course (1-3 credits). This course may be repeated in increments of 1-3 credits to meet the 6-credit requirements of the Nail Technology certificate.

COS 1519

1 Credit

Salon Success

This course focuses on the foundational skills essential to obtaining employment and succeeding in the cosmetology industry.

COS 2460

3 Credits

Advanced Esthetics I

This course consists of treatments performed by estheticians in a medical environment or full-service salon and day spa. Students will complete an in-depth study of light, medium and deep chemical peels, acne treatment procedures, microdermabrasion, and derma planning. It will also include camouflage make-up, body treatment procedures and advanced massage techniques including manual lymphatic drainage to promote healing. Students must have successfully completed the Cosmetology or Estheology program/license requirements. Instructor permission required.

COS 2462

3 Credits

Advanced Esthetics II

This course consists of the study of esthetic treatments performed by medical professionals under the supervision of a dermatologist or plastic surgeon. Students will study procedures including laser treatments, botox injections, and soft tissue fillers. In addition, students will develop a basic understanding of paramedical cosmetic procedures and learn associated medical terminology and records requirements. Students must have successfully completed the Cosmetology or Estheology program/license requirements. Instructor permission required.

COS 2464**3 Credits****Spa and Alternative Therapies**

This course covers advanced spa services, body treatments, and alternative massage related therapies. Students will be able to identify, explain, and perform spa treatments and services suited for individual client needs. Students must have successfully completed the Cosmetology or Estheology program/license requirements. Instructor permission required.

COS 2920**4 Credits****Advanced Esthetics Experiential Capstone**

This course includes information needed to complete the license requirements through the Minnesota Board of Cosmetologist Examiners. It will prepare students for the written Minnesota Advanced Practice Esthetics Exam issued by the state which is needed for licensure. Students must have successfully completed the Cosmetology or Estheology program/license requirements. Instructor permission is required.

EARLY CHILDHOOD EDUCATION (ECED)

ECED 1015**3 Credits****Creative Activities and Environment**

The student will gain knowledge and skills related to providing age-appropriate learning experiences and learning environments for young children. The student will examine the role of the teacher in providing learning experiences to meet each child's needs, capabilities, and interest, and ways to implement the principles of developmentally appropriate practices. The student will practice language and literacy, social, emotional, and sensory learning, art and creativity, and math and science learning experiences.

ECED 1105**3 Credits****Behavior Guidance**

This course examines positive strategies to guide children's behavior in the early childhood setting. Students will examine strategies to establish supportive relationships with children and families to help guide them in order to enhance learning and development. It includes positive guidance techniques for individual and group situations.

ECED 1110**3 Credits****Foundations of Language and Literacy**

This course is an introduction to children's language and literacy development from birth to age eight. Students will learn skills in creating developmentally appropriate learning experiences that support both oral language and emerging literacy skills among children at all developmental levels. Students will be shown a wide range of instructional practices, approaches, methods and curriculum materials to support children's language and literacy development.

ECED 1115**3 Credits****Introduction Special Education**

This course covers the social, physical, emotional and intellectual development of individuals with differing abilities. Special topics covered include strategies for learners who have been identified as having special needs and looking for indications that a child may need to be referred for additional assessments. Students will integrate strategies that support inclusive programs for children, apply legal and ethical requirements including, but not limited to American Disabilities Act and Individuals with Disabilities Education Act.

ECED 1120**3 Credits****Diverse Children and Family Relations**

This course introduces students to core concepts and approaches to multicultural education including issues related to student, family, and community diversity based on culture, language, race, class, gender, and sexual identity. Emphasis is placed on demonstrating the multicultural competence required of all successful teachers working with today's diverse children. Awareness of the history, language, and cultural background of Minnesota-based American Indian tribes and various immigrant groups of Minnesota will also be addressed.

ECED 1125**3 Credits****Child Growth and Development**

This course examines the major developmental milestones, both typical and atypical, for children from conception through grade eight in the areas of physical, social, emotional, language, cognitive, and creative development. The students will study developmental theory, investigative/observational research methods and developmentally appropriate practices. The course emphasizes variations across cultures and correlation between developmental and environmental factors.

ECED 1150**2 Credits****Children's Mental Health**

Young children's healthy social and emotional development are essential in their success in school and beyond. This course will introduce students to strategies to promote healthy social and emotional development, assist them in identifying children who are at risk for mental health disorders, and introduce strategies to provide individualized attention to young children who are exhibiting symptoms of mental health disturbances.

ECED 1155**1 Credit****Crisis Intervention**

This course will train students how to safely manage disruptive and assaultive behavior. Students will learn methods for defusing explosive behavior and how to handle most any type of threatening or challenging situation with minimal anxiety and increased confidence. In addition, students will create positive behavior interventions and supports for their future classroom.

ECED 1410**2 Credits****Introduction to Autism Spectrum Disorder**

This course will study ways early childhood educators can look for characteristics of autism in those children yet to be identified and help children with autism reach their highest potential. Setting up a positive social climate, helping children learn life skills, managing behavior, helping them communicate and encouraging children with autism to play will also be discussed.

ECED 1420**1 Credit****Bullying: An Educator's Role**

This course will study methods to create a caring early childhood environment and appropriate ways to respond to negative social behaviors such as teasing and bullying. Ways to help teachers create a climate of mutual respect where all children feel safe, comfortable, and welcome will also be discussed.

ECED 1430**1 Credit****Assistive Technology in Early Childhood Special Education**

This course will study ways to help children with disabilities use assistive technology to completely participate in inclusive early childhood environments. A wide variety of assistive technology supports will be discussed that assist students in the areas of communication, language, play, mobility, and literacy.

ECED 1440

1 Credit

Creating an Inclusive Early Childhood Environment

This course will study ways to adapt regular curriculum activities to meet the needs of all children in the early childhood environment. Practical ways to adjust centers, activities, and classroom routines so that all children can learn and be kept involved in developmentally appropriate activities will also be discussed.

ECED 1610

3 Credits

Health, Wellness and Nutrition in Early Childhood

This course will guide students in understanding teacher strategies and skills needed to establish and maintain a physically and psychologically safe and healthy learning environment for young children birth through age eight. Topics include preventing illness and accidents, handling emergencies, providing health, safety, and nutritional experiences within the daily routine, meeting children's basic nutritional needs, child abuse and neglect, childhood stress, trauma and current health, safety, and nutrition related issues.

ECED 1620

3 Credits

Introduction to Early Childhood Education

This course provides an overview of the early childhood profession. It includes philosophies, missions, and regulations. Students will explore the roles, responsibilities and job requirements of professionals in a variety of career settings. There will also be discussion on the societal changes that affect child care, development, and family involvement.

ECED 1630

3 Credits

Observation and Assessment in Early Childhood

This course focuses on the appropriate use of observation and assessment strategies to document children's development, growth, play, and learning, to plan and individualize curriculum and teaching practices. The students will study recording strategies, rating systems, multiple assessment tools, and portfolios.

ECED 2900

3 Credits

Internship

In this course students demonstrate early childhood teaching competencies under guided supervision to make connections between theory and practice. Students apply comprehensive understanding of children and families, developmentally appropriate, child-centered, play-oriented approaches to teaching and learning, and knowledge of curriculum content areas. They will design, implement, and evaluate experiences that promote positive development and learning for all young children.

ECED 2910

2 Credits

Early Childhood Special Education Internship

This course is a cooperative work study program between the Ridgewater College Early Childhood Education Department and an educational facility, preschool, or child care facility. The experiential learning in this course will increase the student's understanding of special education and programs serving young children with special needs and their families.

ECED 2950

1-6 Credits

Special Projects/Topics

This course provides the opportunity for students to pursue projects and/or topics concentrating on concepts of current interest to Early Childhood Education studies. The course will include research and project work in a mentored setting. The topics studied and the projects chosen by the instructor and the students will develop concepts that integrate and further develop skills and concepts essential to the Early Childhood Education program.

EARTH SCIENCE (ESCI)

ESCI 1100

4 Credits

Physical Geology

MnTC Goals 3B, 10

This course focuses on the physical aspects of the earth. We examine basic scientific methods, concepts and theories related to the earth as a dynamic planet and its origin and place in the cosmos. Minerals, rocks, and economic resources are introduced and interpreted. Methods of representing and interpreting the earth (maps and graphs) are evaluated and used. Surface processes that shape our planet and internal processes that drive the dynamic systems of the planet are studied (local/regional examples are used). The impact of human activities on the planet are examined. A semester long earthquake and volcano monitoring project is assigned as well as several online and written activities. This course is delivered in an online format and requires computer and internet access. Lecture - 3 hours. Lab - 2 hours. Prerequisite: Basic math recommended.

ESCI 1120

4 Credits

Introduction to Meteorology

MnTC Goals 3B, 10

This course focuses on weather and climate. Students look at basic scientific methods, concepts, and theories dealing with weather systems and daily weather conditions. Global air circulation, air masses, forecasting techniques, severe weather, and climate patterns are examined. Human impact on the atmosphere, weather and climate are closely studied and possible solutions are discussed. A semester lab project related to observational meteorology is assigned as well as several internet and written activities. This course is delivered in an online format and requires computer and internet access. Lecture - 3 hours. Laboratory - 2 hours.

ESCI 1130

4 Credits

Introduction to Astronomy

MnTC Goal 3B

This course focuses on the observable universe. Students look at basic scientific methods, theories and concepts related to space/time, motion, and forces that govern the universe. The origin, evolution, and fate of planets, stars, galaxies, and the universe are examined and interpreted. Observational techniques for astronomic studies are introduced and used. Events and techniques related to space exploration and searches for life elsewhere are covered. Several voluntary night observations are offered during the semester. A semester project using observational skills is assigned along with several internet and written activities. This course is delivered in an online format and requires computer and internet access. Lecture - 3 hours; laboratory - 2 hours. Prerequisite: Basic math recommended

ESCI 1140

4 Credits

Natural Disasters

MnTC Goals 3B, 10

This course provides an in-depth investigation of natural phenomena that have potentially disastrous effects on humans and the environment. Topics are investigated from both a historical and a current perspective, and include earthquakes, volcanism, landslides, severe weather, shoreline problems, flooding, astronomical activities, and future global issues. Exploration methods will include discussions on cause and effect, discussions of prediction and prevention, reading and writing activities, media studies, Internet research, and data collection and analysis. Laboratory activities include using inquiry-based modules and online resources along with several realtime data collecting projects. This course is delivered in an online format and requires computer and internet access. Lecture - 3 hours. Laboratory - 2 hours. Prerequisite: Basic math recommended

ECONOMICS (ECON)

ECON 1900

3 Credits

Personal Finance

MnTC Goal 9

This course is a study of major financial decisions facing the typical American household. It introduces students to credit, banking, personal budgeting and planning, risk management, investing, and retirement and estate planning. Civic responsibility, personal ethics, and the socio-political consequences of personal actions are emphasized as are individual roles in creating the society we want to live in. This is a general education course open to all students.

ECON 1950

3 Credits

Introduction to Economics

MnTC Goals 5, 9

This course is designed for the non-business, non-economics major who wishes to further his/her knowledge of the economic problems facing the United States and world. A non-mathematical survey of macro- and microeconomic topics including demand, supply, modern and historic economic systems, pollution, government regulation, taxes, unemployment, and inflation. The impact of economic policy and market choice from social, personal, and ethical perspectives will be examined. This is a terminal course and should not be taken after ECON 2060 and/or ECON 2070.

ECON 2060

3 Credits

Principles of Microeconomics

MnTC Goals 5, 10

This course provides traditional coverage microeconomic principles. The course examines the nature of choice and trade from the perspectives of individuals, firms, markets, and government. Microeconomic theory is applied to current events and through the perspective of evolving international markets. Prerequisite: MATH 0980 or 2 years of high school algebra recommended

ECON 2070

3 Credits

Principles of Macroeconomics

MnTC Goals 5, 8

This course provides traditional coverage of macroeconomic principles. The course examines society-wide choices for economic growth, methods of macroeconomic measurement, and applies monetary and fiscal tools for influencing macroeconomic policy variables. Macroeconomic theory is applied to current events from a global perspective. Prerequisite: MATH 0980 is recommended

ECON 2080

3 Credits

Intro to International Business/Economics

MnTC Goals 5, 8

A first course in international business aimed at providing a clear introduction to the essentials of international business and the environmental forces that impact on it. Relationships between business, education and government organizations as well as the financial, physical, sociocultural, political and economic forces of the international environment will be studied.

EDUCATION (EDUC)

EDUC 1100

2 Credits

Drug Education

This course is designed to provide students with a working knowledge about the use and misuse of tobacco, alcohol, drugs and narcotics while developing an understanding of their impact on society, student life, and learning. This course will explore prenatal and postnatal drug use and the effects of usage on development and learning. Students will identify the impact of drug use by children/teenagers. Students will examine the psychological, physical, social, medical, and legal aspects of drug use. Students will access community action programs, sources of referral and rehabilitation, as well as drug education programs in our school systems and communities. This course complies with the requirements of M. S.A. 122A.66.

EDUC 1115

3 Credits

Introduction to Special Education

This course covers the social, physical, emotional, and intellectual development of individuals with differing abilities. Special topics covered include strategies for learners who have been identified as having special needs and looking for indications that a child may need to be referred for additional assessments. Students will integrate strategies that support inclusive programs for children, apply legal and ethical requirements including, but not limited to American Disabilities Act and Individuals with Disabilities Education Act.

EDUC 1120

3 Credits

Diverse Children and Family Relations

This course introduces students to core concepts and approaches to multicultural education including issues related to student, family, and community diversity based on culture, language, race, class, gender, and sexual identity. Emphasis is placed on demonstrating the multicultural competence required of all successful teachers working with today's diverse children. Awareness of the history, language, and cultural background of Minnesota-based American Indian tribes and various immigrant groups of Minnesota will also be addressed.

EDUC 1125

3 Credits

Child Growth and Development

This course examines the major developmental milestones, both typical and atypical, for children from conception through grade eight in the areas of physical, social, emotional, language, cognitive, and creative development. The students will study developmental theory, investigative/observational research methods and developmentally appropriate practices. The course emphasizes variations across cultures and correlation between developmental and environmental factors.

EDUC 1135

2 Credits

Education Technology

This course is designed to provide students with the skills necessary to support and reinforce the instruction of K-6 students in the area of technology. Students will utilize technology to gather and develop classroom lesson plans. Students will examine assistive/augmentative technology and the technologies required of prospective and practicing teachers. Students will also learn to apply those skills and knowledge when assisting students.

EDUC 1200

4 Credits

Introduction to Education

This course provides an overview of the education profession and the U.S. educational system, including historical development, social foundations, and educational institutions along with an overview of the traditional elementary level education classroom. Students will explore strategies to support the development of their future students within the physical, social, emotional, and cognitive domains. In addition, students will complete a total of 40 field experience hours. Ten of those hours will be completed specifically in a special education classroom setting.

Course Descriptions

EDUC 2200

3 Credits

Educational Psychology

This course introduces students to developmental theories related to the learning process and how to apply these theories to increase student learning and development. It will provide students with an in-depth analysis of how people learn and a developmental foundation for improving environments for learning. This course will explore the differences in approaches to learning and performance, and provide a framework for teachers to plan, create and deliver effective lessons for individual learners. In addition, it will differentiate between teaching and learning and cover ways to assess each student's learning.

EDUC 2900

2-8 Credits

Cooperative Education - Education Internship

Students are placed with supervising teachers in elementary, secondary, and special education classrooms. Contact hours required range from 75 to 300 depending on the number of credits carried. In addition to the field placement, students meet in weekly seminar at the college and complete additional course requirements. Prerequisites: Completion of 30 semester credits, a 2.0 GPA and consent of instructor.

EDUCATIONAL ASSISTANT (EDA)

EDA 1005

1-2 Credits

Occupational/Service Learning

This course takes a hands-on approach to introducing the student to the human service profession related to the education paraprofessional career area. The student will complete meaningful service to the community linked to curriculum-based learning by shadowing, observing, and participating in events hosted by organizations, agencies, schools, or facilities of related interest. Students will also attend field trips and workshops. (This course may be taken in 1-credit increments.)

EDA 1010

2 Credits

Cultures in the Workplace

This course covers an anti-bias, multicultural approach to attitudes, knowledge, and skills necessary for working in a complex, diverse world. This course will also address the importance of communication and relationships within the workplace.

EDA 1015

1-3 Credits

Activity Ideas

The ability to create and apply activity ideas and resources is an essential skill in the human service profession. Students will create projects, a resource planning guide, plan excursions and highlight special events as they relate to people of all ages and backgrounds.

EDA 1020

2 Credits

Sign Language I

This course introduces students to basic fingerspelling and American Sign Language with focus on developing expressive and receptive sign communication skills.

EDA 1025

2 Credits

Sign Language II

This course builds upon and expands previously learned vocabulary, incorporating fingerspelling and American Sign Language. Prerequisite: EDA 1020

EDA 1030

2 Credits

Sign Language III

This course emphasizes the importance of continual use of American Sign Language and provides experience and study with fingerspelling. Prerequisite: EDA 1025

EDA 1035

2 Credits

Sign Language IV

This course accents the importance of continual use of American Sign Language. Experience and study with fingerspelling, facial expression and body movement reinforce the learning of this conceptual language. This is a participatory course which will be reflected by your grade. Prerequisite: EDA 1030

EDA 1065

2 Credits

Teaching Strategies

This course covers analyzing teaching techniques, identifying effective instructional elements, identifying task analysis, reasonable accommodations and curricular adaptations and analyzing specific teaching strategies. We also spend some time talking about learning styles.

EDA 1075

2 Credits

Human Relations at Work

This course covers the importance of communication and relationships within the workplace. Topics covered include communication styles, non-verbal communication, speaking styles, listening styles, and employer-employee relationships. A self-evaluation of your personal communication style will be completed.

EDA 1105

2 Credits

Behavior Intervention

This course explores behavior in classroom environments and an analysis of the ways to effectively deal with management problems while enhancing the student's self-esteem.

EDA 1110

3 Credits

Language Arts

This course covers concepts, methods, and techniques of assisting in language arts instruction in a preschool, elementary, or special needs classroom. Special topics covered are language development, readiness, lesson plans, comprehension, spelling, listening, and storytelling. Prerequisite: Placement in this course is determined by placement test.

EDA 1115

2 Credits

Special Education

This course covers the social, physical, emotional, and intellectual development of individuals with special needs. Included are specific strategies, skills, and technology for working with those individuals.

EDA 1125

3 Credits

Child Development I

This course presents a study of the growth and developmental characteristics of infants from conception through preschool years. Included is an emphasis on stages of development with focus on physical, intellectual, social, and emotional growth and multiculturalism.

EDA 1130

3 Credits

Child Development II

This course covers the developmental study of children from middle childhood through adolescence. Special topics covered are overall development, organizing, and sustaining positive functioning of children and their families in a multicultural learning environment.

EDA 1150**Children's Mental Health**

Young children's healthy social and emotional development are essential in their success in school and beyond. This course will introduce students to strategies to promote healthy social and emotional development, assist them in identifying children who are at risk for mental health disorders, and introduce strategies to provide individualized attention to young children who are exhibiting symptoms of mental health disturbances.

2 Credits**EDA 1180****Employment Readiness**

The work environment undergoes constant change. To be prepared to meet those changes, students, as prospective employees, must be able to evaluate their strengths, skills, and abilities. They need to be able to match those to a career, and they need to be able to investigate, locate, and obtain employment in that career area. This course is designed specifically for persons desiring work in the human service occupation area. Students will create resumes, cover letters, follow-up letters, and employment portfolios. They will have an opportunity to complete a practice interview in their career field.

1 Credit**EDA 1185****Math Activities**

This course covers activities and techniques used to support and facilitate the learning of mathematics by preschool and elementary students. Prerequisite: Placement in this course is determined by placement test.

3 Credits**EDA 2900****Internship I**

This course is a cooperative work study program between the Ridgewater College Educational Assistant department and an educational facility, child care, elder care, cleaning service, food service, residential facility or experience in the activity field. This opportunity allows the student an employment-like work experience. This internship is specifically for students completing the AAS degree.

1-4 Credits**EDA 2910****Internship II**

This course is a cooperative work-study program between the Ridgewater College Educational Assistant program and an educational facility, child care, elder care, residential facility or related experience in the field. This opportunity allows the student an employment-like work experience. (Course may be repeated for a total of up to 12 credits.)

5 Credits**EDA 2950****Special Topics/Projects**

This course allows the student to complete a course of study on a special topic or project with the approval of the instructor. Under direction of the instructor, the student will explore new concepts and complete assigned projects.

1-6 Credits

ELECTRICIAN (CNEL)

CNEL 1001**2 Credits**

This course will cover the safety aspects encountered in today's workplace sites with an emphasis on Electrical Safety. A practical study of safety topics and NFPA 70E safety practices will be covered.

CNEL 1313**1 Credit****Circuit Lab I**

In this course, students apply theories covered in Circuits 1 (CNEL 1411) with hands-on practical applications focused on fundamental electronic circuit topics including Ohm's law, power, series circuits, parallel circuits and combination circuits. Corequisite: CNEL 1411

CNEL 1314**1 Credit****Circuits Lab II**

In this course, students apply the theory covered in Circuits 2 (CNEL 1412) in a hands-on lab setting. Students will construct and evaluate the characteristics and behaviors of a variety of circuits. Corequisite: CNEL 1412

CNEL 1411**2 Credits****Circuits I**

In this course, students will study fundamental concepts of DC electricity including Ohm's law, Kirchhoff's law, resistors, series circuits, parallel circuits, and combination circuits. A hands-on practical application of theories will take place in a lab setting.

CNEL 1412**3 Credits****Circuits 2**

This course covers series and parallel inductive, capacitive, resistive - capacitive, resistive - inductive, and resistive - inductive - capacitive circuits, and associated power factor correction calculations. A hands-on practical application of theories will take place in a lab setting. Prerequisite: CNEL 1411

CNEL 1513**2 Credits****Semiconductors**

This introductory course covers basic concepts of current flow in semiconductor materials and provides an overview of the analysis and operation of solid state devices including p-n diodes, zener diodes, LEDs, and bipolar junction transistors.

CNEL 1621**2 Credits****Digital Logic**

This course introduces basic concepts of digital logic and provides an overview of numbering systems, logic gates, Boolean algebra, DeMorgan's theorem, Karnaugh mapping, comparators, multiplexing, de-multiplexing, and flip-flops. Prerequisites: CNEL 1314, CNEL 1412

CNEL 1809**2 Credits****Electrical Materials Lab**

In this course, students will learn to apply specific technical skills, workplace competencies, concepts and knowledge within the context of activities representative of the typical electrician's workplace. It is expected that all students will complete and demonstrate entry level proficiency with core competencies. In addition, students will complete optional learning activities based on their individual career interests.

Course Descriptions

CNEL 1810

5 Credits

Basic Wiring Lab I

This course introduces the student to electrical safety, basic wiring methods, basic wiring materials, and basic electrical circuits. Practical applications of the National Electrical Code are covered with emphasis on organization, content and terminology as applied to basic residential wiring.

CNEL 1811

5 Credits

Basic Wiring Lab 2

This course is a continuation of CNEL 1810. More advanced circuits are taught along with additional wiring methods so that the student will become proficient in layout and development of advanced electrical installations. Prerequisite: CNEL 1810

CNEL 1815

4 Credits

Applied Math for Electricians

This is a foundation course for beginning electrician students. The course reviews the fundamental concepts of mathematics as related to the electrical workplace emphasizing the essential elements of arithmetic, basic algebra, geometry and trigonometry.

CNEL 1820

3 Credits

National Electrical Code I

This course provides an overview of the National Electrical Code, and introduces the laws and rules for the State of Minnesota, definitions, articles pertaining to requirements for electrical installations, use and identification of grounded conductors, branch circuits, feeders, services, and over-current protection.

CNEL 1825

3 Credits

National Electrical Code II

This course is a continuation of the study of the National Electrical Code. This course emphasizes grounded conductors, branch circuits, feeders, services, over-current protection, grounding and bonding and wiring methods. Prerequisite: CNEL 1820

CNEL 1830

3 Credits

Print Reading, Planning and Estimating for Electricians

This course covers reading and interpreting blueprints in terms of wiring schematics and specifications, analysis of construction and wiring methods and materials, and fundamentals of estimating practices. Prerequisite: CNEL 1810

CNEL 1850

2 Credits

Lighting Equipment

This course will cover the principles of light and sight, luminaries, light distribution, and an introduction to lighting calculations. A variety of equipment including incandescent, fluorescent, and HID fixtures and lamps will be covered with an emphasis on code, trade application and installation.

CNEL 2413

2 Credits

Circuits 3 Lab

In this course using NIDA Training Modules, the student will conduct the required coursework in a lab format. Items covered will include the study of Diodes and Diode circuits, power supplies, digital logic functions, and combinational logic circuits. Prerequisite: CNEL 1412

CNEL 2730

3 Credits

Motor Controls

This course covers electrical tools, instruments, safety, electrical symbols, line diagrams, AC manual contactors and motor starters, time delay logic and control devices as related to motor controls. Lab activities give students the opportunity to hard wire, test and troubleshoot common control circuits. Prerequisite: ELEC 1412

CNEL 2731

3 Credits

Programmable Logic Controllers

This course provides an overview of PLC hardware and devices including input transducers and output devices. In addition, the course provides a practical hands-on approach to installing, programming, maintaining, and troubleshooting PLC controlled systems to control specific industrial processes. Prerequisite: CNEL 2730

CNEL 2805

2 Credits

Electric Motors Lab

This is an introductory course in the theory and operation of electric motors and the fundamentals of DC and single phase AC motors and motor controls. Troubleshooting, repair and maintenance of equipment is strongly emphasized. Prerequisite: ELEC 1412

CNEL 2830

3 Credits

National Electric Code III

This course is a continuation of National Electric Code II. This course covers the NEC that pertains to heating equipment, motors and controllers, refrigeration, and air conditioning equipment. This course also covers the requirements and installation of service entrance equipment and the installation methods and material used in industrial wiring. Prerequisite: CNEL 1825

CNEL 2835

3 Credits

National Electrical Code IV

This is a continuation of National Electrical Code III with emphasis on special conditions such as hazardous wiring, agriculture wiring, power limited wiring and communication systems. Prerequisite: CNEL 2830, minimum grade required: C

CNEL 2840

3 Credits

Commercial Wiring Lab

This lab course gives the student practical application and practice of wiring installations normally found in commercial buildings. Prerequisite: CNEL 1811

CNEL 2846

2 Credits

Wiring Methods

This course consists of a review and application of grounding methods, grounding safety, bonding of electrical services, transformers, and all non-current carrying metal parts used in the electrical industry. In addition, wiring methods related to switches, devices, equipment and advanced conduit bending techniques will be covered. Prerequisites: CNEL 1810, CNEL 1811

CNEL 2847

1 Credit

Basic Residential Wiring Lab

This hands-on lab course is designed to give the students the practical experience needed to install electrical materials, apparatus and circuits necessary for residential construction. All installations are applicable to the current edition of the National Electrical Code and local accepted wiring standards. Prerequisite: CNEL 1848

CNEL 2848 **1 Credit**
Advanced Residential Wiring Lab
 This hands-on lab course is designed to give students the practical application needed to wire special circuits and apparatus, and install services for both single and multi-family dwellings. All installations are applicable to the current edition of the National Electrical Code and local accepted wiring standards. Proper use of hand and power tools will be covered as well as safety practices and work ethics. Prerequisite: CNEL 2847

CNEL 2850 **3 Credits**
Specialized Systems
 This course is designed as an enhancement to CNEL 2840 - Commercial Wiring Lab, covering specialized systems found in many commercial applications. The primary emphasis of this course is to introduce installation of fire alarm systems, security systems and generators. Prerequisite: CNEL 1850

CNEL 2870 **3 Credits**
Heating and Air Conditioning Controls
 In this course, students learn electrical controls and their functions as they pertain to heating and air conditioning equipment in both residential and commercial settings. Prerequisite: CNEL1412

CNEL 2900 **3 Credits**
Transformers
 This course covers the design, layout and installation of distribution system transformers and specialty transformers. Prerequisite: CNEL 1825

CNEL 2901 **3 Credits**
Electrical Services
 This course covers the design, layout and installation of electrical services found in residential and commercial applications. Prerequisite: CNEL 1825

ELECTRONICS (ELEC)

ELEC 1814 **3 Credits**
Electronics 1
 This course covers the principles of basic electricity and electronic systems. Items covered include safety, components, symbols, electron theory, conductors, voltage, current, resistance, Ohm's law and circuits.

ELEC 1815 **3 Credits**
Electronics 2
 This course covers direct and alternating current electronic circuits. Specific areas covered include Ohm's law, power formulas, series circuits, parallel circuits, combination series-parallel circuits, voltage dividers, Kirchhoff's Current and Voltages laws, and power transfer. Prerequisite: ELEC 1814

ELEC 1816 **4 Credits**
Electronics 3
 This course covers basic alternating current electronics. Specific areas covered include alternating current, sine wave, oscilloscope, capacitance, RC circuits, inductance, RL circuits, RLC circuits, Pythagorean Theorem, and phaser algebra.

ELEC 2413 **2 Credits**
Power Supplies
 This course reviews rectifier networks. It includes the study of filtering networks, series and shunt regulators, three terminal regulators, and switch mode regulators with a special emphasis placed on troubleshooting strategies. Prerequisite: ELEC 1512

ELEC 2424 **3 Credits**
Troubleshooting Techniques
 This course includes the study of all the possible ways that electronic circuits can be tested. Signal tracing, signal injection, D-C voltage analysis, visual inspection, symptom analysis, and comparative analysis are some of the topics covered. This knowledge helps individuals to analyze problems and work with others in a team setting. As a result of this course, students become more systematic in their troubleshooting approach. Prerequisite: ELEC 1412

ELEC 2614 **2 Credits**
Electronic Product Development & Manufacturing
 This course investigates the process of taking an electronic product from the idea stage through the schematic, circuit layout, testing, documentation and final assembly stages. Students practice design and troubleshooting of circuits by using computer-based circuit design and simulation tools. Prerequisite: ELEC 1412

ELEC 2624 **2 Credits**
Microcontrollers
 This course is designed to teach students the operation and programming of the PIC micro controller chip. The student will wire the PIC chip on a Breadboard and program the chip to control various timers, inputs, and outputs. Prerequisite: ELEC 2513

ELEC 2731 **4 Credits**
Programmable Logic Controllers
 PLCs are used in almost every segment of industry where automation is required. This course provides a practical hands-on approach on installing, programming, maintaining and troubleshooting a PLC-controlled system. The student will work with LADDER LOGIC DIAGRAMS. Using various input transducers and output devices, the student will write programs to control specific industrial processes. Identifying PLC hardware components and their use and troubleshooting practices are strongly emphasized.

EMERGENCY MEDICAL SERVICES (EMS)

EMS 1033 **2 Credits**
Emergency Medical Responder
 This course is specifically designed for law enforcement and emergency responder personnel, or people interested in becoming law enforcement or rescue personnel. The course provides instruction on practical on-the-scene procedures including CPR, legal aspects relative to rendering emergency medical care, treatment of fractures, control of bleeding, patient examination, hazardous materials, blood borne pathogens, and environmental emergencies. This course follows the guidelines of the American Heart Association.

EMS 1120 **7 Credits**
Emergency Medical Technician
 This course covers the Emergency Medical Technician (EMT) requirements of the National Registry of EMT standard curriculum. The course is designed for law enforcement and emergency responder personnel, or people interested in becoming law enforcement or ambulance personnel. This course provides instruction on practical on-the-scene procedures including CPR, legal aspects relative to rendering emergency medical care, hazardous materials, blood borne pathogens, and environmental emergencies. Topics covered include airway, patient assessment (medical and trauma), medical/behavioral emergencies, OB/GYN, trauma, special populations, ambulance operations, and interventions (medications and semi-automatic defibrillation). Upon successful completion of the EMT basic course, the student will be eligible to take the National Registry of EMT's written examination. This course follows the guidelines of the American Heart Association.

ENGINEERING (ENGR)

ENGR 1010 2 Credits

Introduction to Engineering

This course is an introduction to problem solving methods, engineering curriculum and computer applications in engineering. In addition, students will explore educational and professional career opportunities.

ENGR 2030 3 Credits

Mechanics of Materials

This course includes the study and analysis of simple stress and strain, shear and bending movement, flexural and shearing stresses in beams, combines stresses, deflection of beams, statically indeterminate members, and columns. Prerequisite: ENGR 2350

ENGR 2350 3 Credits

Statics

Learn vector algebra. Apply the equations of equilibrium to the analysis of simple engineering structures and machines. Explore nature and influence of friction, elementary theory of statically determinate framed structures, and deformation of structures with axially loaded elements. Prerequisite: PHYS 1210

ENGR 2360 3 Credits

Dynamics

Introduction to vector calculus and kinematics. Apply principles and particle motion, conservation principles, dynamics of particle systems, plane rigid bodies, and technical applications. Prerequisite: PHYS 1210

ENGR 2500 4 Credits

Circuit Analysis I

Study methods of electrical engineering circuit analysis including Kirchhoff's Laws, Norton and Thevenin equivalents, DC circuits, transient RLC analysis, AC Circuits, phasors, and power. Prerequisite: PHYS 1220, Co-requisite: MATH 2330

ENGR 2510 3 Credits

Circuit Analysis II

This course examines linear electric circuits in steady-state and transient conditions, Laplace transformation, two-port networks, active and passive filters, filter design wave analysis, diodes and transistors. This course is intended for electrical and some mechanical engineering majors. The lab component provides hands-on learning of the lecture concepts and introduces proper use of the laboratory equipment. Prerequisite: ENGR 2500

ENGLISH (ENGL)

ENGL 0960 6 Credits

Gateway to Critical Reading and Writing

This course prepares students for the critical reading, thinking, and writing that will be required in college-level courses across the curriculum. ENGL 0960 will use college-level, academic texts for students to practice and hone their skills. The course design includes an integrated approach to reading and writing instruction and a scaffolded, recursive approach to learning. Students completing the course with a grade of C or better progress to ENGL 1210 while students completing with a grade of C- to D- progress to ENGL 0980. Prerequisite: Appropriate placement in compliance with Board Policy 3.3 "Assessment for Course Placement" and System Procedure 3.3.1 "Assessment for Course Placement."

ENGL 0970 6 Credits

English for Academic Purposes

This course begins to prepare English Language Learners (ELLs) for the specific language skills necessary to read and write effectively in academic settings including essential English grammar, sentence structures and vocabulary. Assignments will emphasize critical thinking and integrative skill development through speaking, reading, listening, and writing with emphasis on recognizing the common structures of reading texts and practical experience in producing essays. Students completing the course with a grade of C or better progress to ENGL 1210 while students completing the course with a grade of C- to D- progress to ENGL 0980. Prerequisite: Appropriate placement in compliance with Board Policy 3.3 "Assessment for Course Placement" and System Procedure 3.3.1 "Assessment for Course Placement."

ENGL 0980 3 Credits

Transitions to Academic Reading and Writing

This course supports students who are simultaneously enrolled in ENGL 1209. This course is structured through an integrated approach and emphasizes the reading and writing skills needed to achieve the ENGL 1209 outcomes. Instruction focuses on reading comprehension strategies to support the critical reading happening in the college-level classroom, while writing instruction focuses on a scaffolded approach, supporting the writing expectations of ENGL 1209. Students registered for 0980 must also be enrolled in a paired section of ENGL 1209. ENGL 1209 is equivalent to ENGL 1210. This is a P/NC course. Prerequisites: C- to D- in ENGL 0960 or 0970 or appropriate placement in compliance with Board Policy 3.3 "Assessment for Course Placement" and System Procedure 3.3.1 "Assessment for Course Placement." Corequisites: ENGL 1209 companion section

ENGL 1209 3 Credits

College Composition I: Critical Reading & Writing

MnTC Goal 1

A course designed to give students extended practice at developing and improving their writing abilities. Students work on their writing through a process approach and through an emphasis on critical reading. Assignments address specific audiences and range from personal writing to writing from sources. ENGL1209 is reserved for students who register for ENGL 0980. All students registered for ENGL 1209 must be concurrently enrolled in a paired section of ENGL 0980. ENGL 1209 is equivalent to ENGL 1210. Prerequisites: CAppropriate placement in compliance with Board Policy 3.3 "Assessment for Course Placement" and System Procedure 3.3.1 "Assessment for Course Placement." Corequisite: ENGL 0980

ENGL 1210 3 Credits

College Composition I: Critical Reading & Writing

MnTC Goal 1

A course designed to give students extended practice at developing and improving their writing abilities. Students work on their writing through a process approach and through an emphasis on critical reading. Assignments address specific audiences and range from personal writing to writing from sources. ENGL 1209 is equivalent to ENGL 1210, Composition I. If both ENGL 1209 and 1210 are completed, only the higher grade will be counted toward graduation and in the computation of the overall grade point average. Students are placed into English 1210 by way of C or better in ENGL 0960 or ENGL 0970, or successful completion of ENGL 0980, or appropriate placement in compliance with board policy. Prerequisites: C or better in ENGL 0960 or ENGL 0970; or successful completion of ENGL 0980; or appropriate placement in compliance with Board Policy 3.3 "Assessment for Course Placement" and System Procedure 3.3.1 "Assessment for Course Placement."

ENGL 1220 **3 Credits**
College Composition II - Writing with Sources
An introduction to the research paper stressing methods of research, critical thinking, organization, documentation, and research paper style. This course focuses on writing from outside sources with at least one major research paper required. Prerequisite: C- or better in ENGL 1209 or ENGL 1210

ENGL 1230 **3 Credits**
Scientific and Technical Writing
Study and application of the written, visual, and verbal communication skills involved in gathering, analyzing, and distributing scientific and technical information efficiently, accurately, and ethically for specific audiences. Assignments will include, but are not limited to, professional communications, proposals, and technical reports. Research will be required for applicable assignments. Prerequisite: C- or better in ENGL 1210

ENGL 1500 **3 Credits**
Introduction to Literary Studies
MnTC Goal 6, 7
Introduction to major forms of literature: fiction, prose, poetry, and drama. Discussions and writing require students to apply critical thinking skills. Students will be introduced to literary terms and literary criticism. English 121 recommended. This course is part of the Minnesota State Transfer Pathways program for English, Area 1 and MnTC Goals 6, 7.

ENGL 1600 **3 Credits**
The Short Story
MnTC Goals 6, 8
The study of the short story as a literary form and its development from its beginnings in oral traditions, to its conscious formulation in 19th Century American, to its continued metamorphosis in the 20th Century. Primary emphasis is placed on the reading, discussing, interpreting and writing about short stories. English 121 is recommended. This course is part of the Minnesota State Transfer Pathways program for English, Area 1 and MnTC Goals 6, 8.

ENGL 1700 **3 Credits**
World Literature
MnTC Goals 6, 8
The course emphasizes the study and consideration of the literary, cultural, and human significance of selected great works of the Western and non-Western literary traditions. An important goal of the class is to promote an understanding of the works in their cultural/historical contexts and of the enduring human values which unite the different literary traditions. This course is part of the Minnesota State Transfer Pathways program for English, Area 3 and MnTC, Goals 6, 8.

ENGL 1800 **3 Credits**
American Writers: Modern and Contemporary
MnTC Goals 6, 9
Students will read, discuss, and write about works from a variety of American authors who represent the diverse viewpoints and experiences of Americans during the modern and contemporary eras, 1914 to present. This course is part of the Minnesota State Transfer Pathways program for English, Area 2 and MnTC, Goals 6, 9.

ENGL 1900 **3 Credits**
British Writers: Modern and Post-Modern
MnTC Goals 6, 8
Students will read, discuss, and write about works written by a variety of British authors of the modern and post-modern areas, 1914 to present. This course is part of the Minnesota State Transfer Pathways program for English, Area 2 and MnTC, Goals 6, 8.

ENGL 2110 **3 Credits**
Multicultural Literature
MnTC Goals 6, 7
This course introduces students to literature from selected cultures in order to foster an understanding and awareness of cultures other than their own. The focus will be on critical reading and discussion, the elements of literature and analysis, interpretation and evaluation with special attention to specific cultural backgrounds. Readings for this course will vary. This course is part of the Minnesota State Transfer Pathways program for English, Area 3 and MnTC, Goals 6, 7.

ENGL 2200 **1-3 Credits**
Creative Writing
MnTC Goal 6
A study of imaginative writing in several genres. Students will share their work in non-evaluative critique sessions. For part of the course, students will be encouraged to pursue their particular creative interests in areas such as poetry, fiction, children's literature and non-fiction. Students may enroll up to 3 times for a total of no more than 6 credits. This course is part of the Minnesota State Transfer Pathways program for English, Area 4 and MnTC Goal 6.

ENGL 2320 **3 Credits**
Fantasy, Fable, and Science Fiction
MnTC Goals 6, 8
A study of highly imaginative literature which may include mythology, fantasy, fable and science fiction. Emphasis may differ from section to section. Short stories and novels will be used to discuss aspects of characterization, plot and metaphor, as well as common themes, such as "utopia" and "good versus evil." This course is part of the Minnesota State Transfer Pathways program for English, Area 3 and MnTC Goals 6, 8.

ENGL 2390 **3 Credits**
Gender and Sexuality in Literature
MnTC Goal 6, 7
This course will examine literary representations of women and men in literature focusing on gender issues, including lesbian and gay-male sexuality and the Latin American concept of machismo. Literature may include the works of North American, Latin American, and European authors. Students will contrast notions of sexual orientation and identity with gender-based conceptions of sexuality, and will consider the intersections of sexuality and social class, race, religion, AIDS, and leftist and rightist political ideologies. Authors studied will vary from year to year but may include Willa Cather, Alice Walker, Gloria Anzaldúa, Reinaldo Arenas, E.M. Forster, Tony Kushner, Cherrie Moraga, Octavio Paz, and Manuel Puig. This course is part of the Minnesota State Transfer Pathways program for English, Area 3 and MnTC, Goals 6, 7.

ENGL 2470 **3 Credits**
International Study of Literature
MnTC Goals 6, 8
Designed to provide credit for international study experiences conducted under the auspices of Ridgewater College faculty. Course requirements may vary but will include pre-departure, on-site, and post-trip readings and assignments related to literature. Prerequisite: ENGL 1210 or permission of instructor

ENGL 2950 **3 Credits**
Special Topics in Literature
MnTC Goal 6
Study of a prominent theme, time period, or genre. Descriptions of specific courses will be available from the instructor prior to registration. Examples include Literature of the American West, the Jazz Age, Environmental Literature, Film and Literature, Regional Writers, and Literature in Translation. Students may repeat this course if content changes. Prerequisite: ENGL 1210 recommended

ENVIRONMENTAL SCIENCE (ENVS)

ENVS 1410

4 Credits

Environmental Science

MnTC Goals 3A, 10

An examination of the scientific and technical problems of renewable and non-renewable natural resources. Stresses the problems and impact of energy, air, water, chemicals, solid waste, noise, radioactivity and population on the environment. The laboratory will emphasize observation, data collection, quantitative measurement and drawing conclusions.

ENVS 1510

4 Credits

People, Sustainability, and the Environment

MnTC Goal 3A, 10

Discussion and evaluation of current environmental biology topics, including the wise use of renewable resources with an emphasis on human impacts and sustainable living. This course is designed to encourage critical evaluation of biological information, providing students with the knowledge to make sustainable decisions affecting their own lives and the well being of society.

ENVS 2470

1-3 Credits

International Travel

Designed to provide credit for international study experiences conducted under the auspices of Ridgewater College faculty. Course requirements may vary but will include pre-departure, on-site, and post-trip readings and assignments.

GENERAL STUDIES - COMPUTER/INFORMATION TECHNOLOGY (GSCI)

GSCI 1002

2 Credits

Keyboarding/Word Processing

This course provides students with fundamental concepts and skills required to efficiently create, edit and format business documents. Emphasis will be placed on keyboarding and word processing techniques and skills.

GSCI 1301

1 Credit

Introduction to Computers

This course is designed for the person who has had limited or no previous computer experience. Personal computers will be used to introduce the learner to a wide variety of computer concepts and various applications. Microsoft Windows operating system will be utilized as the foundation platform for the Microsoft Office Suite. Students may have the opportunity to utilize word processing, spreadsheet, database, presentation software as well as the Internet.

GSCI 1302

2 Credits

Introduction to Computers

This course is designed for the person who has had limited or no previous computer experience. Personal computers will be used to introduce the learner to a wide variety of computer concepts and various applications. Microsoft Windows operating system will be utilized as the foundation platform for the Microsoft Office Suite. Students may have the opportunity to utilize word processing, spreadsheet, database, presentation software as well as the Internet.

GSCI 1312

1 Credit

Industry Computer Applications

This introductory computer class exposes the student to computers as they are used in the industrial setting. Students will use personal computers to become familiar with a variety of software which may be used in an industrial setting.

GSCI 1401

1 Credit

Computer Technology

This course focuses on various computer technologies used in a business setting. The Microsoft Windows operating system will be used as a foundation. Topics covered include basic file storage and management, hardware/software, using electronic resource materials, e-mail usage, and Internet procedures. The course may also include topics that are current and specific to computer technology in an office environment such as digital imaging, IP telephony, PDA technology, and others.

GENERAL STUDIES — COMMUNICATIONS (GSCM)

GSCM 1102

2 Credits

Applied Written Communications

This course covers introductory writing and professional communication skills. The course is designed for students preparing to enter an occupation and focuses on those aspects of communication that are known to be troublesome for both students and industrial employees. Emphasis is placed on the communicative use of language rather than simply its formal aspects. Most emphasis is placed on the psychological, social, and rhetorical principles underlying effective communication.

GSCM 1103

3 Credits

Applied Written Communications

In this course, students develop language skills necessary for effective writing and interpreting of technical field related information. Additional communication skills will be learned as they relate to the specific major the student is pursuing.

GSCM 1112

2 Credits

Applied Oral Communications

This course prepares students for day-to-day employer requests to speak to a group at a moment's notice. These applied oral exercises in this course are employment-based scenarios and are different from the normal speech course. Types of scenarios may include giving a tour, an entire organizational briefing, a departmental briefing, or briefing the boss and his staff on a project previously assigned.

GSCM 1123

3 Credits

Oral and Written Communication

Principles of leadership and oral and written communication skills for farm and agri-business managers and technicians. This course is part of the basic core of required courses for the Agri-business, Agronomy Tech, Farm Operation and Management, and Dairy Management programs.

GENERAL STUDIES — INTERPERSONAL SKILLS (GSIS)

GSIS 1403

3 Credits

Professional Developmental Skills

This course covers a selection of topics relating to personal and professional development in a business environment. Such topics may include group/team dynamics, stress management, wellness, sexual harassment, chemical dependency, time management, professional organizations, assertiveness, leadership, supervision, confidentiality, conflict management, and professionalism, among others.

GSIS 1502

2 Credits

Human Relations

Students will explore theories of self-concept, personality types, wellness, the global workplace, and work ethics. Management styles, goal setting, organizational management, and group dynamics will be discussed.

GSIS 1602

2 Credits

Personal Financial Management

An overview of personal and family financial planning with an emphasis on financial record keeping, planning your spending, consumer credit, making buying decisions, purchasing insurance, selecting investments and retirement and estate planning.

GENERAL STUDIES — MATH/SCIENCES (GSMS)

GSMS 1222

2 Credits

Applied Elementary Algebra

This course is designed for the trade or technical student and provides application of algebra to the technical courses. The emphasis is on the algebra necessary to solve literal equations and formulas, exponents, powers, roots, radical expressions, verbal problems, expressions involving trigonometry functions, algebraic fractions, and scientific notation.

GSMS 1251

1 Credit

Applied Physics

This course may include selections from the following topics as they apply to specific technical programs: electricity, electrical circuits, switches, generators, transformers, motors, conductors, meters, measuring devices, micrometers, calipers, etc. Metric and English units of measurements and temperature. Dimensional analysis is also covered.

GENERAL STUDIES — WORKPLACE SKILLS (GSWS)

GSWS 1401

1 Credit

Employment Preparation

Students will create various employment-seeking documents, practice comprehensive interviewing techniques, research applicable job search tools, review the do's and don'ts of employment laws, utilize the internet for job search, and discuss how attitude, dress, and confidence play a large role in a successful job search.

GSWS 1402

2 Credits

Employment Prep & Retention

The main purpose of this course is to assist the student in development of job search skills and documents necessary for a successful, self-directed job search. In addition, this course will expose the student to relationships with co-workers, supervisors, and customers. A variety of employment application materials will be developed by the student.

GSWS 1412

2 Credits

Small Business Operation

This course includes the study of small business operation. Topics may include electronic record keeping for the small business, marketing, managing, business organizations, patents, trademarks, logos, copyright laws, franchises, employee rights and responsibilities, government laws and regulations, labor standards, OSHA, permits and license necessary in the operation of a business.

GSWS 1413

3 Credits

Small Business Operation

This course includes the study of small business operation. Topics may include electronic record keeping for the small business, marketing, managing, business organizations, patents, trademarks, logos, copyright laws, franchises, employee rights and responsibilities, government laws and regulations, labor standards, OSHA, permits and license necessary in the operation of a business.

GSWS 1422

2 Credits

Quality Management

Students will learn principles and use tools for quality and continuous improvement. Emphasis will be on assessing the supervisor's role and responsibilities related to quality including identifying customer needs, applying tools and techniques for improving systems and processes, developing a quality training plan for work group members, and enhancing work group commitment to quality. Students will participate in a group to complete a quality/continuous improvement course project.

GSWS 1432

2 Credits

Problem Solving/Decision Making

Problem solving will be a hands-on experience using a root cause analysis method. Teams will identify problems, expose root causes, and create lasting solutions. Also, decision making processes will be discussed and integrated into a team structure.

GSWS 1442

2 Credits

Team Development

Students will become familiar with the purpose of team environments, their role in facilitating or participating possible problems experienced by team situations, and how team members deal with interpersonal relationships within the team structure.

GSWS 1451

1 Credit

First Aid/Safety

This course provides emergency care instruction for anyone who works with the public. It includes legal rights of the injured, treatment for obstructed airway, management of cardiac arrest using an automatic defibrillator, management of fractures, spinal injury, and medical emergencies until the ambulance arrives. The student receives a 3-year Red Cross First Aid certification card and a 2-year CPR certification card.

GSWS 1452

2 Credits

First Aid/Safety

This course provides emergency care instruction for anyone who works with the public. It includes legal rights of the injured, treatment for obstructed airway, management of cardiac arrest using an automatic defibrillator, management of fractures, spinal injury, and medical emergencies until the ambulance arrives. The student receives a 3-year Red Cross First Aid certification card and a 2-year CPR certification card.

GSWS 1481

1 Credit

OSHA General Industry / First Aid

This course provides emergency care instruction for anyone who works with the public. It includes legal rights of the injured, treatment for obstructed airway, management of cardiac arrest using an automatic defibrillator, management of fractures, spinal injury, and medical emergencies until the ambulance arrives. Successful students will receive First Aid and CPR certification. The OSHA 10-hour course component is designed to familiarize workers with OSHA standards as well as safety and health hazards common to the workplace. This course will focus on providing a foundation for students to identify, avoid, control, and prevent jobsite hazards.

GEOGRAPHY (GEOG)

GEOG 1400

3 Credits

Introduction to Geography

MnTC Goals 5, 8

An introduction to the discipline of geography. Interaction of both the physical and human concepts. Including all of the traditions of geography; spatial distribution, spatial diffusion, and spatial interaction. Emphasis on analysis of maps, graphs, and tables.

GEOG 1410

3 Credits

World Regional Geography

MnTC Goals 5, 8

A study of world regional geography. Emphasis is placed on the development of a conceptual overview of the world. Regions are analyzed by integrating geographic elements from both the physical and cultural worlds, and by analyzing the interaction between different regional systems.

GEOG 2470

3 Credits

International Travel

This course is a true environmental, cultural, and historical immersion into the rain forests of Costa Rica. Students will explore the vast diversity and majestic splendor of this disappearing ecosystem. The historic exploitation and manipulation of this ecosystem will also be addressed. This course can be taken for credit or without. The credit option will have regular class meetings before and after the two-week experience in the rain forests of Costa Rica.

GLOBAL STUDIES (GLST)

GLST 1010

3 Credits

Introduction to Global Studies

MnTC Goals 6, 8

Introduction to Global Studies is designed to introduce students to global issues and the analysis of the events that are affecting today's new global society. Students will explore these issues through areas such as art, sociology, economics, media, business, history and science to name a few. This introductory course prepares students for the remaining multi-disciplinary courses that comprise the Global Studies certificate program.

GLST 2010

1 Credit

Global Studies Capstone

MnTC Goals 6, 8

Global Studies Capstone is designed to synthesize the coursework from the Global Studies certificate courses as well as other cultural experiences students have had. Students will engage in further reading and analysis of current global issues and complete a project that will enhance their global awareness. Prerequisite: Must have completed or be in the process of completing all other Global Studies certificate requirements

HEALTH (HLTH)

HLTH 1130

3 Credits

Medical Terminology

This course shows students how to recognize and build medical terms after learning the meaning of word parts, prefixes, and suffixes. The course is based on a body systems approach. Students will also learn how to interpret and use common medical abbreviations and symbols.

HLTH 1160

3 Credits

Anatomy and Physiology for Allied Health

This course is designed to assist the student in developing a basic understanding of the normal structure and functioning of the human body. Such knowledge is basic to understanding common disease processes.

HLTH 1200

3 Credits

Disease Conditions

This course presents basic information about common disease conditions affecting various body systems. Causes, signs and symptoms of various diseases will be presented. Diagnostic and treatment procedures will be discussed. Prerequisites: HLTH 1160 or ADS 1110 or HIMC1110 or MEDA1010, concurrent enrollment, or instructor approval

HLTH 1220

3 Credits

Pharmacology for Allied Health

This course covers a review of basic math, drug information sources, drug standards and legislations, pharmaceutical preparations and prescriptions. Students will also learn the study of drugs according to classification and/or body systems. Prerequisites: HLTH 1160 or ADS 1110 or HIMC1110 or MEDA1010, concurrent enrollment, or instructor approval

HEALTH INFORMATION TECHNOLOGY (HIMC)

HIMC 1100

3 Credits

Fundamentals of Health Information

This course covers the history and development of health/medical record keeping in the health profession and provides a foundation for the application of techniques necessary to assure adequate documentation of health care in the health record (patient information systems). The student is given the opportunity to learn about the roles of health care professionals who contribute to and utilize patient information systems, the application techniques used in the development and implementation of primary and secondary health information systems, and the analysis of information design, retention and retrieval.

HIMC 1115

1 Credit

Anatomy and Physiology Applications for HIT

This is a one-semester Human Anatomy and Physiology Applications course designed to assist the student in further development and application of their understanding of the structure and function of the anatomy and physiology of the major body systems. The course includes activities directed towards coding applications with review of pertinent terminology, abbreviations, math conversions, coding cases where that knowledge is reinforced, specific body functions and how those body functions tie into all of the systems, tie-in to medical laboratory tests, pharmacology interactions, etc.

HIMC 1150

2 Credits

Legal Aspects of Health Information

This course covers the application of legal principles, policies, regulations, and standards for the control and usage of health information. Ethical and bioethical practices will be explored, along with discussion on contracts and consent forms used in health care.

HIMC 1250

2 Credits

Health Information Technician Experiential Foundations

This course provides students with experiences in the application of concepts, practices and structures related to the work setting of the Health Information Technician (HIT) and Health Information Manager (HIM). The course incorporates research, documentation and simulation, and may include job shadowing, internship, and/or externship to provide experiences in the day-to-day work environment. The experiences will benefit the student by giving them deeper occupational perspective and networking opportunities. Workplace interpersonal relations and teamwork are emphasized. Students must have a cumulative GPA of 2.0 or greater and the consent of the instructor. Prerequisite: Approval of instructor

HIMC 1320

2 Credits

Reimbursement Methodologies

This course provides a study of numerous health insurance plans, reimbursement practices, and compliance policies as well as a basic understanding of Revenue Cycle. Prerequisite: HIMC 1100

HIMC 1330

2 Credits

Electronic Health Records

This course introduces the student to electronic health records including the evolution of systems and software that have influenced electronic health records used today. The development and implementation of EHR strategies for healthcare organizations and the stages of preparation of electronic health record development will be covered. The challenges of electronic health record implementation will also be discussed. Students will also receive hands-on

application utilizing EHR software to reinforce these concepts to build their knowledge and skills.

HIMC 1340

1 Credit

Health Records Documentation

This course addresses fundamental health record documentation. Fundamental health record documentation requirements and practices for acute care as well as those required by ambulatory care, long-term care, home care, hospice, and behavioral care settings will be covered. This course will address both paper and electronic health records.

HIMC 2001

3 Credits

CPT Coding

This course covers the basic coding rules and principles for coding diseases using the ICD-10-CM, ICD-10-PCS, ICD-9-CM, and CPT-4/HCPCS Level I and Level II classification systems. Further emphasis is placed on proper procedures to code and index diagnoses and procedures. The need for accuracy and following coding rules is stressed. Prerequisite: HIMC 1110, HIMC 1120

HIMC 2003

3 Credits

ICD Coding

This course covers the basics of coding with the current ICD coding system. Students learn how to classify and index diagnoses for the purposes of standardization, retrieval, and statistical analysis. Prerequisite: HIMC 1110

HIMC 2004

3 Credits

Advanced Coding

This course provides advanced study of the ICD, CPT/HCPCS Level II coding systems and ICD legacy systems. DRG/APC optimization and data accuracy are emphasized. Prerequisite: HIMC 1100

HIMC 2020

1 Credit

Health Information Technology Review

This course provides a review for the AHIMA Registered Health Information Technician (RHIT) national examination. It includes a study plan, review of all major examination and domain topics, mock tests, guidance to good computer test taking skills, and assistance with the application process.

HIMC 2030

1 Credit

Certified Coding Assistant Review

This course provides a review for the AHIMA Certified Coding Associate (CCA) national examination. It includes a study plan, review of all major examination and domain topics, mock tests, guidance to good computer test taking skills, and assistance with the application process. Prerequisite: HIMC 1100

HIMC 2040

3 Credits

Quality Management and Healthcare Statistics

This course covers quality improvement concepts and practical tools for problem-solving, decision-making, risk management, and time management as applied to healthcare service systems. Processes for reviewing and evaluating healthcare services will be explored. In addition, this course will cover procedures for collecting, analyzing, interpreting, and presenting numerical data relating to health care services. Prerequisite: HIMC 1100

HIMC 2240

2 Credits

Supervision of Health Information

This course provides an examination of decision making processes, leadership, direction, and documentation necessary for control of human resources as applicable to the healthcare services industry. Prerequisite: HIMC 1100

HIMC 2250

2-3 Credits

Health Information Technician Experiential Capstone

This course focuses on application of the knowledge and skills covered throughout the Health Information program including those in the first experiential experience. The course incorporates research, job shadowing, internship, and/or externship to provide experiences in the day-to-day work environment. Depending on availability, lab hours will vary. Students will be required to meet written goals and objectives, undergo work evaluations, and submit a written report on their learning experience that will include details of the experiences that directly relates to their career path in HIM. This course will consist of 1 credit lecture (didactic content) and 1-2 credits of lab and internship as determined by the instructor. Prerequisite: Approval of the instructor

HIMC 2252

1 Credit

Health Information Technician Internship

This course is an application of the skills that have been learned by the student throughout their coursework in an internship setting. Students will be required to meet written goals and objectives, undergo work evaluations, and submit a written report on their learning experience. Prerequisite: HIMC 1100

HIMC 2260

2-3 Credits

Medical Coding Specialist Experiential Capstone

This course focuses on application of the knowledge and skills covered throughout the Medical Coding program. The course incorporates research, job shadowing, internship, and/or externship to provide experiences in the day-to-day work environment. Depending on availability, lab hours will vary. Students will be required to meet written goals and objectives, undergo work evaluations, and submit a written report on their learning experience that will include details of the experiences that directly relates to their career path. This course will consist of 1 credit lecture (didactic content) and 1-2 credits of lab and internship as determined by the instructor. Prerequisite: Approval of instructor

HIMC 2262

1 Credit

Medical Coding Specialist Internship

In this course, students will observe and perform coding responsibilities in healthcare facilities. Students will be required to meet written goals and objectives, undergo work evaluations, and submit a written report on their learning experience. Prerequisite: HIMC 1100

HIMC 2270

2 Credits

Computerized Health Information

This course focuses on the vital role information processing plays in health-care delivery. Basic concepts of electronic health information systems will be introduced and applied including electronic data collection, storage, retrieval, and other applications. Prerequisites: HIMC 1100

HIMC 2950

1-4 Credits

Special Projects/Topics

This course provides an opportunity for a student to study topics delivered either on an individual or course basis. A student must show a special need to be able to enroll in this course.

HISTORY (HIST)

HIST 1010

3 Credits

World History to 1500

MnTC Goal 5, 8

Survey of world civilizations and cultures from the ancient period to 1500.

HIST 1020

3 Credits

World History 1500 - Present

MnTC Goals 5, 8

Survey of world civilizations and cultures from 1500 to the contemporary period.

HIST 1110

3 Credits

United States History to 1865

MnTC Goals 5, 7

Survey of major political, economic, and sociocultural topics of United States history from ancient times through the Civil War.

HIST 1120

3 Credits

United States History 1865 - Present

MnTC Goals 5, 7

Survey of major political, economic, and sociocultural topics of United States history from Reconstruction to the contemporary period.

HIST 2100

3 Credits

East Asian History

MnTC Goals 6, 8

A survey of East Asian history from the earliest beginnings to the present. Emphasis is on political, economic, social and cultural development in China and Japan with secondary focus on Korea and Southeast Asia.

HIST 2220

3 Credits

Western Civilization II

MnTC Goals 6, 8

Survey of major political, economic, and sociocultural topics of European history from 1500 to the contemporary period.

HIST 2470

3 Credits

International Study

MnTC Goals 6, 8

Designed to provide credit for international study experiences conducted under the auspices of Ridgewater College faculty. Course requirements may vary but will include pre-departure, onsite, and post-trip readings and assignments.

HIST 2500

3 Credits

Minnesota History

MnTC Goals 5, 7

Survey of major political, economic and sociocultural topics of Minnesota history from ancient times to the contemporary period.

HIST 2570

1-3 Credits

Special Topics

MnTC Goals 5, 7

This course covers special topics in History. Students may repeat this course if content changes.

HIST 2670
Special Topics
MnTC Goals 6, 7

1-3 Credits

This course covers special topics in History. Students may repeat this course if content changes.

HIST 2950
Topics in History
MnTC Goal 5

1-3 Credits

Individual reading with seminar discussions on selected topics in history.

HUMAN SERVICES (HSER)

HSER 1010
Survey of Addiction

3 Credits

The historical development of drug abuse and basic terminology of chemical dependency are discussed. Special emphasis is placed on understanding the relationship between personality variables, the environment and the chemical abused. Various theoretical models of treatment are examined.

HSER 1660
Introduction to Social Services

3 Credits

This course is designed for social service majors and other students who desire knowledge of the history, organizational structure and the work of the major public agencies of welfare, mental health and rehabilitation.

HSER 2010
Introduction to Case Management

3 Credits

This course will examine the theoretical and practical knowledge needed for entry level practice in casework. Casework values will be identified and basic helping skills will be emphasized. Practice of these skills will be stressed.

HSER 2340
Assessment and Interviewing

3 Credits

This course is designed to develop a specialized set of interviewing skills. It meets requirements for general assessments as well as chemical use assessments and Rule 25 assessments. A major emphasis will be on the application of these skills in a laboratory setting.

HSER 2900
Cooperative Education

1-12 Credits

The aim of the internship is to provide practical experience in an agency to bridge the gap between theory and practice. . Prerequisite: Completion of semester credits including human service classes for chemical dependency counseling and consent of instructor

HUMANITIES (HUM)

HUM 1050
The Human Adventure
MnTC Goals 6, 8

3 Credits

This course introduces the humanities through its various disciplines, not limited to: visual arts, music, theatre, literature, dance and film. The disciplines will be explored within a historical and cultural perspective, to help gain an understanding of their value in society. The course will also examine broad themes that drive the humanities such as beauty, morality, love, happiness, and freedom.

HUM 1100
Leadership Development Studies
MnTC Goals 6, 9

3 Credits

Leadership Development Studies is designed to provide emerging and existing leaders the opportunity to explore the concept of leadership and to develop and improve their leadership skills. The course integrates readings from the humanities, experiential exercises, films, and contemporary readings on leadership.

LAW ENFORCEMENT (LAWE)

LAWE 1010
Law Enforcement Practicum

12 Credits

In this course, students will apply academic knowledge to the practice of law enforcement. Skills development will occur in such areas as firearms, self-defense, physical fitness, patrol procedures, emergency driving, criminal investigation and traffic law enforcement. NOTE: Although credit for the skills training is granted by Ridgewater College, the actual course work is accomplished off campus. Prerequisite: Consent of program coordinator

LAWE 1030
Introduction to Criminal Justice

3 Credits

This course provides an overview of the criminal justice system in US society, including the philosophy, history, organization, and function of the police, courts, and corrections. Topics include foundations of crime; justice and law; federal, tribal and state elements; victimization; victim rights; crime statistics and the extent of crime; police issues; juvenile justice system; juvenile delinquency; court systems; corrections and community corrections; professional career opportunities; and future trends.

LAWE 1050
Introduction to Corrections

3 Credits

This course addresses the philosophy and history of corrections and its role in American society. It provides an overview of the elements of corrections, the purposes of correctional punishments, and a historical perspective of punishments. Also covered are the following: correctional retribution, desert, deterrence, incapacitation, rehabilitation, and restoration; political, social, economic, human, and moral consequences of crime control; and a survey of professional career opportunities and qualifications required.

LAWE 1130
Minnesota Statutes

3 Credits

Knowledge of traffic and criminal codes is central to the role of a Minnesota law enforcement officer. This course focuses on the Minnesota Traffic and Criminal Code, including how to apply the laws in a variety of situations. Critical thinking through practical application is a major component of this course.

Course Descriptions

LAWE 1510

1 Credit

Self-Defense: The PR-24

This class provides practical experience in techniques which will enable students to defend themselves and others and control hostile suspects with the PR-24 police baton. In addition to providing basic PR-24 certification, the class provides advanced and retention techniques for the PR-24. The course also qualifies individuals to use the persuader baton as a police impact instrument.

LAWE 1520

1 Credit

Self-Defense for the Peace Officer

This class provides practical experience in techniques designed to insure peace officer self-defense. The areas of revolver retention, handcuffing and searching, as well as joint manipulation, pressure points and active counter-measures are covered. Prerequisite: Open only to licensed peace officers and students enrolled in the Peace Officer program.

LAWE 2010

3 Credits

Criminal Procedures

Knowledge of legal matters is central to the role of a law enforcement official. This course introduces students to the principles of criminal procedures and the law. Topics include case law from the Supreme Court relating to stop and frisk, search and arrest, suspect identification and interrogation, and other legal procedures involved in law enforcement. Additional topics include the Minnesota State Constitution; application of the Fourth, Fifth, and Sixth Amendments of the United States Constitution; and procedural requirements for police.

LAWE 2230

3 Credits

Peace Officer Communications and Employment Prep

This course will prepare students to complete written reports used in law enforcement. Topics include the necessary information to be contained in police reports and the use of various law enforcement reports. This course will also discuss barriers to clear communication, ways to enhance interpersonal communication and demonstrate reading skills necessary in law enforcement.

LAWE 2310

3 Credits

Peace Officer and Community

This course provides a practical overview of key issues, questions, and concepts related to police interaction with communities. Topic areas include ethics, leadership, diversity, problem-solving, crime prevention, patrol functions and tactics and communication. The course will also explore the relationship of police and community, and public relations procedures.

LAWE 2410

3 Credits

Criminal Investigations

Knowledge of investigative procedures and practices is central to the role of a law enforcement officer. This course focuses on reporting and investigative techniques as well as the processes and procedures required in crime scene investigations. Special attention is paid to accurate documentation and evidence handling and preservation.

LAWE 2430

3 Credits

Homeland Security

This course provides a general overview and practical application of current terrorism and homeland defense information. It is designed to prepare students to address terrorism threats and acts of terrorism, which affect communities both nationally and internationally. This is a specialized course designed for criminal justice students, but is open to and may be of interest to any student.

LAWE 2450

3 Credits

Police Ethics and Leadership

Police Ethics includes definitions, perceptions and concerns, code of honor, racial profiling, and history of police work environment. The student will explore corruption, deviancy, and criminality found within police departments, and discuss the impact upon relations within the community and citizens. This course alerts students to some of the more sensitive and often problematic matters involved in police conduct and ethics. Students will specify actions contrary to duties and responsibilities of law enforcement officers and learn how to conduct themselves and their affairs in a manner that reflects department standards and professionalism.

LAWE 2470

3 Credits

Juvenile Justice

This course emphasizes the origin, development, organization, functions, and jurisdiction of the Juvenile Justice System in America, with emphasis on the MN Juvenile Justice System. Topic areas covered include processes and detention of juveniles, constitutional protections extended to juveniles, case disposition, juvenile statutes and court procedures relative to juvenile offenders, laws and procedures regarding child abuse, child neglect, juvenile records and juvenile court process.

LAWE 2510

3 Credits

Peace Officer and Human Behavior

This course integrates the academic and applied aspects of the basic patrol function for a patrol officer. Course topics include an in-depth examination of the knowledge, skills, and abilities required to fulfill a patrol officer's duties, functions, and responsibilities. Students explore vehicle stops, traffic enforcement, pedestrian checks, officer safety issues, and other duties as they relate to the basic function of a patrol officer.

LAWE 2900

1-6 Credits

Cooperative Education

This course provides students a cooperative education experience in the field of law enforcement. Placement is made in a criminal justice agency with instruction in the operation of that agency. Classroom study emphasizes basic criminal justice theory and problems of power in inter-human relationships. The student will have a combination of field experiences alternated with academic study to provide a more meaningful education. In this class students will have the practical exposure necessary to make their field experience relative to their long-range occupational and/or scholastic goals. Prerequisite: LAW 1030, LAW 113 and/or consent of program coordinator

LAWE 2950

1 Credit

POST Seminar

Seminar discussion and review of the MN Post Officer Skills Training (POST) Board learning objectives for professional peace officer education.

MACHINE TOOL TECHNOLOGY (MACT)

MACT 1005 **2 Credits** **Blueprint Reading for Machinists**

This course provides a foundation for understanding and using drawings (blueprints). Topics covered will provide students with basic skills required for understanding prints utilized in a manufacturing/machining environment. Emphasis will include geometric dimension and tolerance symbols/principles, lines, multi-view drawing, title blocks, identification of general manufacturing notes, and specific machining notes.

MACT 1190 **2 Credits** **Principles of Machining Operations**

This course introduces students to the most common machine types and their functions, basic machining operation techniques, and overall operations in the machine shop. Students will apply principles of shop safety, part measurement, and blueprint reading.

MACT 1507 **1 Credit** **GD & T Basics**

This course provides a general overview of the fundamentals of geometric dimensioning and tolerancing including the review of applicable sections in the ASME-Y14.5M-2009 standard.

MACT 1508 **2 Credits** **Applied Math**

This course introduces the fundamentals of applied geometry and trigonometry as applied to drafting and manufacturing math problems. Topics covered include angles, circles, functions, right, and oblique triangles, and compound angles. Exercises will be presented using the textbook exercises and a series of worksheets, with an emphasis on actual shop calculations. This course is dual-listed with DRFT 1508.

MACT 1800 **1 Credit** **Manufacturing Computer Applications**

Personal computers will be used to introduce the learner to a wide variety of computer applications. Word processing, spreadsheet applications, database, Internet research and general computer skills will be covered.

MACT 1801 **2 Credits** **Fundamentals of Precision Manufacturing**

This course is designed to give students foundational knowledge in safety, precision measuring and use of basic manual tools and common machines used in a machine shop. Topics include an overview of basic machining practices, measurements and tolerances used for machining of components, and aids in the transfer of engineering drawings to 3-D visualizing.

MACT 1802 **1 Credit** **Precision Measurement and Part Inspection**

This course is designed to give students foundational knowledge in the use of precision measurement tools to accurately inspect manufactured parts for conformance to print specifications.

MACT 1804 **1 Credit** **Basic Shop Maintenance**

This course is designed to give students foundational knowledge and practice of basic maintenance duties in the machine shop.

MACT 1812 **2 Credits** **Fixture Design and Tooling**

This course covers basic principles in the design of jigs, fixtures, automated loading equipment, and tooling techniques. The students will use CAD software for the design and plotting of their drawings.

MACT 1831 **3 Credits** **Manual Lathe Operations**

This course introduces techniques in the basic operation of an engine lathe with technical theory worksheets. Topics covered include safety, turning, tapping, and machining angles.

MACT 1840 **3 Credits** **Manual Mill Operations**

This course covers basic principles of vertical milling operations and the techniques used to program, set up and operate a 2-axis milling machine to create component parts with steps, angles, slots, shapes, and holes.

MACT 1900 **3 Credits** **Advanced Manual Lathe and Mill Operations**

This course covers advanced techniques in the operation of both engine lathes and 2-axis vertical milling machines. Prerequisites: MACT 1831, MACT 1840

MACT 2503 **3 Credits** **Parametric Design I**

This course provides instruction on producing solid models and drawings from those solid models using the SOLIDWORKS® parametric software. This course will cover the fundamentals and basic concepts of parametric modeling as well as creating part and assembly drawings from those models.

MACT 2506 **3 Credits** **Reverse Engineering for Machinists**

Machinists are often called upon to make replacement parts that are no longer produced or available for purchase. The development of the skills needed to do that will be the focus of Reverse Engineering for Machinists. Students will be given machined parts to measure and assess. Those measurements will then be used to design solid models using Solidworks software. The solid models will be imported into a MasterCAM program for production on a CNC machine. Design for machinability will be a major focus of instruction. Prerequisite: MACT 1801

MACT 2507 **2 Credits** **Practical Application of Geometric Dimensioning and Tolerancing**

This course provides comprehensive overview of the fundamentals of geometric dimensioning and tolerancing including the review of applicable sections in the ASME-Y14.5M-2009 standard. Classroom lecture and practical exercises are combined to give students an opportunity to assess part accuracy based on geometric tolerance principals using precision measurement.

MACT 2803 **3 Credits** **Precision Grinding**

This course introduces students to surface grinding. Topics covered include how to select the correct grinding wheel, dress the grinding wheel, safely use and set up the grinder, and grind multiple shapes and dimensions to specifications. Students should successfully complete MACT 1840 prior to beginning this course. Prerequisites: MACT 1831, MACT 1840, MACT 1900

Course Descriptions

MACT 2811**3 Credits****CNC Programming and Set-up - Mill**

This course introduces students to CNC machining centers and the programming code that controls them. Two-axis contour programming using Fanuc compatible G&M codes programming will be introduced. Students should successfully complete MACT 1840 prior to beginning this course.

MACT 2813**3 Credits****CNC Vertical Machining Centers**

This course covers intermediate level principles, programming, set-up, and operation of CNC vertical milling centers that are essential for employment in manufacturing and machining shops. CAM programs will be used. Prerequisite: MACT 2811

MACT 2815**3 Credits****CNC Programming and Set Up - Lathe**

This course introduces students to Numerically Controlled Turning Centers and the programming that controls them. Students should successfully complete MACT 1831 prior to beginning this course.

MACT 2820**1 Credit****Mentorship I**

Mentorship I is designed to solidify the learning of students in the Machine Tool Technology program by allowing them to instruct and guide first semester students to successfully and safely complete two machine shop projects. The projects are basic and have previously been completed by the mentors. Instructor will provide written and oral direction, assign students their mentee, and assist with the scheduling of mentorship appointments.

MACT 2821**2 Credits****Mentorship II**

Mentorship II is designed to solidify the learning of students in the Machine Tool Technology program by allowing them to instruct and guide second semester students to successfully and safely complete several CNC machine shop projects. The CNC projects are introductory and have previously been completed by the mentors. Instructor will provide written and oral direction, assign students their mentee, and assist with the scheduling of mentorship appointments. Prerequisite: MACT 2820, Co-requisite: MACT 2892

MACT 2826**3 Credits****Computer-Assisted Machining I**

This course introduces computer-assisted numerical-controlled programming using a computer-aided manufacturing system.

MACT 2827**3 Credits****Computer-Assisted Machining II**

This course builds upon MACT2826 Introduction to CAM and covers solids, surfaces and multi-axis programming and design techniques. This course will provide a deeper exploration of the capabilities of CAM software when working with solid models and multi-axis parts. Prerequisite: MACT 2826

MACT 2831**2 Credits****Die Design**

This course gives the students basic knowledge in the metal stamping industry. The course covers die types, metal forming, tool steels, and design techniques.

MACT 2832**2 Credits****Mold Design**

This course gives the students basic knowledge in plastic molding, die casting components, molding techniques and mold designing.

MACT 2839**2 Credits****Mold and Die Design**

This course provides an overview of mold and die design. This course is designed to give students basic knowledge of plastic molding, design of molds, mold components, and molding processes. In the metal stamping industry, discuss the various stamping operations, design of dies, stamping die components and special machine tools.

MACT 2870**3 Credits****Mold Making I**

Students will learn general concepts for mold design and function. They will use this information, combined with their previous Solidworks software training, to design all of the components of a mold.

MACT 2872**3 Credits****Mold Making II**

The student will build the complete mold base with cooling lines, cavities and core pockets, and a runner system. Prerequisite: MACT 2870

MACT 2880**2 Credits****Die Making I**

In this course the students will develop the design and print package for a complete stamping die including the set, punches, pilots, die block, stripper and stop.

MACT 2882**3 Credits****Die Making II**

The student will build the complete die set and start machining the punches, pilots, die block, stripper, etc. The student will also heat treat the punches and die block. Prerequisite: MACT 2880

MACT 2884**4 Credits****Die Making III**

This course covers how to test fit the punches and dies in the dies-set. Also covered is final assembly, install die in punch press and operate the punch press. Prerequisite: MACT 2882

MACT 2890**3 Credits****CNC Turning Centers**

In this course, students will use MasterCAM software to program parts to run on a CNC lathe. This course covers advanced CNC concepts related to developing tool paths, operating a turning center, and part planning and construction.

MACT 2899**6 Credits****Advanced CNC**

Focusing on the intermediate phases of machining using CNC equipment, this course covers advanced CNC concepts related to programming, part set-up, multi-axis programming and 3-D contouring. Students will be required to complete final CNC machined projects according to instructor specifications. A working knowledge of parametric design software to complete the design portion of the final project is required for success in this course. All CNC machining programs for components of the final projects will be created using MasterCAM software. Industry exploration is incorporated into the class lecture time.

MACT 2950**1-6 Credits****Special Topics/Projects**

This course allows the student to complete a course of study on a special topic or project with the approval of the instructor. Under direction of the instructor, the student will explore new concepts and complete assigned projects.

MANUFACTURING TECHNOLOGY (CMAE)

CMAE 1514

2 Credits

Safety Awareness

This course is designed to align with the National Skill Standard assessment and certification system for Safety Awareness. The course curriculum is based on federally-endorsed national standards for production workers. This course will introduce OSHA standards relating to personal protective equipment, Hazard communication, tool safety, confined spaces, electrical safety, emergency responses, lockout/tagout, and others.

CMAE 1518

2 Credits

Manufacturing Processes and Production

This course is designed to align with the National Skill Standard assessment and certification system for Manufacturing Processes. The course curriculum is based on federally-endorsed national standards for production workers. The course emphasizes Just-In-Time manufacturing principles, basic supply chain management, communication skills, and customer service.

CMAE 1522

2 Credits

Quality Practices

This course is designed to align with the National Skills Standard assessment and certification system for Quality Practices. The course curriculum is based upon federally-endorsed national standards for production workers. Emphasis is placed on continuous improvement concepts and how they relate to a quality management system. Students will be introduced to a quality management system and its components. These include corrective actions, preventative actions, control of documents, control of quality records, internal auditing of processes, and control of nonconforming product.

CMAE 1526

2 Credits

Maintenance Awareness

This course is designed to align with the National Skills Standard assessment and certification system for Maintenance Awareness. The course curriculum is based upon federally-endorsed national standards for production workers. The Maintenance Awareness course introduces the concepts of Total Productive Maintenance and preventative maintenance. Students will be introduced to lubrication, electricity, hydraulics, pneumatics, and power transmission systems.

CMAE 1528

1 Credit

Career Success Skills

This is an introductory career success skills course. The primary goal of this course is to help individuals acquire a solid foundation in the basic skills for a successful career. This course will identify the skills important to businesses and help the students assess his/her level of skill. The course will provide suggestions for how the student can improve his/her level of skill.

MARKETING AND SALES MANAGEMENT (MSM)

MSM 1000

1 Credit

Student Success

This course intends to inspire and engage students with the perseverance and determination of an entrepreneurial mindset needed to succeed academically, professionally, and personally. This course encourages students to apply real-world circumstances, which will enable them to develop entrepreneurial attitudes, behaviors, and skills that can support them throughout college and beyond. The core concepts include their own power of choice, opportunity, action, and knowledge. The advanced concepts include resourcefulness, reliability, community, and persistence.

MSM 1012

3 Credits

Business Presentations

This course covers the development of business presentations. Students will plan, write and deliver presentations on various topics using appropriate media and presentation software. This course is dual listed with ADS 1012, Business Presentations.

MSM 1101

3 Credits

Principles of Marketing

This course is designed to serve as an introduction to the basic principles of marketing, practices, and the application of these practices. Students will explore why marketing is the foundation for all successful businesses. Topics covered include consumers, products, promotion, placement, pricing, market research, questionnaire design, data analysis, market segmentation and target markets. Students will learn how to analyze the marketing environment and recommend marketing strategies.

MSM 1103

3 Credits

Basic Sales Techniques

This course covers the role of sales in the economy, the importance of communication skills and the basic steps of a sale. It also covers topics related to customer service department including standard operating procedures, telephone procedures, customer contact, conflict handling and problem solving.

MSM 1137

3 Credits

Business Math and Accounting

This course is an introduction to the fundamental mathematical and accounting concepts necessary for successful careers in business. Topics include decimals, percent increase/decrease, word problems, commissions, discounts, markup, the accounting equation and financial statements.

MSM 1212

3 Credits

Personal Finance

This course is designed to help students make better personal financial decisions. They will learn how to spend and save money more wisely and to improve their standard of living. Emphasis will be given to budgeting, credit, taxes, insurance, and investing.

MSM 1220

3 Credits

Advertising

This course acquaints the students with advertising psychology, types of media available, and the steps in the preparation of creative advertisements. Emphasis is placed on planning, execution and evaluation of these promotional components.

Course Descriptions

MSM 1818

Internship I

This course is designed to provide the students with a purposeful occupational experience in the wholesale/retail/sales marketing industry. Each occupational experience is individualized and a training plan is created for each student in conjunction with the training station the student is assigned to.

3-6 Credits

MSM 1819

Internship II

For this course, projects, reports, and discussions are coordinated to relate to the students employment situation. A minimum of two employer evaluations per student is a requirement of this course.

1-3 Credits

MSM 2102

Professional Sales

This course provides the practical sales applications of business-to-business sales transactions. Students will learn the value of relationship sales and study presentation methods to differing customer personalities. It will cover the techniques to overcome objections, prospecting, and negotiation skills. Significant time is spent preparing and delivering actual sales presentation.

3 Credits

MSM 2105

Computer Applications

This course provides students with an introduction to computer software used in today's business world. Students will learn how to use word processing, database, spreadsheet, and graphics software tools as means of communication and problem-solving. The course is primarily project-based in which the students' skills and proficiency in the use of these computer software programs will be developed and refined. Students will also be introduced to enterprise resource planning concepts and software and how these programs are integrated into day-to-day business operations.

3 Credits

MSM 2110

Principles of Supervision

The theories, methods, and techniques of supervision are emphasized in this course. This course addresses such topics as goal-setting, productivity, team-building, motivation, delegation and appraisal. The use of case problems and/or simulations is a part of the training.

3 Credits

MSM 2125

E-Commerce & Social Media

This course covers an overview of e-Commerce and how it is used as an additional marketing tool for many businesses. Students will learn the basics of developing a web page, what goes into developing a shopping cart for products, explore linking to other websites, and practical application in evaluating website effectiveness.

3 Credits

MSM 2203

Management Issues

This course examines the concepts and principles of management, including the management problem solving process today. Topics include the manager as a person, human relations, ethics, diversity and inclusion, organizational culture and transformational leadership. Students will study the four functions of management: planning, organizing, leading, and controlling, which are the foundation of management and provide context to how managers plan, make decisions, organize, motivate, lead and control operations.

3 Credits

MSM 2207

Merchandise Management

This course covers the merchandise management strategies within a retail organization. Topics to be covered: six-month plan, sales stock, open-to-buy, vendor relations and negotiations pricing, profitability, assortment and

3 Credits

merchandise planning. Merchandise inventory controls and strategies will be discussed.

MSM 2823

Introduction to Entrepreneurship

This course inspires and engages students in the fundamental aspects of an entrepreneurial mindset as an essential life skill. Eight fundamental concepts are discussed using real-world entrepreneurs who have overcome challenges by embracing the core concepts of an entrepreneurial mindset. The course also provides experiential learning through the process of identifying problems, finding solutions, and making connections beyond the classroom.

3 Credits

MSM 2833

International Business

This course is an introduction to the working of business in a global environment. With the increase in technology, our market is becoming a global market. Topics covered include cultural differences, legal systems, economic systems as well as importing, exporting and managing on an international basis.

3 Credits

MSM 2850

Small Business Development

This course is a foundational course for the individual pursuing the establishment of a small business. Students will learn what it takes to own, operate, and grow a small business successfully. Various types of small business start-ups will be examined. Students will develop an understanding of the steps required to start a small business and will examine the elements that can either lead to a business failure or success.

2 Credits

MSM 2950

Special Projects/Topics

This course provides an opportunity for a student to study topics delivered either on an individual or course basis. A student must show a special need to be able to enroll in this course.

Variable Credits

MASSAGE THERAPY (MTHE)

MTHE 1201

Basic Massage

This course is designed to provide students with the technical and interpersonal skills to provide a proper and effective full body, partial, and seated-chair massage for therapeutic purposes. Topics will include good therapeutic communications, benefits and precautions, general pathology, correct body mechanics, proper procedures in a variety of massage applications, and guidelines for giving and receiving massage. The use of hot stones for therapeutic purposes and incorporating various massage tools will also be covered. Students will have sufficient time for hands-on practice both in the campus lab and through the externship program. Corequisites: MTHE 1203, MTHE 1204, MTHE 1205, MTHE 1206, MTHE 1208

5 Credits

MTHE 1203

Massage Therapy Anatomy and Physiology

This course will cover basic anatomy and physiology, including the names, locations, types, characteristics, actions, functions and dysfunctions of all structures and systems of the human body as they relate to the practice of massage therapy. Students will also become familiar with the energetic anatomy system and how it functions within the physical body. Co-requisites: 1201, MTHE 1204, MTHE 1205, MTHE 1206, MTHE 1208

3 Credits

<p>MTHE 1204 Business Practices/Communications I for Massage This course will focus on the requirements for the practice of massage therapy including laws, regulations and insurance, equipment and supplies, standard sanitation and safety practices, personal ethics and boundaries, client communication, record keeping, creating an appropriate practice setting, negotiating contracts and analyzing choices for a career as a professional massage therapist. Students will participate in business-related aspects of the on-site Student Massage Center. Co-requisites: MTHE 1201, MTHE 1203, MTHE 1205, MTHE 1206, MTHE 1208</p>	<p>2 Credits</p>
<p>MTHE 1205 Principles of Holistic Health This course has been developed to provide students with a broad range of information and experience with holistic medicine and complementary health and healing techniques they are likely to encounter in their work as a massage therapist. Topics studied will include nutrition information, diagnostic sciences, and many types of holistic therapies. The course will also provide students with hands-on experience in meditation techniques, yoga and tai chi, and various vibrational therapies, as well as an opportunity to design their own strategies for long-term health and wellness. Co-requisites: MTHE 1201, MTHE 1203, MTHE 1204, MTHE 1206, MTHE 1208</p>	<p>2 Credits</p>
<p>MTHE 1206 Clinical/Field Experience I Field experience will offer students the opportunity to perform massage therapy, including the use of relaxation, deep tissue techniques and adjunctive therapies, through both the externship program outside of the classroom and in the college Student Massage Center under the supervision of the instructor. Experience the business, technical and interpersonal aspects of a massage therapy practice for either self-employment or employment in a spa or non-medical setting will be gained. Co-requisites: MTHE 1201, MTHE 1203, MTHE 1204, MTHE 1205, MTHE 1208</p>	<p>1 Credit</p>
<p>MTHE 1208 Introduction to Pathology Introduction to Pathology is designed to give students a practical understanding of conditions that relate to the safe practice of massage therapy. Students will learn to recognize dysfunctions and diseases of major body systems, identify whether or not they are contagious, and determine if massage therapy is indicated or contraindicated. Topics covered include use of reference materials, modality recommendations, terminology, assessment tools, infectious agents, hygienic practices, and prescription medications for the purpose of keeping both clients and therapists protected in the therapeutic environment. Co-requisites: MTHE 1201, MTHE 1203, MTHE 1204, MTHE 1205, MTHE 1206</p>	<p>2 Credits</p>
<p>MTHE 1211 Advanced Massage This course will expand on methods taught in Basic Massage and also include the areas of Reflexology, Shiatsu, Myofascial Release, and Hot Stone spot treatments, as well as pre- and post-event sports massage. Students will also be introduced to advanced massage methods including pregnancy/infant massage, joint mobilization, cranial sacral techniques, and energy balancing techniques, as well as assessment and treatment plan procedures. Students will tour therapeutic massage practices and participate in 50 hours of internship as a part of MTHE 1230 Clinical Experience II. Prerequisites: MTHE 1201, MTHE 1203, MTHE 1204, MTHE 1205, MTHE 1206, MTHE 1208. Co-requisites: MTHE 1212, MTHE 1213, MTHE 1214, MTHE 1230</p>	<p>5 Credits</p>
	<p>MTHE 1212 Massage Therapy Anatomy and Kinesiology This course focuses on the muscular and skeletal systems, the relationship of body structures and body movement, and the physiological, mechanical, and psychological mechanisms of human movement. Emphasis will be placed on muscle tissue, skeletal attachments, neuromuscular connections, biomechanical laws, muscle and joint movements, and myofascial integration as related to therapeutic massage. Prerequisite: MTHE 1203, 1208. Co-requisites: MTHE 1211, 1213, 1214, 1230</p>
	<p>MTHE 1213 Massage Therapy Business Practices/Communication II Whether a student is planning to be employed or self-employed, this essential course will help ensure long-term success as a professional massage therapist. Students will benefit from topics in the areas of goal-setting, strategic planning, business development and ethics, financial management, target market analysis, value added services, and professional communications, as well as hands-on experience in designing business cards, brochures, promotional materials and conducting market research and analysis studies. Students will also practice negotiating contracts, job search and interviewing skills. Students will also make on-site visits to a number of successful massage therapy practices in the area and participate in business-related aspects of the on-campus Student Massage Center. Prerequisite: MTHE 1204. Co-requisites: MTHE 1211, MTHE 1212, MTHE 1230</p>
	<p>MTHE 1214 Ancillary Treatments This course will educate students in the use of equipment, products, and spa body treatment application procedures, including exfoliation, mud/inch loss wraps, hydration and spa treatments including ear candling and essential oil protocols. An overview of various spa techniques will be presented and key aspects of client relations, consultations, benefits and precautions, treatment types, purposes and practices will be covered. Nutritional supplements will be examined. Prerequisites: MTHE 1201, MTHE 1203, MTHE 1204, MTHE 1205, MTHE 1206, MTHE 1208. Corequisites: MTHE 1211, MTHE 1212, MTHE 1213, MTHE 1230</p>
	<p>MTHE 1220 Massage Therapy Certification Preparation This course is designed to help students prepare for the national certification examination to become a licensed Massage Therapist, and will cover NCETMB and NCETM professional standards. Topics covered will include body systems; anatomy, physiology, and kinesiology; pathology; therapeutic massage assessment; therapeutic massage application; professional massage standards, ethics, business, and legal practices; and Eastern modalities.</p>
	<p>MTHE 1225 Field Experience Field experience will offer students the opportunity to perform massage therapy techniques such as relaxation, deep tissue techniques, and adjunctive therapies in the college Student Massage Center under the supervision of the instructor.</p>
	<p>MTHE 1230 Clinical/Field Experience II This course will focus on the requirements for the practice of massage therapy, including laws, regulations and insurance, equipment and supplies, standard sanitation and safety practices, personal ethics and boundaries, client communication and consultation, record keeping, creating an appropriate practice setting and analyzing choices for a career as a professional massage therapist. Field experience will offer students the opportunity to perform massage</p>

Course Descriptions

therapy, including the use of relaxation, deep tissue techniques and adjunctive therapies in the college Student Massage Center under the supervision of the instructor. Experience in some business aspects of a massage therapy practice and use of both the technical and interpersonal skills necessary for successful practice, whether employed or self-employed will be gained. Prerequisite: MTHE 1201, MTHE 1203, MTHE 1204, MTHE 1205, MTHE 1206, MTHE 1208. Co-requisites: MTHE 1211, MTHE 1212, MTHE 1213, MTHE 1214

MTHE 1501

3 Credits

Advanced Massage 2

This course will expand on methods taught in Basic Massage and Advanced Massage including areas such as Reflexology, Myofascial Release, Pregnancy Massage and additional industry relevant therapeutic massage techniques. Students will also be introduced to advanced assessment and treatment plan procedures that will allow them to work in varied therapeutic settings. Students will also learn how to identify and find quality research as well as determine evidence-based practices for massage therapy. Prerequisite: MTHE 1211, MTHE 1230

MTHE 2950

1-6 Credits

Special Projects/Topics

This course provides educational opportunities with topics and/or projects of current interest to therapeutic massage. The course may include research and project work in a mentored classroom or clinical lab setting. The specific topics studied and projects chosen will integrate and further develop knowledge and skills related to the Massage Therapy program. This course may be repeated in intervals of 1-6 credits for a maximum of six credits.

MATHEMATICS (MATH)

MATH 0970

3 Credits

Beginning Algebra

This is a beginning algebra course designed for students with an insufficient background for Math 98. Topics covered at the introductory level include real numbers; operations with integers and rational numbers; evaluating and simplifying algebraic expressions; solving linear and absolute value equations and inequalities; problem solving with percents, ratios, and proportions and geometric applications; functions; graphing linear equations and inequalities; finding slope and equations of lines; operations on polynomials; and work with negative exponents. Prerequisite: A grade of C- or better in MATH 0930 or appropriate score on the math placement exam

MATH 0980

3 Credits

Intermediate Algebra

Topics covered include factoring, solving polynomial equations, solving systems of equations, operations on rational and radical expressions, graphing rational functions, simplifying radical expressions, solving rational and radical equations, properties of real and complex numbers, graphing and solving quadratic equations, exponential and logarithmic functions, and algebraic problem solving. Prerequisite: A grade of C- or better in MATH 0970 or appropriate score on the math placement exam

MATH 0990

4 Credits

Mathematical Reasoning

This developmental course provides an alternative pathway to earning a college level liberal arts mathematics course. All college students, regardless of their college major, need to be able to make reasonable decisions about fiscal, environmental, and health issues that require quantitative reasoning skills. An activity-based approach is used to explore numerical relationships, graphs, proportional relationships, algebraic reasoning, and problem solving using linear,

exponential and other mathematical models. Students will develop conceptual and procedural tools that support the use of key mathematical concepts in a variety of contexts. This course is the first in a two-part sequence and is not suited for Science, Technology, Engineering, or Math (STEM) students. Prerequisite: A grade of C- or better in MATH 0930 or appropriate score on the math placement exam

MATH 0995

2 Credits

Co-Requisite for College Algebra

This is a beginning algebra course designed for students with an insufficient background for Math 98. Topics covered at the introductory level include real numbers; operations with integers and rational numbers; evaluating and simplifying algebraic expressions; solving linear and absolute value equations and inequalities; problem solving with percents, ratios, and proportions and geometric applications; functions; graphing linear equations and inequalities; finding slope and equations of lines; operations on polynomials; and work with negative exponents. Prerequisites: A grade of C- or better in MATH 0970 or MATH 0990, or placement into MATH 0980 or MATH 0995 with appropriate score on the Math Placement Exam.

MATH 1000

4 Credits

Quantitative Reasoning

MnTC Goal 4

This course provides an alternative pathway to completing a college level liberal arts mathematics course. All college students, regardless of their college major, need to be able to make reasonable decisions about fiscal, environmental, and health issues that require quantitative reasoning skills. Like Quantway I, an activity-based approach is used to explore numerical relationships, graphs, proportional relationships, algebraic reasoning, and problem solving. In addition, topics from probability and statistics, finance, graph theory and logic will also be introduced. Students will develop conceptual and procedural tools that support the use of key mathematical concepts in a variety of contexts. This course is the second in a two-part sequence and is not suited for Science, Technology, Engineering, or Math (STEM) students. Prerequisite: A grade of C- or better in MATH 0980 or MATH 0990 or appropriate score on the math placement exam

MATH 1090

4 Credits

Elements of Algebra & Trigonometry

MnTC Goal 4

Algebraic and trigonometric concepts are taught with a heavy emphasis on applications to technical fields. Topics covered include the real number system; algebraic concepts, operations, and factoring; graphing; linear, quadratic, fractional and radical equations; proportion and variation; geometry; trigonometric functions and their graphs; and logarithmic and exponential functions. Prerequisite: A grade of C- or better in MATH 0980 or appropriate score on the math placement exam

MATH 1100

3 Credits

Contemporary Concepts in Mathematics

MnTC Goal 4

This course is designed to fulfill the general education mathematics requirements at four-year colleges. It will introduce and expand upon fundamental concepts of modern mathematics including work with sets, logic, the real number system, linear models, exponential growth, geometry, counting methods, probability, and statistics. Concepts studied will be used to develop strategies for solving real world problems. Prerequisite: A grade of C- or better in MATH 0980 or appropriate score on the math placement exam

MATH 1120 **4 Credits**
College Algebra
MnTC Goal 4
 Short review of elementary algebra topics; general problem solving strategies; solving first degree, second degree, and absolute value equations and inequalities; linear, quadratic, exponential, and logarithmic functions; systems of linear equations and inequalities; matrix algebra; solving polynomial equations; quadratic systems; fundamental geometric concepts. Prerequisites: A grade of C- or better in MATH 0980, a passing grade in MATH 0995, or appropriate score on the math placement exam

MATH 1125 **4 Credits**
College Algebra with Co-Requisite Support
MnTC Goal 4
 This is a College Algebra course required to be taken concurrently with MATH 0995. Students taking this course have basic algebra skills but need additional support provided in MATH 0995 to be successful in College Algebra. Topics covered include: a short review of elementary algebra topics; general problem solving strategies; solving first degree, second degree, and absolute value equations and inequalities; linear, quadratic, exponential, and logarithmic functions; systems of linear equations and inequalities; matrix algebra; solving polynomial equations; quadratic systems; fundamental geometric concepts. Prerequisites: A grade of C- or better in MATH 0970 or MATH 0990, or placement into MATH 0980 or MATH 0995 with appropriate score on the Math Placement Exam. Corequisite: MATH 0995

MATH 1160 **3 Credits**
Trigonometry
MnTC Goal 4
 Trigonometric functions, identities, and equations; right triangle trigonometry; circular functions; trigonometric and polar form of complex numbers. Prerequisite: A grade of C- or better in MATH 1120 or appropriate score on the math placement exam

MATH 1190 **4 Credits**
Accelerated Pre-Calculus
MnTC Goal 4
 A review of algebra, trigonometry, and elementary analytic geometry, inequalities, special functions, determinants, mathematical induction, inverse functions and graphing. This course is designed for the student planning to continue on in mathematics or related fields. Prerequisite: A grade of C- or better in MATH 1120 and MATH 1160 or appropriate score on the math placement exam

MATH 1210 **5 Credits**
Calculus I: Calculus and Analytic Geometry
MnTC Goal 4
 Study of limits, differentiation and applications of the derivative. The definite integral and applications, curve sketching. Prerequisite: A grade of C- or better in MATH 1160 or MATH 1190 or appropriate score on the math placement exam

MATH 1220 **5 Credits**
Calculus II: Calculus and Analytic Geometry
MnTC Goal 4
 Differentiation and integration of logarithmic, exponential, inverse trigonometric and hyperbolic functions. Techniques of integration, indeterminate forms, improper integrals, infinite series and sequences, and tests for convergence. Prerequisite: A grade of C- or better in MATH 1210 or appropriate score on the math placement exam

MATH 2010 **3 Credits**
Elementary Statistics
MnTC Goal 4
 Topics covered include using formulas and technology in solving problems, grouping and graphing data, measures of central tendency and variability, normal distributions, confidence intervals, hypothesis tests, and correlation. This course is designed to provide the students with statistical concepts and techniques used in sociology, psychology and related fields. Prerequisite: A grade of C- or better in MATH 0980 or MATH 0990, or appropriate score on the math placement exam

MATH 2070 **4 Credits**
Statistics and Its Applications
MnTC Goal 4
 This course is designed to give students a conceptual introduction to the field of statistics and its variety of applications. The class is applications-oriented and is presented with the needs of the nonmathematician in mind. Topics covered may include: data collection, summarizing and describing data, estimation and hypotheses testing, statistical inference, goodness of fit, analysis of variance, regression analysis, time series, forecasting, and quality control. Prerequisite: A grade of C- or better in MATH 0980 or appropriate score on the math placement exam

MATH 2080 **4 Credits**
Statistics for Social and Behavioral Sciences
 Students use basic mathematical and computerized procedures to analyze data in the social and behavioral sciences. Students use statistical software (e.g., SPSS, R, PSPP) to conduct descriptive and inferential data analyses. Students choose and apply statistical procedures to help to answer social and behavioral science research questions. Students read, interpret, and write American Psychological Association (APA) style results sections for social and behavioral science research. This course is dual listed with PSYC 2080. PSYC 1310 Intro to Psychology (Grade of 2.0 or higher) AND completion of Math MnTC requirement (MATH 1120 or 2010 or higher)

MATH 2100 **3 Credits**
Introduction to Modern Mathematics I
MnTC Goal 4
 Topics included are introduction to problem solving, whole numbers and numeration, the Hindu-Arabic system, relations and functions, operations with and properties of whole numbers, ordering and exponents, mental math and estimation, written algorithms for whole number operations, algorithms in other bases, ratio and proportion, distance and slope in the coordinate plane. Prerequisite: A grade of C- or better in MATH 0980 or appropriate score on the math placement exam

MATH 2110 **3 Credits**
Introduction to Modern Mathematics II
MnTC Goal 4
 This is the second course of a two-semester sequence in math for elementary education majors. Topics covered include geometric figures, measurement, algebra and functions, the rectangular coordinate system, graphing, equations of lines and slope, geometry using congruence and similarity, geometry using transformations, statistics, and probability. The student will also learn how to use a scientific calculator and practice with a graphing calculator. Prerequisite: A grade of C- or better in MATH 0980 or appropriate score on the math placement exam

Course Descriptions

MATH 2230

4 Credits

Calculus III: Calculus and Analytical Geometry

MnTC Goal 4

Study of solid analytic geometry, polar curves, vectors in space involving dot and cross products, vector functions, partial derivatives, directional derivatives, maxima and minima for functions of two variables, gradient, curl and divergence, line integrals, and calculus of vector fields. Learn double integrals, triple integrals in cylindrical and spherical coordinates, Greens, Stokes, and Divergence Theorems. Prerequisite: A grade of C- or better in MATH 1220 or appropriate score on the math placement exam

MATH 2330

5 Credits

Linear Algebra and Differential Equations

MnTC Goal 4

Study of matrices and systems of equations, determinants, vector spaces and linear transformations. Solve differential equations involving the standard first and second order types plus higher order linear equations with constant coefficients as well as an introduction to Laplace transforms. Prerequisite: A grade of C- or better in MATH 1220 or appropriate score on the math placement exam

MEDICAL ASSISTANT (MEDA)

MEDA 1002

2 Credits

Applied Communications/Scribing I

This course introduces the development of basic computer, and word processing techniques with emphasis on building speed and accuracy. A Windows-based word processing program will be used to provide opportunities for application of the keyboarding skill in formatting letters, reports, tables, memos, as well as editing, storage, and use of other basic software features. This course will also introduce basic medical scribing techniques.

MEDA 1102

2 Credits

Applied Communications/Scribing II

This course provides practical application of spelling, capitalization, and punctuation rules in the medical field. Various kinds of medical forms and technologies are utilized including letters, chart notes, scribing, history and physicals, and medical reports. Stress is on accuracy of grammar, spelling, punctuation, proofreading, and formatting. Prerequisite: MEDA 1002

MEDA 1110

3 Credits

Human Relations for Health Care

This course focuses on increased awareness of self and others in normal and abnormal situations.

MEDA 1135

3 Credits

Clinical Procedures I

This course covers the fundamentals of clinical medical assisting including documentation, patient interview, patient education, vital signs, physical exam, eye and ear, gastrointestinal, pulmonary, pediatrics, geriatrics, orthopedics, rehabilitation, and physical therapy.

MEDA 1225

3 Credits

Orientation to Medical Lab

This course is an introduction to the clinical lab setting, laboratory safety, specimen collection, laboratory math and measurement concepts, use and care of lab equipment, CLIA regulations, including patient test management and quality assurance.

MEDA 1235

3 Credits

Clinical Procedures II

This course covers the continued study of the fundamentals of medical assisting. Included in this course are minor surgery, drug administration, X-ray, emergency care and assisting in the primary care areas of women's health, prenatal care and obstetrics, men's health and urology. Prerequisite: MEDA 1135 or consent of instructor

MEDA 1313

2 Credits

Human Development for Allied Health

This course introduces the student to theories of human development, the progressive stages of physical, emotional, cognitive, and social development during the lifespan, and application in the healthcare setting.

MEDA 1324

1 Credit

Lab Skills I

This course includes physical and chemical examination of urine. Prerequisite: Successful completion of all program course work.

MEDA 1326

1 Credit

Lab Skills II

This course includes microscopic urine examination, occult blood testing, and immunology tests. Prerequisite: MEDA 1225, MEDA 1324, or concurrent enrollment

MEDA 1328

1 Credit

Certification Exam Review I

The course focuses on an overall review of theory covered in the first semester in the Medical Assistant program. Prerequisite: Completion of all program coursework of first semester, concurrent enrollment in second semester, and/or consent of instructor.

MEDA 1451

3 Credits

Practicum Seminar

This course covers the role of the medical assistant in relation to the following areas: ethical-legal issues, community resources, patient education, hiring practices, job seeking/keeping skills, DOT collections, and review of lab procedures. Prerequisite: Currently enrolled or successful completion of all related theory and practical courses

MEDA 1540

3 Credits

Medical Office Procedures

This course teaches medical office skills including filing, medical appointments, telephone techniques, billing, and handling medical records. Students will also learn medical insurance, insurance forms, as well as proper coding techniques using ICD-9-CM, CPT, and HCPCs. Prerequisite: GSCI 1102, MEDA 1010, MEDA 1021, MEDA 1113, concurrent enrollment or consent of instructor

MEDA 1900

3 Credits

Phlebotomy Practicum

This course is designed to provide on-the-job experience. The student will be assigned to work in a healthcare facility for a total of 120 hours. The student will work under the supervision of facility personnel performing tasks pertinent to the student's program curriculum. Prerequisite: All previous program courses

MEDA 2020

2 Credits

Certification Exam Review II

This course focuses on an overall review of theory covered in the Medical Assistant program. Prerequisites: Completion of all program coursework, concurrent enrollment in final semester, and/or consent of instructor

MEDA 2100**5 Credits****Practicum**

This course is designed to provide on-the-job experience. The student will be assigned to work in a physician's office for a total of 200 hours. The student will work under the supervision of office personnel doing tasks pertinent to the student's program curriculum. There will also be one required personal reflection paper to complete in which the student will evaluate his/her own performance during the entire program as well as evaluating personal growth. Prerequisite: Successful completion of all program course work

MEDA 2310**1 Credit****Laboratory Procedures I**

This course covers the fundamental of performing automated electrocardiograms: preparing the patient, applying leads correctly, recording and mounting the tracing. Standard 12-lead electrocardiograms will be performed. Monitoring of the heart rhythm will be discussed. This course will also cover fundamentals of spirometry testing. Prerequisite: MEDA 1010

MEDA 2320**2 Credits****Laboratory Procedures II**

This course focuses on medical laboratory procedures for basic manual and automated hematology tests, blood chemistry testing and medical microbiology. These include hemoglobin, hematocrit, cell counts, red cell indices, preparation of blood smears, differential counts, erythrocyte sedimentation rate, coagulation testing, measurement of chemical analytes in blood, inoculation and set-up of cultures, gram stain techniques and identification of common microorganisms. Prerequisites: MEDA 1225

MULTIMEDIA DESIGN TECHNOLOGY (MMDT)

MMDT 1002**3 Credits****Graphic Visualization**

This course is a basic introduction to design. Through a variety of techniques and exercises, emphasis will be on various approaches of the creative design process and basic visual language. The elements and principles of design will be introduced and explored through hands-on exercises, discussions, social media and critiques. Students will become more aware of design in the world around them and learn how to create effective design solutions.

MMDT 1008**3 Credits****Introduction to Computer Graphics**

This course provides an introduction to vector and image-editing software used in the design fields. Students will learn the basics of creating vector and raster graphics, utilizing file formats, along with a basic understanding of multimedia software.

MMDT 1010**3 Credits****Typography & Color Theory**

Theories of design will be discussed specifically related to typography and color. Students will be introduced to type terminology, the categories and anatomy of fonts, and font installation. In addition, students will learn typographic tips and techniques, and will utilize fonts in various formats. Color management will also be explored as it relates to various output forms. Students will understand various psychological responses to color in addition to color harmonies/schemes in order to use it more effectively.

MMDT 1021**3 Credits****HTML and CSS**

This course is designed to give students the basic skills they need to design web pages. Students will develop the skills they need to write, understand, and use HTML and CSS code in the creation of web pages. Course content addresses topics such as the use of HTML coding, HTML versions, browser differences, and CSS for page layout and design. In addition, students will navigate the World Wide Web and understand how web pages are delivered.

MMDT 1022**3 Credits****HTML II and JavaScript**

This course covers advanced topics in the use of the Hyper Text Markup Language (HTML). Students will develop the skills they need to create forms for data entry, embed multimedia, use cascading style sheets for printing, and the use of Javascript to enhance page function. JavaScript code will be written by hand and then debugged and managed using Macromedia Dreamweaver. Prerequisite: MMDT 1021 or CST 1021 and CST 1794

MMDT 1025**2 Credits****Networking Basics**

In this course students will learn how local networks, wide-area networks, and the Internet work. They will also learn about the various types of servers and the services they provide. This will be learned through the installation and configuration of a variety of application programs of the type used in organizations. Students will work with various types of network hardware in a hands-on lab setting.

MMDT 1041**3 Credits****Information Illustration**

Students learn the fundamental concepts and features to create vector art, illustration and information graphics using the precise drawing and typography tools of vector-based graphic software programs such as Adobe Illustrator. Students become fluent in the software through hands-on exercises including vector graphics, logos, page layout and information graphics output for print or web.

MMDT 1051**3 Credits****Image Editing**

Students will learn the basics of image editing software such as Adobe Photoshop. They will acquire competencies in image acquisition, selections, using tools and panels, using layers, customizing the work environment, and using paths and filters. This is a project-based course.

MMDT 1057**3 Credits****Electronic Publishing**

Students learn techniques for page layout and design using a page layout software such as Adobe InDesign. Concepts include basic tools, text formatting and flow, graphics incorporation, style sheets and master pages. In addition, Portable Document Format (PDF) will be introduced and used to create interactive PDF files.

MMDT 1088**3 Credits****Basic Digital Photography**

Students will learn basic knowledge of digital photography as it applied to multimedia titles and the Web. Students will work with digital cameras to produce a variety of photographic images for practical business applications using both creativity and technical skill. Industry-standard software will be utilized to manipulate photos for multimedia application.

Course Descriptions

MMDT 1112

3 Credits

Animation for Web Design

Students will develop animations that are optimized for real-world applications. Using industries most current technologies, students will create interactive and animated web content for output on desktops, a variety of browsers and devices.

MMDT 1124

3 Credits

Web Publishing

This course is designed to give students the necessary skills in setting up a website and publishing it publicly on the internet. Students will learn to create a live website with a functional structure, host their website on an actual web server, and manage their website's presence within search engine indexes.

MMDT 1126

3 Credits

Advanced Web Development

This course is designed to give students advanced skills in developing a web site. The use of HTML and CSS coding and advanced topics such as mobile and responsive development, accessibility standards, performance optimization, and complicated prototyping are covered. Prerequisite: MMDT 1124. Corequisite: MMDT 1022 or CST 1022

MMDT 1135

1-3 Credits

Internship

This course is designed to provide the student with a purposeful occupational experience in the field of graphics and design, web design, video editing or multimedia design. Each student's 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. Prerequisites: Instructor's approval, grade of C or better in program

MMDT 1142

3 Credits

Interface Design

Students learn the design of Web and mobile interface elements.

MMDT 1146

3 Credits

PHP Programming

In this course students will design and write programs using PHP, a widely used programming language used to make dynamic web sites and web applications. Students will write PHP programs to solve real world problems. PHP code will be written by hand and then debugged and managed using Adobe Dreamweaver. Students will be running their projects on an actual web server with PHP and MySQL installed. Prerequisites: CST 1794 and CST or MMDT 1021

MMDT 1152

3 Credits

Business of Multimedia

Utilizing the teamwork concept in multimedia production, the class simulates a multimedia production team, working together on real-world projects. Students will each have a position, creating proposals, budgets, and timelines for projects.

MMDT 1180

4 Credits

Multimedia Portfolio

Students will build a professional portfolio from initialization to completion. Students will develop a personal brand and professional presence in their career field of choice. Assessment in the guild of a comprehensive portfolio will focus on conceptual thinking, critical thinking, creative thinking, and communication skills.

MMDT 2146

3 Credits

Data Driven Web

This course is designed to give students the advanced skills they need to design a data driven web site. Topics covered in this course are: dynamically created web pages using data obtained from a database, the use of PHP as a server-side language to create the pages, and the use of MySQL as the database to store and obtain the data. Students will construct a business web site or application. Students will be running their projects on an actual web server with PHP and MySQL installed. This course is based on the use of textbook study and hands-on structured labs assigned by the instructor. Prerequisite: CST 1146 or MMDT 1146

MMDT 2950

1-6 Credits

Special Projects / Topics

This course provides an opportunity for a student to study topics delivered either on an individual or course basis. A student must show a special need to be able to enroll in this course.

MUSIC (MUSC)

MUSC 1000

1 Credit

Concert Choir

Concert Choir is the main performing ensemble which is open to all students by audition. The group performs at least two major concerts per year and takes a bi-annual tour. Exposure to a wide variety of musical styles is emphasized. This credit may be repeated as often as desired.

MUSC 1010

1 Credit

Chamber Singers

Chamber Singers is an auditioned select group which performs various types of choral music that is mainly a cappella. This credit may be repeated as often as desired. Corequisite: Simultaneous membership in MUSC 1000 - Concert Choir

MUSC 1070

1 Credit

Community Band

Participation in band includes rehearsals and performances which cover standard band literature. This credit may be repeated as often as desired. Prerequisite: consent of director

MUSC 1080

1 Credit

Community Orchestra

The orchestra is a performing ensemble that rehearses one evening per week and is made up of college and high school students as well as Willmar area community members. The group performs at least three major concerts a year often with guest artists and other performing ensembles. This credit may be repeated as often as desired. Prerequisite: consent of director

MUSC 1110

3 Credits

Introduction to Music

MnTC Goals 6, 8

An introduction to the experiential aspects of music through a study of its functions in society, in different cultures and in historical contexts. Indigenous music from world cultures and a variety of genres including rock and roll, classical, folk, jazz and blues will be examined.

MUSC 1210 From Bach to Broadway MnTC Goals 6, 8 This course is designed to survey the development of music through representative works and composers of many style periods. The course focuses on the role of music and musicians in Western culture. Emphasis is placed on developing good musical listening skills as well as becoming more knowledgeable members of an audience.	3 Credits
MUSC 1220 Music of the United States MnTC Goals 6, 7 Music of the United States is designed for non-music/music majors who desire to expand their knowledge of classical and contemporary American music. The course will include the study of orchestral instruments, American folk music, jazz, musical theatre, country and popular music. In addition to listening to the music of each different style period, students will study the lives of several composers/musicians from each style.	3 Credits
MUSC 1230 Fundamentals of Music MnTC Goal 6 This course studies the elements of music such as pitch, rhythm, scales, intervals, and chords. Basic sight singing/ear training skills will be introduced as well as beginning keyboard skills. MUSC 1230 is a course for liberal arts students and is recommended for elementary education students.	3 Credits
MUSC 1300 Basic Musicianship I MnTC Goal 6 First-year study of the fundamentals and structural elements of music such as scales, intervals, chords, and part-writing. Students will learn how to sight read and notate rhythmic, melodic and harmonic dictation. This course is open to all liberal arts students.	4 Credits
MUSC 1310 Basic Musicianship II MnTC Goal 6 First-year study of the fundamentals and structural elements of music such as scales, intervals, chords, and part-writing. Students will learn how to sight read and notate rhythmic, melodic and harmonic dictation. This course is open to all liberal arts students. Prerequisite: MUSC 1300	4 Credits
MUSC 1350 Survey of Rock and Roll Music MnTC Goals 6, 7 A survey of rock and roll music from 1954 to the present. Emphasis will be placed on listening to and identifying individual styles as well as delving into the historical development and social/political contexts of rock and roll music.	3 Credits
MUSC 1400 Music in World Cultures MnTC Goals 6, 8 This course studies music including formal, traditional and popular styles, its functions and its transformation in cultures in various areas around the world. Areas included but not limited to are: Asia, India, Latin America, and Africa.	3 Credits

MUSC 1500 Voice Class Class instruction in vocal technique for beginning students includes the study of voice production, posture, breathing, diction and pronunciation. Different styles of vocal music such as art songs, Broadway, jazz and folk songs will be explored. Basic music fundamentals such as note reading and keyboard skills will be introduced.	2 Credits
MUSC 1510 Applied Voice Private music instruction by arrangement in the following: voice and piano. An additional fee is charged. Lessons must be arranged with the instructor the first week of the semester.	1 Credit
MUSC 1520 Applied Piano Private music instruction by arrangement in the following: voice, piano, and guitar. An additional fee is charged. Lessons must be arranged with the instructor the first week of the semester.	1 Credit

NONDESTRUCTIVE TESTING TECHNOLOGY (NDT)

NDT 1030 Basic Liquid Penetrant Inspection This course covers basic principles and practices of liquid penetrant inspection. Students learn to use various types of penetrant materials, and the proper techniques necessary for reliable inspection. The course includes extensive hands-on training in the penetrant lab.	2 Credits
NDT 1045 Basic Radiographic Inspection This course introduces radiographic principles, terms, definitions, and theory to provide students with a fundamental understanding of radiation, measurements of radiation, radiographic imaging, film characteristics, processing, quality and interpretation.	6 Credits
NDT 1065 Basic Ultrasonic Inspection This course introduces ultrasonic principles of sound wave propagation, terminology and applications of ultrasonic inspections to provide the students with a basic understanding of calibration methods, thickness measurements, flaw detection and interpretation.	6 Credits
NDT 1080 Basic Eddy Current Testing Inspection This course will cover the theory of the production of eddy currents, calibration and operation of eddy current machines, and applications of eddy current testing.	3 Credits
NDT 1090 Basic Magnetic Particle Inspection This course introduces magnetic particle principles of electromagnetism, terminology and applications of magnetic particle inspections to provide the students with a basic understanding of inducing magnetic fields, flaw detection and interpretation.	2 Credits

Course Descriptions

NDT 1100 2 Credits

Manufacturing Processes

This course provides an overview of manufacturing processes to provide the student with a basic understanding of casting, forming, joining, heat treating, machining, and finishing.

NDT 1140 1 Credit

Basic Blueprint Reading

This course introduces principles, terms, and definitions of reading and understanding blueprints.

NDT 1501 1 Credit

Introduction to NDT

This course introduces terms, definitions, and an overview of key nondestructive testing methods including: eddy current liquid penetrant, magnetic particle, radiography, and ultrasonic testing.

NDT 1510 3 Credits

Fundamentals of Metallurgy

This course provides an overview of metallurgy and its application in industry. Topics covered include metallographic sample preparation, hardness and tensile testing, fundamentals of physical metallurgy and heat treating.

NDT 1516 1 Credit

Introduction to Codes/Specifications

This course introduces codes and specifications terms, definitions, applications, and interpretations.

NDT 1517 1 Credit

Introduction to Report Forms/Writing

This course introduces the student to the technical style of writing reports and test procedures commonly used in nondestructive testing.

NDT 1820 3 Credits

NDT Geometry and Trigonometry

This course covers geometry and trigonometry functions commonly used in nondestructive testing.

NDT 2030 1 Credit

Advanced Liquid Penetrant Inspection

This course covers evaluating liquid penetrant indications, interpreting standards and specifications, and checking penetrant system quality. Students will review fundamental liquid penetrant principles and techniques, develop and write procedures, and inspect welds, castings, forgings and machined components. Parts are evaluated according to relevant codes and/or standards.

Prerequisite: NDT 1030

NDT 2045 6 Credits

Isotope/Radiation Safety/Advanced Radiography

This course covers radiation safety principles and practices when working with radioisotopes. It also covers common radiographic techniques using both radioisotopes and x-ray machines, and addresses inspection of welds and castings in accordance with various codes and specifications. Prerequisite: NDT 1045

NDT 2052 2 Credits

Computerized Radiography I

This course covers the use of computerized radiographic systems.

Prerequisite: NDT 1045

NDT 2075 6 Credits

Advanced Ultrasonic Inspection

This course introduces the student to advanced principles of ultrasonic testing. Advanced applications will be performed using normal beam, angle beam and immersion testing techniques. Prerequisite: NDT 1065

NDT 2076 3 Credits

Advanced Phased Array Ultrasonic

This course covers an introduction to ultrasonic phased array testing and its applications, and includes linear and sectorial scanning setups utilizing A, S, and C scan imaging. The laboratory work includes performing each of these tests on flawed samples. Prerequisites: NDT 2075 or NDT 2062

NDT 2085 3 Credits

Advanced Eddy Current Inspection

This course presents advanced theory and application of eddy current testing. Prerequisite: NDT 1080

NDT 2090 1 Credit

Advanced Magnetic Particle Inspection

This course covers developing proper magnetic particle inspection techniques, quality control checks, interpretation, and reporting of indications. Prerequisite: NDT 1090

NDT 2150 1 Credit

Infrared Inspection

This course covers the theory of infrared inspection. The student uses an infrared camera, and other temperature measuring devices to determine temperatures, heat loss and gain.

NDT 2160 2 Credits

Applied Physics

This course will cover a math review and the elements of physics. Emphasis will be placed on velocity and acceleration, work and energy, simple machines, elasticity, fluids, thermal expansion, heat, electrical circuits, sound, and light.

NDT 2170 2 Credits

Advanced Visual Inspection

This course covers visual inspection tools, techniques, industry standards, and manufacturing processes to provide the students with the ability to perform measurements and interpret visual discontinuities.

NDT 2240 1-11 Credits

Internship I

This course provides students with a work-based learning experience within the field of nondestructive testing. The worksite and the internship agreement must be approved by the instructor and must include experience in one or more NDT disciplines.

NDT 2260 1 Credit

Composites

This course covers the basic information needed to understand processing and performance characteristics of composite materials. The course focus is on the fiber resin matrix composites and the nondestructive testing of those materials.

NDT 2510 1 Credit

Leak Testing

This course provides an overview of leak testing methods. Subjects covered include concepts of leaks, bubble testing, acoustical leak detection, and helium mass spectrometer detection.

NDT 2527**2 Credits****AWS Weld Evaluation**

This course covers the AWS code in detail. This course includes information on welding, NDT, and metallurgy.

NDT 2605**1 Credit****Introduction to Nuclear Reactors**

This course will cover the basics of the nuclear fuel process, the basic fission processes, fuels for power generation, the operating principles and components for both BWR and PWR systems. Also discussed are the types of drawings found in the power plant environment and various regulations and codes that apply to the inspection of nuclear reactors.

NDT 2950**1-6 Credits****Special Projects/Topics**

This course provides the opportunity for students to pursue topics and/or projects concentrating on concepts of current interest to Welding studies. The topics studied, and the projects chosen by the instructor and the students, will develop concepts that integrate and further develop skills and concepts essential to the Welding program.

NURSING (NURS / PRNU)

NURS 2700**9 Credits****Health Promotion and the Role of the Professional Nurse**

This course introduces the student to the role of the professional nurse. The emphasis on health promotion across the lifespan includes learning about self-health, as well as holistic client health practices. Students learn to access and apply research evidence to guide safe preventative care. The student will incorporate communication and growth and development theory in a caring and culturally sensitive manner. The student will work as an ethical member of multi-disciplinary teams giving and receiving feedback about performance and use reflective thinking about their practice. Within the context of the nursing process, populations studied will include children, adults, older adults and the family experiencing a normal pregnancy. The credit-to-contact hour ratio for this combined (lecture/lab/clinical) course is lecture 1:1, lab 1:2, clinical 1:3. Prerequisite: Admission to the MANE curriculum.

NURS 2720**4 Credits****Transition to the Role of the Professional Nurse**

This course is designed to expand the knowledge and skills of the LPN as they transition to the professional role within nursing. Emphasis is placed on health promotion through the lifespan and incorporates theories related to evidence-based practice, quality and safety, communication, collaboration, clinical decision-making/reasoning, informatics, assessment, caring, and health-illness continuum. The credit-to-contact hour ratio for this combined (lecture/clinical) course is lecture 1:1, clinical 1:3. Prerequisite: Admission to the MANE curriculum

NURS 2750**2 Credits****Nutrition and the Role of the Professional Nurse**

This course introduces the student to the role of the nurse in promoting and supporting nutritional health. Emphasis is on the role nutrition plays in health promotion/prevention of illness, recovery from acute illness and/or management of chronic illness. Students learn to access evidence to support healthy nutritional choices that reduce risk factors for disease and/or illness across the lifespan. Students explore how culture, ethnicity, socio-economic status, nutritional trends and controversies, and integrative therapies influence the nutritional health of the client. Prerequisite: Admission to the MANE curriculum

NURS 2800**7 Credits****Chronic and Palliative Care**

This course focuses on the nursing care of clients experiencing chronic illness and/or end of life. Emphasis is placed on understanding the "lived experience" of clients and families. Ethical issues related to advocacy, self-determination, and autonomy are explored. Evidence-based practice is used to support appropriate focused assessments and management of care of clients experiencing concurrent illnesses/co-morbidities. The credit-to-contact hour ratio for this combined (lecture/lab/clinical) course is lecture 1:1, lab 1:2, clinical 1:3. Prerequisite: Successful completion of all nursing courses from previous semester

NURS 2820**3 Credits****Pharmacology and the Role of the Professional Nurse**

This course introduces theoretical concepts that enable students to provide safe and effective care related to pharmaceuticals and natural products to diverse clients across the lifespan. A framework is presented for approaching the study of pharmacotherapeutics including pharmaceutical research and regulation, quality and safety, major drug classifications, and clinical management. Prerequisite: Successful completion of all nursing courses from previous semester

NURS 2850**2 Credits****Applied Pathophysiology for Nursing I**

This course introduces a holistic perspective of pathophysiological processes and the disruption in normal body function. Emphasis will be on objective and subjective manifestations of common chronic health problems' resulting from environmental, genetic, and stress-related maladaptation's to provide a foundation for nursing care. This course complements selected topics addressed in Chronicity and End of Life to provide a comprehensive understanding of disease processes. Prerequisite: Successful completion of all nursing courses from previous semester

NURS 2900**7 Credits****Acute and Complex Care Illness**

This course focuses on the nursing care of clients experiencing acute disruptions of health and/or end of life issues. Emphasis is placed on understanding and application of theory and skills required to provide nursing care to clients with complex and/or unstable conditions. Evidence-based practice is used to support appropriate focused assessments, and effective, efficient nursing interventions. Knowledge of life span, developmental factors, cultural variables and legal aspects of care guide the ethical decision making in delivery of care. The credit-to-contact hour ratio for this combined (lecture/lab/clinical) course is lecture 1:1, lab 1:2, clinical 1:3. Prerequisite: Successful completion of all nursing courses from previous semester

NURS 2920**2 Credits****Applied Pathophysiology for Nursing II**

This course will facilitate ongoing critical thinking and analysis of pathophysiological concepts. Emphasis will be on interpretation and prioritization of data resulting from environmental, genetic, and stress-related maladaptations. This course complements the selected topics addressed in Acute & Complex Care to provide a comprehensive understanding of disease processes. Prerequisite: Successful completion of all nursing courses from previous semester

NURS 2950**3 Credits****Nursing Leadership I**

This course focuses on prioritization, delegation, and supervision of nursing care of clients across the lifespan. Healthcare policy, finance, and regulatory environment issues are analyzed. Emphasis is on planning, collaborating and coordinating care for individuals and groups across the care continuum. The credit-to-contact hour ratio for this combined (lecture/clinical) course is lecture 1:1, clinical 1:3. Prerequisite: Successful completion of all nursing courses from previous semester

Course Descriptions

PRNU 1000

6 Credits

Foundations of Practical Nursing

This course introduces the student to the role of the practical nurse. The emphasis is on the introduction of concepts: teamwork and collaboration, safety, quality improvement, professional integrity and behavior, relationship-centered patient care, evidence-based nursing judgment, managing care of the individual patient, and informatics/technology. Within the context of the nursing process, the student will be introduced to nursing skills foundational to the role of the practical nurse. Prerequisite: Admission to the practical nursing program. Successful completion with minimum 2.0 in each Semester One (1) course.

PRNU 1200

3 Credits

Nursing Care of the Older Adult

This course introduces the student to the role of the practical nurse in the care of the older adult in restorative and residential settings. Emphasis is on the application of professional concepts of informatics/technology, managing care, evidence-based nursing judgment, relationship-centered patient care, professional integrity and behavior, quality improvement, safety, and teamwork and collaboration in the care of the older adult. The leading causes of mortality according to the Center for Disease Control serve as a foundation for discussion of health/illness exemplars. The student has an opportunity to demonstrate skills specific to the care of the older adult in the lab setting. Prerequisite: Admission to the practical nursing program. Successful completion with minimum 2.0 in each Semester One (1) course.

PRNU 1300

2 Credits

Pharmacology for the Role of the Practical Nurse

This course introduces the student to information on how medications effect the body and how the body processes medications. Emphasis is placed on drug classifications and nursing care related to the safe administration of medications to patients across the life span. Prerequisite: Admission to the practical nursing program. Successful completion with minimum 2.0 in each Semester One (1) course.

PRNU 1400

3 Credits

Clinical I

This clinical course provides the student an opportunity to apply concepts of informatics/technology, managing care, evidence-based nursing judgment, relationship-centered patient care, professional integrity and behavior, quality improvement, safety, teamwork and collaboration. The emphasis is on the care of the older adult in the clinical setting. Prerequisite: Admission to the practical nursing program. Successful completion with minimum 2.0 in each Semester One (1) course.

PRNU 1617

1 Credit

Medical Terminology

In this self-directed online course, the student learns basic medical terminology used in the role of healthcare. Within the context of the professional concepts of: relationship-centered patient care and safety; the student learns basic medical terminology applied to health illness concepts experienced by patients across the lifespan.

PRNU 2100

3 Credits

Nursing Care of Adults

This course focuses on health/illness needs of the adult person and incorporates professional concepts of informatics/technology, managing care, evidence-based nursing judgment, relationship-centered patient care, professional integrity and behavior, quality improvement, safety, and teamwork and collaboration within the context of care for an adult patient. The leading causes of mortality according to the Center for Disease Control serve as a

foundation for exemplars of health/illness concepts. The student has an opportunity to demonstrate skills specific to the care of the adult in the lab setting. Prerequisite: Successful completion with minimum 2.0 in each Semester One (1) and Two (2) practical nursing course.

PRNU 2200

3 Credits

Nursing Care of Women/Newborns/Children

Nursing Care of Women/Newborns/Children provides an integrative approach to the care of the childbearing woman, newborns, and children. Emphasis is on the application of concepts of informatics/technology, managing care, evidence-based nursing judgment, relationship-centered patient care, professional integrity and behavior, quality improvement, safety, and teamwork and collaboration in the care of women/newborns/children. Emphasis is on normal pregnancies, normal growth and development, and common health/illness problems of children. The student has an opportunity to demonstrate skills specific to the care of the women, newborns, and children in the lab setting. Prerequisite: Successful completion with minimum 2.0 in each Semester One (1) and Two (2) practical nursing course.

PRNU 2300

1 Credit

Transition to Practice

This course facilitates the transition of the student to a practical nurse graduate and the role of the Licensed Practical Nurse (LPN) in the workplace. Professional concepts of informatics/technology, managing care, evidence-based nursing judgment, relationship-centered patient care, professional integrity and behavior, quality improvement, safety, and teamwork and collaboration are examined within the scope of practice of the LPN. Prerequisite: Successful completion with minimum 2.0 in each Semester One (1) and Two (2) practical nursing course.

PRNU 2400

1 Credit

Psychosocial Nursing Care

This course introduces the student to health/illness concepts associated with behavioral disorders. Emphasis is on the application of professional concepts of informatics/technology, managing care, evidence-based nursing judgment, relationship-centered patient care, professional integrity and behavior, quality improvement, safety, and teamwork and collaboration in the care of the individual patient with psychosocial nursing care needs. Prerequisite: Successful completion with minimum 2.0 in each Semester One (1) and Two (2) practical nursing course.

PRNU 2500

6 Credits

Clinical II

This capstone clinical course provides the student an opportunity to apply concepts of information/technology, managing care, nursing judgment/evidence-based practice, relationship-centered patient care, professional integrity and behavior, quality improvement, safety, teamwork, and collaboration. The emphasis is on the individual patient across the lifespan. Prerequisite: Successful completion with minimum 2.0 in each Semester One (1) and Two (2) practical nursing course.

OCCUPATIONAL SKILLS (OSP)

OSP 1000

1-3 Credits

Job Keeping Skills

This course covers basic job keeping skills such as reliability, dependability, honesty, good attendance, punctuality, initiative, and good co-worker relationships and customer service.

OSP 1100

1-3 Credits

Job Seeking Skills

This course covers information students need to seek employment. Topics include job-related vocabulary, job applications, classified ads, resumes, interviews, thank you notes, networking, internet resources for job search, job search record keeping, and use of references.

OSP 1200

1-3 Credits

Career Assessment and Planning

This course provides an opportunity to explore occupational options. Students will identify their strengths and aptitudes to plan career goals.

OSP 1300

2 Credits

Basic Consumer Skills

This course covers consumer skills. Topics include paychecks, bank services, budgeting, credit and credit cards, loans and comparative shopping.

OSP 1320

2 Credits

Communications

This course covers speaking, listening, using the telephone, expressing oneself, and understanding body language. It covers written personal communication: keyboarding, computer use, notes, messages, letters, and forms.

OSP 1340

2 Credits

Personal Development

This course covers the decision-making process, self-advocacy, self esteem, social behaviors and time management.

OSP 1360

1-2 Credits

Relationships

This course covers human relationships including personal relationships, family relationships, values, and social behaviors. Emphasis is placed on helping students make appropriate and safe social choices.

OSP 1390

1 Credit

Community and Leisure Resources

This course covers skills necessary for students to identify and access community and leisure resources. These skills will allow students to access opportunities to assist them in vocational and social independence and enrichment.

OSP 1400

1-3 Credits

Transition to Independent Living

This course helps students identify skills needed for independent living at work and in daily life. Topics include: housing, transportation, personal budgeting, legal rights and responsibilities, insurance, and banking services.

OSP 1600

1-4 Credits

Topics in Occupational Skills

Topics in Occupational Skills is a course designed to cover skill acquisition in a specific training area. Some examples of special topics are: forklift driver's training, nursing assistant skills training, fry cooking skills, warehouse operations, and carpentry basic skills. Other topics will be developed according to student needs.

OSP 1700

2 Credits

Supervised Occupational Training Related Seminar

This course covers the knowledge and skills that are job-specific to the student's supervised occupational training experience. Instruction focuses on the technical aspects of the student's training as well as transferable skills.

OSP 1750

1-8 Credits

Supervised Occupational Training I

This course uses a community-based training site to teach job skills. Students participating in supervised occupational training will have individualized training agreement.

OSP 1850

1-8 Credits

Internship I

This course provides the student opportunity to apply knowledge and skills learned at the supervised occupational training site or in the classroom. The content for each student will be individually developed. The job site will be community based.

OSP 1900

4-8 Credits

Applied Job Search

This course covers active job search for students seeking permanent paid employment. Students will participate in a job seeking club.

PARAMEDIC (EMSP)

EMSP 1511

2 Credits

Introduction to Emergency Operations

This course provides students with current standards related to the roles and responsibilities of paramedics. Topics include well-being, personal protection, infectious disease control issues, communication and documentation, and legal responsibilities for emergency medical workers. Students will begin to be prepared to provide pre-hospital care within the scope of practice and capacity of the paramedic to ill or injured individuals. Prerequisite: Admissions to Paramedic program, NREMT Certification

EMSP 1512

2 Credits

Ambulance Operations 2

This course is part of a series of courses which prepare students to provide pre-hospital care within the scope of practice and capacity of the paramedic to ill or injured individuals. This course focuses on advanced ambulance operational issues and practices including, but not limited to hazardous materials response, natural and man-made events, emergencies requiring specialized response, and crime scene awareness. Prerequisite: EMSP 1595

EMSP 1520

4 Credits

Patient Assessment and Pharmacology

This course focuses on patient assessment, the emergency response, and medication administration. Topics include acquiring patient health history, physical examination, communication skills, and medical documentation. This course covers medications commonly used in the pre-hospital setting, how these

Course Descriptions

medications work, and how they are administered. Medication administration skills include working with oral, subcutaneous, intramuscular (IM), intraocular (IO), and intravenous (IV) meds. Prerequisite: EMSP 1511.

EMSP 1540 **3 Credits** **Shock and Trauma Care**

The course focuses on expanded study of the pathophysiology of injury and the acute effects of altered hemodynamic states in the traumatized patient. Specific topics covered include trauma systems, mechanism of injury, hemorrhage, shock, burns, thoracic trauma, and managing the multi-trauma patient. Prerequisites: EMSP 1552, EMSP 1590

EMSP 1552 **2 Credits** **Airway and Pulmonology**

This course provides in-depth assessment and treatment modalities for the patient who is suffering from an airway and/or respiratory emergency. In addition, this course will cover respiratory diseases, the pathophysiology behind them and appropriate treatments.

EMSP 1554 **4 Credits** **Cardiology**

This course provides in-depth assessment and treatments for the patient who is suffering a cardiac event including how to acquire and interpret 12-lead ECGs. Topics include cardiac anatomy, circulatory system, heart sounds, EtCO₂ monitoring and waveform capnography, ECG axis, identifying acute ECG changes, pathophysiology of the patient experiencing and acute myocardial infarction (AMI), and pharmacological and electrical interventions for the AMI patient. Prerequisite: EMSP 1552, EMSP 1590

EMSP 1560 **4 Credits** **Medical Emergencies**

This course is focused on the assessment and treatment of medical emergencies. The topics include, but are not limited to, neurology, gastroenterology, toxicology, hematology, and urology. Co-requisites: EMSP 1506 or instructor's approval

EMSP 1570 **3 Credits** **Special Populations**

This course focuses on care of patients who comprise special populations including OB/GYN, pediatrics, neonatology and geriatrics. Emphasis is placed on recognizing the differences in treating special population patients from that of the average adult patient and treating them appropriately. Prerequisite: EMSP 1595

EMSP 1590 **1 Credit** **Clinical I -BLS**

In this course, the student will apply medical skills and knowledge while being monitored by a qualified preceptor. Students will participate in clinical activities at an approved pre-hospital advanced life support service and will have a fundamental understanding of the paramedic treating patients. Prerequisite: EMSP 1511, EMSP 1520.

EMSP 1595 **3 Credits** **Clinical 2-ALS**

This course presents the concepts and information necessary for the student to apply classroom and clinical learning to the care and treatment of patients. The student will apply medical skills and knowledge as an ALS team member while being monitored by a qualified preceptor. Students will attend clinical at an approved pre-hospital advanced life support service as well as acute and tertiary healthcare settings. Prerequisite: EMSP 1590

EMSP 1598 **3 Credits** **Clinical 3-ALS**

This course continues the concepts and information necessary for the student to apply more classroom and clinical learning to the care and treatment of patients. The student will apply medical skills and knowledge as an ALS team member while being monitored by a qualified preceptor. Students will attend clinical at an approved pre-hospital advanced life support service as well as acute and tertiary healthcare settings. Prerequisite: EMSP 1595

EMSP 1610 **3 Credits** **Paramedic Capstone**

This course provides summative evaluation of the Paramedic student in the cognitive, psychomotor, and affective domains, allowing the student to sit for the National Registry psychomotor and cognitive exams. Prerequisites: EMSP 1512, EMSP 1570, EMSP 1598

EMSP 1620 **1 Credit** **Paramedic Psychomotor Skills Synthesis**

This course will provide opportunities to extensively practice skills essential for the Paramedic National Registry Psychomotor exam.

PHILOSOPHY (PHIL)

PHIL 1010 **3 Credits** **Introduction to Philosophy** **MnTC Goals 6, 9**

Philosophy is concerned with investigating some of the most fundamental questions about knowledge and existence. This course provides students with a general introduction to the major areas of philosophy, including classical and contemporary topics in epistemology, metaphysics, and value theory.

PHIL 1020 **3 Credits** **Introduction to Ethics** **MnTC Goals 6, 9**

Survey of philosophical systems of morality, including their scope and limitations. Applications to traditional and contemporary moral problems.

PHIL 1030 **3 Credits** **World Religions** **MnTC Goals 6, 8**

This course is an introduction to major world religions through the study of their texts, practices, beliefs, and experiences of practitioners. The focus of the course will be on the connections between beliefs and practices, including how they shape the diverse world we live in; in particular, how they shape our shared context of the United States. The course will cover various religions including Buddhism, Hinduism, Islam, Judaism, and Christianity. Throughout the course, students will explore diverse perspectives and experiences of each tradition and consider various forms of religious expression as a way of enhancing their global perspective.

PHIL 1100 **3 Credits** **Logic and Critical Thinking** **MnTC Goal 4**

Introduction to modern methods of logical analysis and critical thinking, including the analysis of logical fallacies, the elements of contemporary symbolic logic, and exposure to basic concepts of inductive reasoning.

PHYSICAL EDUCATION (PE)

PE 1020 **1 Credit**
Racquet Sports
 Beginning skills taught for the racquet sports of tennis, badminton and possibly other racquet sports. Rules and strategies also covered.

PE 1040 **1 Credit**
Weight Training
 To provide basic knowledge and techniques of fitness and conditioning. The course will allow an individual to set up an effective strength program when complete. Can be taken on an independent study basis.

PE 1060 **1 Credit**
Golf
 Students will learn the basic skills of golf, iron play, driving, chipping, and putting. Students will also learn the rules and strategies of golf. The students will also gain an understanding of golf etiquette.

PE 1080 **1 Credit**
Volleyball
 This course is designed to provide the participants with a basic understanding of volleyball through active participation in the sport. Beginning volleyball skills, rules and regulations will be covered in this activity course.

PE 1100 **1 Credit**
Recreational Activities
 Designed for Physical Education majors, but also as an elective for nontraditional students. Develop skills in billiards, ping-pong, bowling, racquetball, flag football, tennis, basketball, volleyball, badminton, and other related low-skill level activities.

PE 1140 **1 Credit**
Physical Agility
 Designed not only for law enforcement students, it is designed to provide a student the opportunity to enroll in a class for general physical conditioning.

PE 1160 **1 Credit**
Cardio and Core Training
 Students can choose from a variety of cardiovascular activities such as power walking, jogging, biking, Stairmaster, in-line skating, aerobics and cross training. Core training activities will include use of balance balls, plank exercises, kettlebells and Pilates.

PE 1180 **1 Credit**
Introduction to Yoga
 Yoga offers greater ability to relax, better flexibility and increased strength. You will learn yoga poses that will keep your body fit and breathing exercises to relax and reduce stress. When you practice yoga, you will gain better posture, higher energy levels and an increased feeling of well being.

PE 1190 **1 Credit**
Varsity Athletics I
 A first season of participation on an athletic team is required. Students may repeat this course if taken for/in different sports.

PE 1200 **1 Credit**
Self-Defense
 Self-defense training is basic information on avoiding dangerous situations and countering a personal attack to ensure enough time to remove oneself from the situation.

PE 1220 **2 Credits**
Wellness and Fitness
 This course assists and encourages positive lifestyle choices for wellness and fitness. Required fitness workouts and physical activity labs enhance understanding benefits of proper physical activity. Textbook and labs provide information on healthy dietary habits, disease risk reduction, stress management, and maintenance of a healthy body weight.

PE 1240 **1 Credit**
Resistance and Balance
 This class will assist and encourage students to make positive lifestyle choices for their individual wellness and fitness. Through classroom participation and assignments, students will develop an understanding of the benefits of proper physical activity, healthy dietary habits, disease risk reduction, stress management, and maintenance of a healthy body weight. Students can choose from a variety of activities to improve muscle tone and balance through the use of resistance bands, weighted balls, fitness balls and other low-impact strength training equipment.

PE 1300 **1 Credit**
Outdoor Activities
 This class is designed for Physical Education majors to develop skills, awareness and knowledge in all listed activities. Canoeing includes the use and care of canoes and all related equipment. Outdoor activities include many areas of outdoor recreation, including: cooking, gear & shelter, First Aid, hiking, nature interpretation and environmental ethics. In cross-country skiing, students learn about equipment, skills, clothing, safety and skills to enjoy this recreational activity.

PE 1400 **1 Credit**
Strength and Speed Development
 Students will learn advanced techniques and concepts in strength and speed. Development of power and explosion will be enhanced through plyometric, interval and aerobic training. The following classes do not count as required activity courses, but are primarily Physical Education major classes or electives.

PE 2000 **2 Credits**
Introduction to Physical Education
 This course is designed primarily for Physical Education majors and minors to help students discover a variety of careers available in the physical education discipline. The course stresses the purpose of physical education, careers as a teacher of physical education, careers other than teaching, the relationship of physical education to health, education and recreation. This is not a physical education activity class.

PE 2010 **2 Credits**
Introduction to Exercise Science
 This course introduces students to the professions under the Exercise Science umbrella. It will discuss the history of Exercise Science, career opportunities, specific education requirements and certifications required for the specific professions. Students will be exposed to these professions with hands-on learning experiences. The course will also provide an introduction to where the Exercise Scientist fits in the health care/health promotion team.

Course Descriptions

PE 2020 Anatomical Kinesiology Kinesiology is a broad-based, umbrella term for the holistic study of human movement. This course focuses on the anatomical perspective, primarily the skeletal and musculature systems, and specifically how these systems are applied in human movement.	4 Credits
PE 2050 Prevention and Care of Athletic Injuries Basic recognition, prevention and care of athletic injuries including practical experience in taking care of these injuries. Students will also learn about strength conditioning, nutrition, and rehabilitation methods for injured athletes.	2 Credits
PE 2090 Sport Skills and Officiating This course will study the theory, rules, and techniques of officiating and coaching sports.	2 Credits
PE 2100 Football Skills and Officiating Course studies theory, rules, and techniques of officiating and coaching football.	2 Credits
PE 2110 Volleyball Skills & Officiating Class combines volleyball skills (passing, setting, hitting, blocking) and officiating skills. Individuals learn skills, rules, and duties of officials.	2 Credits
PE 2120 Wrestling Skills and Officiating This course follows the guidelines of the MSHSL Rules. Students learn rules and mechanics of officiating. Wrestling skills and coaching methods are examined.	2 Credits
PE 2130 Basketball Skills & Officiating This course follows the guidelines of the MSHSL Rules. The student will not only learn the rules of the game, but also have the opportunity to officiate during the skills class. Basic basketball skills will also be taught.	2 Credits
PE 2140 Softball and Baseball Skills & Officiating This course follows the guidelines of the MSHSL Rules. The student learns softball and baseball rules and umpiring mechanics. Basic softball/baseball skills are covered.	2 Credits
PE 2150 Coaching Practicum This course is designed to provide students opportunities to gain knowledge and experience in coaching in a practical environment.	2 Credits
PE 2190 Varsity Athletics II Participation as a second-year player on a varsity athletics team. Students may repeat this course if taken for/in different sports. Prerequisite: PE 1190	1 Credit
PE 2200 First Aid/CPR This course is designed to provide participants with the knowledge of what they are to do in an emergency before medical help arrives. Participants will be instructed how to recognize an emergency and how to respond.	2 Credits

PE 2300 Introduction to Sport Psychology Overview of sport psychology topics about philosophy, motivation, team culture, communication, psychic energy management, stress management, attention styles and goal setting.	2 Credits
PE 2900 Cooperative Education Students are placed with supervising physical education teachers in elementary, secondary, and special education classrooms. 225 contact hours required. In addition to the field placement, students meet in weekly seminar at the college and complete additional course requirements. Prerequisites: Completion of 30 semester credits, a 2.0 GPA and consent of instructor	6 Credits

PHYSICS (PHYS)

PHYS 1000 Concepts in Physics MnTC Goal 3B An introductory physics course designed to introduce the student to the understanding and behavior of physical phenomena; such as mechanics, waves, and electricity which occur in the world. The course focuses on actual use of physics concepts and measurements. MATH 1090, Elements of Algebra, and Trigonometry are recommended, but not required. Courses offered on the Hutchinson campus only.	4 Credits
PHYS 1010 College Physics MnTC Goal 3B A two-semester physics sequence general education course for students interested in liberal arts studies, or such fields as agriculture, forestry, dentistry, pharmacy and biological sciences. This course addresses that part of physics dealing with motion, rotation, mechanical energy, sound and waves. Computer simulations and lab investigations are emphasized. Laboratory is included. Lecture - 3 hours. Laboratory - 2 hours. Prerequisite: MATH 1120 and MATH 1160 or equivalent	4 Credits
PHYS 1020 College Physics II MnTC Goal 3B A two-semester sequence general education course for students interested in liberal arts studies, or such fields as agriculture, forestry, dentistry, pharmacy and biological sciences. This course addresses that part of physics dealing with thermodynamics, electricity, magnetism, optics, and modern physics. Through discussion of lecture topics and laboratory investigations, students examine relationships between environmental systems including transportation, energy production, and nuclear power. This course requires a working knowledge of elementary algebra. Laboratory is included. Prerequisite: PHYS 1010	4 Credits
PHYS 1210 General Physics MnTC Goal 3B The first course of a general education physics sequence for students interested in liberal arts studies, or in the fields of physical science or engineering. This course focuses on the study of mechanics of particles and rigid bodies including kinematics, dynamics, conservation laws, linear momentum, and angular momentum. In addition, the topics of fluid mechanics and mechanical waves are covered. Laboratory is included. Corequisite: MATH 1210	5 Credits

PHYS 1220
General Physics II
MnTC Goal 3B

5 Credits

The second course of a general education physics sequence for students interested in liberal arts studies, or in the fields of physical science or engineering. This course focuses on thermodynamics, electricity, magnetism, and optics. laboratory is included. Prerequisite: PHYS 1210

POLITICAL SCIENCE (POLS)

POLS 1310
Introduction to Political Science
MnTC Goals 5, 9

3 Credits

A general introduction to the theory and practice of government and its relationship to society. Specific concepts that are of general usefulness rather than facts pertaining to particular countries or governmental institutions are stressed.

POLS 1320
American National Government
MnTC Goals 5, 9

3 Credits

An introduction to the basic structure and processes of American national government. Specific emphasis is placed on the historical background and contemporary inputs into the American political system, the structure of American national government and various outputs of the national government.

POLS 1330
State and Local Government
MnTC Goals 5, 9

3 Credits

An introduction to the basic structure and processes of the American federal system. The principle concepts, processes and institution of American state and local government are explored. Emphasis is given to federalism, taxes and function of state and local governments in Minnesota.

POLS 1350
International Relations
MnTC Goals 5, 8

3 Credits

An introduction to the concepts and practice of international relations. Special emphasis is placed on differing national systems, national interest and motivations, forms of interaction among countries, international institutions, the changing global economy, foreign policy formation, power politics, diplomacy, national security and war.

PROFESSIONAL PHOTOGRAPHY TECHNOLOGY (PHOT)

PHOT 1015
Lightroom

3 Credits

The beginning of the course will teach students basic Macintosh computer skills. Using Lightroom, students will learn how to organize their photographs. Students will perform basic and advanced color edits on their photos. Lastly the students will utilize creative presets and export their photos in a variety of formats.

PHOT 1016
Classic Portraiture

3 Credits

This beginning course in portraiture will help the student discover how to photograph a individual in a classic portrait studio setting. The emphasis will be on learning portrait studio equipment, posing, and lighting techniques. Students will get to bring in their own models to practice lighting patterns and posing, while enhancing their client communication.

PHOT 1018
Mobile Media for Business

2 Credits

Get the most out of your mobile device by creating branded photos and video, capturing high-quality audio, and producing effective social media advertisements.

PHOT 1019
Digital Cameras and Photography Concepts I

3 Credits

Take control of your camera by learning how to operate it in different modes leading to more consistent and creative photos. The foundation of this course introduces the relationship between shutter speed, aperture and ISO and how to use them to your advantage. This course is designed to give the student an understanding of digital cameras and composition. Students will also analyze various photographs using the elements and principles of design to extend photographic vocabulary. Students will have access to digital cameras, lenses and accessories while enrolled in this course. An active student ID is required to check out equipment throughout the semester, at no charge to the student.

PHOT 1020
Digital Cameras and Photography Concepts I

3 Credits

This course will focus on the advanced functions of a digital camera to enhance your creativity. Get the professional level results you've been looking for by maximizing image sharpness, consistent overall color tones, and the benefit of shooting in different file formats. Learn industry-standard, time-saving techniques such as back button focusing, and autofocus modes. Prerequisite: PHOT 1019

PHOT 1024
Photoshop I

4 Credits

This course will give the student an introduction to the computer program, Adobe Photoshop. Topics covered in this course will include navigating Photoshop, using the tool palette, working with layers, making color corrections, and working with image sizing and resolution. Students will work with blending modes and overlays as well as perform basic portrait retouching. Color theory as it relates to photography will also be discussed. A basic computer class or equivalent experience is necessary to be successful in this course.

Course Descriptions

PHOT 1027

4 Credits

Advanced Portrait Techniques

This course provides the student with advanced portrait work concentrating on the production of quality photography for the client. Skills and techniques to create a variety of styles of portrait photography will be examined. Flow posing, light modifier selection, and model variety will be a heavy concentration in this course. By being creative with lighting, camera settings, and lens selection, you will be able to transform your photography. Prerequisite: PHOT 1016

PHOT 1028

3 Credits

Commercial Photography I

This course will give the student a comprehensive working knowledge of product photography. Topics covered in this class will be basic lighting, exposure control, operation of continuous and studio strobe lights. Students will photograph different shaped products, glassware, monochromatic setups, and self-illuminating products such as laptops and lamps.

PHOT 2030

4 Credits

Commercial Photography II

In this course students will expand their knowledge to more advanced lighting techniques. Students will photograph several food setups and learn special effect techniques for food photography. Other topics covered will be large product studio photography, the technique of focus stacking images, and creating a magazine cover from photography to design. Prerequisite: PHOT 1024

PHOT 2032

3 Credits

On-Location Portraiture

In this course students will find or create ideal lighting conditions outdoors using natural light, reflectors, and on-camera flash. Students will utilize flow posing in a variety of outdoor locations in nature and urban settings to satisfy client needs and expectations. The second half of the course will cover window lighting for sessions such as boudoir, business headshots, and newborn photography.

PHOT 2033

3 Credits

Wedding Photography

This course is for students interested in the fast-paced wedding photography industry. Students will examine the process of wedding photography beginning at booking a client all the way through delivering the final images and products. A mock wedding ceremony and reception are included in this course for the students to gain experience, as well develop their problem solving skills. Basic camera knowledge is necessary to be successful in this course.

PHOT 2034

4 Credits

Photoshop II

In this course students will learn advanced Photoshop skills including color correction, layer masking, text styling and layering techniques. Topics covered include basic skin retouching, modifying marketing templates, and creating high dynamic range (HDR) images. Students will apply photo effects and compositing skills to create a photographic montage. Prerequisite: PHOT 1024

PHOT 2035

2 Credits

Off-Camera Flash Photography

Learn to set yourself apart from other photographers in the industry by using off-camera flash. In this course we will explore advanced settings of a speedlight. Creative projects include setting up a speedlight studio, creative color gels, and how to create dramatic skies in portrait photography. Nikon and Canon speedlights will be available for checkout, free of charge, for students enrolled in this course. Basic camera knowledge is necessary to be successful in this course.

PHOT 2040

2 Credits

Video Production I

This course is designed to give the student a basic understanding of video production. Topics such as proper use of a DSLR/mirrorless camera in video mode, composition, video lighting techniques, post production, and audio techniques will be covered. Basic camera knowledge is necessary to be successful in this course.

PHOT 2041

3 Credits

Basic Photo Business Applications

This course will give the student a basic understanding of business software applications that are used in photography businesses. Students will setup and operate client management software, accounting software, in-person sales software, and productivity software.

PHOT 2042

2 Credits

Photographic Presentations

This course is designed to give the student an understanding of the various methods of image display through the use of an electronic portfolio, and physical display of images. Students will research photographic vendors for potential use in creating products, such as canvases, metal prints, and albums.

PHOT 2043

3 Credits

Video Editing and Motion Graphics

Now that you have the video footage, how do you put it all together? This course equips the students with all the post processing information they need to know to create a professional video with all the modern technology, including green screen extraction, audio enhancement, animated on-screen graphics, and other special effects. Impressively edited video is the new communication tool for social media, small businesses, and consumers.

PHOT 2044

3 Credits

Video Production II

This course is designed to give the student an advanced understanding of video production. Topics such as using a wireless lavalier, capturing slow motion footage, using an electronic gimbal stabilizer, creating 360° video footage, using action cameras, capturing b-roll footage, and using a teleprompter and a clapperboard will be discussed. Footage will be edited using Adobe Premiere Pro. Prerequisites: PHOT 2040, PHOT 2043

PHOT 2046

4 Credits

Portrait Portfolio

This course is for the self-driven student who wants to explore and further develop their own style in their photography niche. It is a project-based course that allows you to break the rules of classic portraiture, and expand your portfolio. Prerequisites: PHOT 1027

PHOT 2048

3 Credits

Photography Business Development

In this course students will be introduced to networking opportunities to jumpstart their business whether that is in a retail space or a home studio. Basics in business development such as tax ID number, cost of doing business, assumed name form, pricing, taxes, markup and discounts will be covered. Students will create a personalized price list for their photography services. Other factors of operating a business will be discussed as well as tours of local photographers' studios.

PHOT 2050**3 Credits****Real Estate Photography**

This course is designed to give students the skills needed to be successful in real estate photography. Topics include operating your DSLR/mirrorless camera in manual mode, using natural light and off-camera flash to create highly effective images, and developing a pricing strategy. Students will apply several post processing techniques included HDR and corrective lens distortion using Adobe Photoshop. Basic camera knowledge is necessary to be successful in this course.

PHOT 2051**3 Credits****High-Volume Photography**

Learn the skills to photograph school pictures, church directories, sports photos and other quick turnaround types of photography sessions. Students will learn the tools and techniques necessary to photograph a high number of clients in a short amount of time all while staying organized and maintaining a consistent workflow. Indoor and outdoor lighting setups will be covered along with green screen photography. Post-processing and Memory Mate layout will also be covered. Basic camera knowledge is necessary to be successful in this course.

PHOT 2057**3 Credits****Internship**

Students who choose to do an external internship in the photography field will be responsible for seeking out an internship site, making contact with the supervisor, and coordinating details revolving around job duties. Tasks may include editing, assisting the supervisor, photographing, packaging orders, and studio organization.

PHOT 2058**3 Credits****Client Simulation**

Students who choose to do an internal internship with a department at Ridgewater College will have the opportunity to professionally represent the Photography Department. Students doing the internal internship may be asked to create marketing materials, department headshots, promotional videos, and photography to be used in advertising.

PHOT 2950**1-6 Credits****Special Projects/Topics**

This course provides an opportunity for a student to study topics delivered either on an individual or course basis. A student must show a special need to be able to enroll in this course.

PSYCHOLOGY (PSYC)

PSYC 1310**4 Credits****Introduction to Psychology****MnTC Goals 5, 7**

An introductory course in general psychology with emphasis on the scientific study of human behavior. This course is required before more advanced courses in psychology may be taken.

PSYC 1320**1 Credit****Laboratory in Introductory Psychology****MnTC Goal 5**

An experiential laboratory course in general psychology for all liberal arts students. The course will introduce the student to laboratory methods in psychology, the basic apparatus used to demonstrate important principles in scientific psychology, computers in psychology, and research methodology in the behavioral sciences. Prerequisite: PSYC 1310

PSYC 1650**3 Credits****Psychology of Women****MnTC Goals 5, 9**

This course is designed to study the subject of women in a sociocultural context. Psychological factors which shape the development and behavior of women in present society will be examined. Attitudes, biases and stereotypes will be explored in the light of present research. Prerequisite: PSYC 1310 or consent of instructor

PSYC 1680**2 Credits****Behavior Modification**

This course will acquaint the student with the basic principles of behavior modification. Practical application of these principles in securing the satisfactory adjustment of a client will be stressed.

PSYC 2000**3 Credits****Counseling Techniques**

This course is designed to provide students with a working model of counseling. It will equip them with practical working knowledge of those skills essential to facilitating the helping process in aiding individuals and families. Major emphasis will be the application of these skills in a laboratory approach. Prerequisite: PSYC 131

PSYC 2020**3 Credits****Group Process**

This is a study and experience of group process as it relates to the helping professions. Topics included are individuals in groups, nature of groups, group communication, growth groups, group leadership, and theory and practice of group counseling. Prerequisite: PSYC 2000

PSYC 2080**4 credits****Statistics for Social and Behavioral Sciences**

Students use basic mathematical and computerized procedures to analyze data in the social and behavioral sciences. You will use statistical software (e.g., SPSS, R, PSPP) to conduct descriptive and inferential data analyses. Students choose and apply statistical procedures to help to answer social and behavioral science research questions. Students read, interpret, and write American Psychological Association (APA) style results sections for social and behavioral science research. This course is dual listed with MATH 2080. Prerequisites: PSYC 1310 (grade of 2.0 or higher) AND completion of Math MnTC requirement (MATH 1120 or MATH 2010 or higher)

PSYC 2120**3 Credits****Psychology of Aging****MnTC Goals 5, 7**

A study of the aging process as it impacts the psychology of the individual. The course will examine helping relationships which assist the adaptation of the individual to the demands of senescence. Prerequisite: PSYC 1310 or consent of instructor

PSYC 2310**3 Credits****Pharmacology**

This class will cover how drugs are made, used and abused, and their effect on the health of human beings.

PSYC 2470**1-3 Credits****International Study****MnTC Goals 5, 8**

This course is designed to provide credit for international study experiences. Course requirements may vary but will include pre-departure, on-site, and post-trip meetings and assignments.

Course Descriptions

PSYC 2630

Developmental Psychology

MnTC Goals 5, 9

An investigation of human development from conception to senescence. The course will examine growth, change, and decline in the areas of social, physical, intellectual, and emotional development. Various motivational, maturational, and social learning theories in developmental psychology will be examined.

Prerequisite: PSYC 1310 or consent of instructor

3 Credits

PSYC 2750

Abnormal Psychology

MnTC Goals 5, 10

An introduction to the study of abnormal behavior. The course will examine the nature and causes of psychopathology, including consideration of diagnosis, classification and assessment of mental disorder. Clinical disorders, personality disorders, and therapeutic regimens will be surveyed as well as legal and ethical issues related to the helping professions. Prerequisite: PSYC 1310 or consent of instructor

3 Credits

PSYC 2800

Psychology of Adjustment

MnTC Goals 5, 9

A study of psychological foundations of adjustment. This is a seminar course with emphasis on various adjustment mechanisms and behavior patterns of individuals. Strategies useful in resolving maladjustment are examined. Prerequisite: PSYC 1310 or consent of instructor

3 Credits

PUBLIC HEALTH (PUBH)

PUBH 1050

Personal and Community Health

This course is offered as a face-to-face or online course. The course is designed to help students gain a better understanding of current health principles that affect the individual and community. The emphasis is on current health issues, nutrition, disease process, chemical use, family living and creating awareness in the health-educated person of the present and the future.

2 Credits

PUBH 1070

Nutrition (online)

This online course focuses on basic nutrients, their functions and sources. The student will examine nutrition in the healthy person at various age levels, interpret food labels, and study selected health problems related to diet. Concepts of therapeutic nutrition and special diets will be introduced. Current nutritional trends and controversies will be studied.

3 Credits

PUBH 1100

Drug Education

This course is designed to provide students with a working knowledge about the use and misuse of tobacco, alcohol, drugs and narcotics while developing an understanding of their impact on society, student life, and learning. This course will explore prenatal and postnatal drug use and the effects of usage on development and learning. Students will identify the impact of drug use by children/teenagers. Students will examine the psychological, physical, social, medical, and legal aspects of drug use. Students will access community action programs, sources of referral and rehabilitation, as well as drug education programs in our school systems and communities. This course complies with the requirements of M. S.A. 122A.66.

2 Credits

SCIENCE (SCI)

SCI 1050

Physical Science

MnTC Goal 3B, 5

Basic concepts of physics and chemistry as related to natural science. Course content includes: laws of motion, wave effects, nuclear physics, energy, gas laws, chemical formulas and reactions, and acids and bases. A general education course for the nonscience major.

4 Credits

SCI 1060

Introduction to Forensic Science

MnTC Goal 3B

This course uses forensic science as the background for studying the general principles of chemistry and biology. Students will see the many areas of forensic science and how it and criminal investigation are aided through the theories of the chemical and biological sciences. Topics included are blood analysis, hair analysis, firearms and identification, fiber comparisons, paints, glass compositions, soil comparisons, DNA analysis, and seminal fluid analysis. Upon completion of this course students should understand the potential value of forensic science and also the limitations. The principles and laboratory techniques of Fourier Transform - Infrared Spectroscopy (FT-IR), Polymerase Chain Reaction (PCR), Restriction Fragment Length Polymorphism (RFLP) and electrophoresis will also be covered in their relationships to forensic science.

4 Credits

SOCIOLOGY (SOC)

SOC 1050

Introduction to Sociology

MnTC Goal 5, 7

An introduction into the realm of sociology introducing and familiarizing the student with basic sociology, terminology, concepts and theories including culture, personality, stratification, group behavior, conflict and basic social attitudes and approaches. Human interaction is viewed through the prisms of family, state, religion, education and economics.

3 Credits

SOC 1060

General Social Problems

MnTC Goals 5, 9

A survey course dealing with the nature of social problems within our current society. In addition to this, general trends and components of social disorganization are introduced. Such areas as drug and alcohol abuse, racial conflict, ecology, crime and delinquent behavior and human structure are examined.

3 Credits

SOC 1070

Marriage and Family Living

MnTC Goals 5, 7

An analysis of the theoretical and practical aspects of courtship, marriage and family. The course examines a number of topics impacting on the family and marriage such as stages of marriage growth, economics, values, interpersonal growth, communication, mixed marriages, human sexuality, reproduction, child rearing, forms of marriage today, divorce, love and infatuation.

3 Credits

SOC 2105 Native American Studies MnTC Goals 5, 7 This course examines Native American culture as it pertains to its past and present physical environment, traditions, socio-cultural and spiritual interactions. Focus will be primarily on Northern Plains Native American people. Past and present issues and concerns will be covered.	3 Credits
SOC 2250 Sociology of Gender MnTC Goals 5, 7 This course is a sociological examination into the study of gender. As such, various sociological concepts, theories and methods will be included in the analysis of gender in society. Numerous intersecting topics related to gender will be covered including race, ethnicity, social class, work, politics and social change.	3 Credits
SOC 2400 Juvenile Delinquency MnTC Goal 5 The basic principles of the juvenile system including definition of a delinquent child, custody of juvenile, maltreatment of minors, juvenile records, juvenile procedures, juvenile courts, and causes and treatment of juvenile delinquency.	3 Credits
SOC 2410 Criminology MnTC Goals 5, 9 This course explores the dynamics, principles and theories of crime within our society. Specific attention is given to organized crime, crime prevention, crime control techniques, and the treatment and rehabilitation process.	3 Credits
SOC 2420 Racial and Cultural Minorities MnTC Goals 5, 8 This course will deal with cultural and social notions of racial, ethnic and cultural minorities in our society. This course will deal with the structure of the basic institutions of family, state, education, economics and religion and the integration of these minority groups into these institutions.	3 Credits
SOC 2430 Sociology of Aging MnTC Goals 5, 7 The course will deal with concepts of aging, social theories of aging, demographics, physical aspects, social relationships, retirement, income, housing, minorities, crime, health care, leisure, widowhood and other sociological and social implications of aging.	3 Credits
SOC 2440 Sociology of Death and Dying MnTC Goals 5, 7 The course will focus on death and dying in American society. It will examine attitudes, process, the hospital and the dying patient, the hospice movement, helping professions and the terminally ill, social work, suicide, funerals, grief and bereavement, cross cultural perspectives and reactions.	3 Credits
SOC 2507 Topics in Sociology MnTC Goals 5, 7 Topics courses will vary in subject and content.	1-3 Credits

SOC 2508 Topics in Sociology MnTC Goals 5, 8 Topics courses will vary in subject and content.	1-3 Credits
SOC 2509 Topics in Sociology MnTC Goals 5, 9 Topics courses will vary in subject and content.	1-3 Credits
SOC 2510 Topics in Sociology MnTC Goals 5, 10 Topics courses will vary in subject and content.	1-3 Credits

SPANISH (SPAN)

SPAN 1070 Beginning Spanish I MnTC Goal 8 This is the first course in a two-semester sequence in Beginning Spanish. This course is designed to introduce students to the skills they will need to function in the language with Spanish speakers in the U.S. or other countries. Proficiency is the focus of the course, using reading, listening comprehension, short writing samples and oral interactions. This course is designed for beginning language students.	4 Credits
SPAN 1080 Beginning Spanish II MnTC Goal 8 This is the second course in a two-semester sequence in Beginning Spanish. This course is designed to help students to continue to develop the skills they need to function in the language with Spanish speakers in the U.S. or other countries. Proficiency is the focus of the course, using reading, listening comprehension, writing samples and oral interactions. Journals, videos and readings expose students to a range of the most-commonly used grammatical structures and vocabulary. Students are introduced to variations within Spanish-speaking countries and cultures. This course is designed for advanced-beginning language students. Prerequisite: SPAN 1070 , one year of high school Spanish or consent of instructor	4 Credits
SPAN 2070 Intermediate Spanish I MnTC Goal 6, 8 This is the first course in a two-semester sequence in Intermediate Spanish, designed to solidify students' oral and written proficiency in the language. Students are exposed to the diversity of the Spanish-speaking world through reading and listening comprehension, writing and speaking activities. Short compositions, presentations and guided discussions encourage them to think and respond critically to the influences in art, music, environment, current events, social structures, and history of the countries and cultures presented. Prerequisite: SPAN 1080 or two years of high school Spanish or consent of instructor	4 Credits

Course Descriptions

SPAN 2080

4 Credits

Intermediate Spanish II

MnTC Goal 6, 8

This is the second course in a two-semester sequence in Intermediate Spanish, designed to further solidify students' oral and written proficiency in the language. Students continue to be exposed to the diversity of the Spanish-speaking world through reading and listening comprehension, writing and speaking activities. Compositions, discussions and debates further engage students in critical thinking about the influences of art, music, politics, and current and future trends of the countries and cultures presented. Prerequisite: SPAN 2070 or three years of high school Spanish or consent of instructor

SPAN 2100

4 Credits

Culture of Costa Rica through Study and Immersion

MnTC Goals 6, 8

Taught entirely in Spanish, this course is part of the Costa Rica Study Abroad Program. The purpose of the course is to introduce students to the cultures of Central America and, in particular, Costa Rica. Course topics will be chosen from areas such as literature, music, films, religion, education, politics, economics, and the environment. Discussions will focus on cultural traditions as well as current events. Prerequisite: Enrollment in the Costa Rica Study Abroad program

SPAN 2950

1-4 Credits

Special Topics in Spanish

MnTC Goal 6, 8

This course is intended for students who wish to continue their study of Spanish language and culture by studying various topics. The topics will vary with each offering of the course, as determined by the Instructor. Therefore, students are able to take the course more than once for credit, as long as the topic has changed.

THEATRE (THTR)

THTR 1400

3 Credits

Introduction to Theatre

MnTC Goal 6

A general survey of theatre, including aspects of its history, its function as a social force as well as an art form, and its components, such as plays, conventions, styles, acting, directing, and technical aspects.

THTR 1410

3 Credits

Introduction to Film

MnTC Goal 6

This course is designed to introduce and acclimate students to film as a significant artistic, rhetorical and cultural medium. Course content focuses on film as an element of popular culture, as well as film genres, cinematic techniques and cinematic conventions.

THTR 1420

3 Credits

Theatre Production and Stagecraft

MnTC Goal 6

The study of and actual practice in the technical aspects of theatre. A brief historical survey of scenic art and lighting as well as the practical methods currently employed in the staging of theatrical productions. Major projects with the main stage shows are required.

THTR 1450

1 Credit

Participation in Theatre

Active participation in theatre productions. Enrollment by approval of department. Maximum 5 credits.

THTR 1500

3 Credits

Beginning Acting

MnTC Goal 6

Acting theories, their backgrounds and applications, introduction to physical and vocal expression, development of poise and confidence. This course is not specifically designed for theatre majors, but for students in all fields who are interested in theatre.

THTR 2500

3 Credits

Intermediate Acting

MnTC Goal 6

A continuation of Theatre 0150, continuing exploration of physical and vocal expression. Additional focus on classical acting techniques, character development, and auditioning skills. Prerequisite: THTR 1500

VETERINARY TECHNOLOGY (VNTE)

VNTE 1000

1 Credit

Introduction to Veterinary Science

This course is an orientation to the field of veterinary technology and emphasizes veterinary medical terminology. Additional topics include the introduction of students to the role of the veterinary technician in the field of veterinary medicine, professional attitudes, ethical responsibilities of veterinary personnel, employment opportunities and potential job duties.

VNTE 1016

3 Credits

Veterinary Nursing Procedures I

This course will introduce concepts of hospital record maintenance, history taking, animal restraint, syringe/needle identification and handling and basic nursing procedures. It will also introduce concepts of the necessary care of kennel animals. Techniques emphasized will include initial physical examination, bathing, grooming, nail trimming, dermatological examination, applications of medications for treatments of eyes, ears, and skin, and injection techniques. Husbandry techniques, kennel management and sanitation of animal facilities will also be emphasized for dogs and cats.

VNTE 1037

3 Credits

Anatomy and Physiology I

This course will prepare the student to be able to compare and identify anatomical structures and basic physiological body functions of domestic animals. Body systems discussed will include: histology, special sense organs, integumentary, skeletal, and muscular.

VNTE 1056

3 Credits

Laboratory Techniques I

This course will introduce the student to the clinical laboratory, microscopes, and other equipment, and basic laboratory procedures. Maintenance of the clinical laboratory will be emphasized. Techniques for the identification of external and internal parasites of domestic animals will be utilized.

VNTE 1117 **4 Credits**
Veterinary Nursing Procedures III
 This course is a continuation of the nursing skills and techniques begun in Veterinary Nursing Procedures I. Techniques covered will include restraint, behavior, complete physical examination, wound management, and nursing care procedures for small animals. Emphasis will be placed on venipuncture, blood vessel catheterization, fluid therapy, bandaging and dental care procedures. Introduced topics will include first aid, CPR, ECG's, toxicology, and oncology. Prerequisites: VNTE 1000, VNTE 1016, VNTE 1037

VNTE 1137 **3 Credits**
Anatomy and Physiology II
 This course will prepare the student to be able to compare and identify anatomical structures and basic physiological body functions of domestic animals. Body systems discussed will include: cardiovascular, reproductive, renal, endocrine, nervous, and gastrointestinal. Prerequisites: VNTE 1000, VNTE 1037

VNTE 1147 **3 Credits**
Pharmacology
 Topics include recognizing types and groups of drugs; labeling and packaging dispensed drugs; using weights and measures and calculating drug dosages; discussing inventory of controlled substances; differentiating between normal and abnormal responses to medications; explaining the appropriate routes and methods of drug administration; and differentiating between prescription drugs and over-the-counter drugs. Prerequisites: VNTE 1016, VNTE 1037

VNTE 1157 **3 Credits**
Laboratory Techniques II
 This course is a continuation of the laboratory skills and techniques already begun. Techniques covered include further testing in hematology, urinalysis, blood chemistries, cytology, review of hematology and serology, and other laboratory skills utilized in veterinary hospitals. Prerequisites: VNTE 1000, VNTE 1037, VNTE 1056

VNTE 2210 **3 Credits**
Veterinary Clinical Skills I
 This course includes a compilation of veterinary technology skills that encompasses technical and didactic information focusing on a review of skills learned in previous semesters as well as service learning, animal care and management, career skills, laboratory techniques, clinical and applied pharmacology, and dentistry. Prerequisite: Successful completion of first 2 semesters VNTE coursework

VNTE 2218 **1 Credit**
Veterinary Large Animal Husbandry
 This course is an introduction to large animal husbandry and is taken simultaneously with VNTE 2219. Topics covered in this course include: restraint and handling techniques, large animal behavior, and nursing care of large animals. Emphasis will include large animal nutrition, industry terminology, physical parameters, and large animal breeds. Prerequisites: CHEM 1010, VNTE 1117, VNTE 1137. Corequisite: VNTE 2219

VNTE 2219 **2 Credits**
Veterinary Nursing Procedures of Large Animals
 This course is a continuation of the nursing skills and techniques begun in Veterinary Nursing procedures I and II. This course is taken simultaneously with VNTE 2218. Techniques covered will include restraint and nursing care of large animals. Emphasis will include preventive medicine, large animal medical, surgical procedures, food safety, lameness, physical examinations, and necropsy procedures. Prerequisites: CHEM 1010, VNTE 1117, VNTE 1137. Corequisite: VNTE 2218

VNTE 2230 **3 Credits**
Radiographic and Imaging Techniques
 This course includes the basic principles of the production of radiographs (X-rays), use of radiographic equipment and accessories, processing, identification, storage and legal records of radiographic films. Students will learn patient positioning and practice radiation safety. Prerequisites: CHEM 1010, VNTE 1137

VNTE 2246 **3 Credits**
Disease Processes
 The study of small and large animal diseases, the body's defense mechanisms, and control and management procedures for the more common important disease conditions of animals, and the public health significance of diseases that may be transmitted from animals to humans. Prerequisites: VNTE 1137, CHEM 101

VNTE 2310 **3 Credits**
Veterinary Clinical Skills II
 This course includes a compilation of veterinary technology skills that encompasses technical and didactic information focusing on a review of skills learned in previous semesters as well as laboratory techniques, office and mentoring skills, advanced nutrition, animal care and management, toxicology, applied disease, and advanced topics in emergency and critical care. Prerequisite: Successful completion of first 3 semesters VNTE coursework

VNTE 2325 **4 Credits**
Veterinary Surgical Nursing and Anesthesia
 This course will cover the use of anesthetics, anesthesia principles, patient monitoring, pre-surgery preparation and post surgical care of small animals, principles of surgery and sterilization, and surgical assisting. Dosage calculations will be reinforced and maintenance of anesthesia and surgical equipment will be introduced. Prerequisites: VNTE 1137, VNTE 1157, BIOL 2150, CHEM 1010

VNTE 2331 **3 Credits**
Veterinary Hospital Procedures
 This course includes routine office procedures with emphasis on client and public relations and education, ethics in veterinary medicine, state and federal regulations governing veterinary practices, and a hands-on laboratory covering all aspects of clinical patient care. Prerequisites: Successful completion of first 3 semesters VNTE coursework

VNTE 2340 **1 Credit**
Clinical Proficiency
 During this course, student's capstone knowledge and clinical skills from all veterinary technology courses will be assessed for proficiency. Remediation of knowledge and skills will be included. The course will also help prepare students and graduates for the Veterinary Technician National Examination (VTNE). The certification examination dates, application process, test domains, and test structure will be explained. Psychology and strategy of taking a test of this magnitude will be covered. Intense review sessions of all materials from the veterinary technology curriculum with a focus on the nine domains of the VTNE will occur including mock examinations. Prerequisite: Successful completion of first 3 semesters VNTE coursework

VNTE 2350 **3 Credits**
Avian, Exotic and Lab Animal Care
 This course concentrates on the principles and practices of laboratory animal care. This course also includes topics on the care and management of common species of birds, reptiles, and exotic pets. Discussion will include the following: husbandry, common diseases, nursing procedures and preventative health care and handling techniques. VNTE 1117, VNTE 1137, CHEM 1010

Course Descriptions

VNTE 2715

8 Credits

Veterinary Technology Internship

This course is a minimum of a twelve-week internship experience, averaging 35-40 hours per week for a total of approximately 450 hours. The internship will be within a veterinary clinic or hospital, laboratory, research facility, or zoological park. Students will observe, assist, and perform tasks as directed by supervisory personnel. Prerequisite: Successful completion of first 4 semesters of VNTE coursework.

VNTE 2811

1 Credit

Shelter Medicine

This course will introduce students to the role of the veterinary team at animal shelters and humane societies. Students will explore types of animal shelters, humane societies, animal welfare organizations, and issues associated with shelter medicine. This course will focus on technical skills of preventive shelter medicine and general animal health care. This course is not intended to introduce skills, but rather apply existing knowledge and explore the many facets of shelter medicine. Prerequisites: VNTE 1117, VNTE 1137, CHEM 1010 (may take concurrently)

VNTE 2812

1 Credit

Intro to Veterinary Physical Therapy

This course will introduce students to the concepts of small animal physical therapy. The student will become familiar with various techniques, equipment, and modalities used in rehabilitation and therapy. The course includes visiting a small animal physical rehabilitation facility. Prerequisites: VNTE 1117, VNTE 1137

VNTE 2825

1 Credit

Advanced Veterinary Behavior

This is a lab-based course that will introduce students to advanced veterinary behavioral procedures, equipment, and terminology. Activities will include discussion of drug use in veterinary behavioral procedures, veterinary behavior assessments, behavior treatment including counter-conditioning methods and observation of the human animal bond. Students will perform behavior observation, advanced behavioral treatments, training discussions with people that show dogs and become more familiar with how dogs and people interact together. Prerequisite: VNTE 1117

VNTE 2830

2 Credits

Pet Grooming

This course will introduce students to the basic concepts of pet grooming. Topics of discussion include preparation of pets for grooming, equipment selection, equipment use and maintenance, bathing and drying, and basic grooming patterns. Students will have hands-on experience with each of the topics. Prerequisite: VNTE 1117

VNTE 2950

1-6 Credits

Special Projects/Topics

This course provides an opportunity for a student to study topics delivered either on an individual or course basis. A student must show a special need to be able to enroll in this course.

WELDING (WELD)

WELD 1118

2 Credits

Agricultural Welding

This course teaches basic arc and oxyacetylene welding, basic welding and cutting. Brazing is included for non-fusion joining procedures.

WELD 1190

2 Credits

Fundamentals of Welding

The course introduces common welding processes used in industry today. Subjects covered include principles of joining methods, shielding gases, filler rods and wires, electrodes, power supplies, equipment and safety practices. Shop activities will be used to introduce the welding methods, equipment set-up and operation, welding procedures and safety expectations.

WELD 1201

2 Credits

Applied Mathematics for Welding Careers

This course is designed for students preparing for welding careers. Topics covered include numbers, decimals, fractions, percentages, ratios and proportions, area, volume, English and metric measurements, basic algebra, geometry, and trigonometry.

WELD 1310

3 Credits

Prints, Symbols, Joint Designs

This course covers basic principles of component, assembly and fabrication prints with the primary focus applied to welding manufacturing operations. Topics covered include drawing formats, terms and components of drawings, dimensioning, view interpretations, assembly, welding symbols and joint configurations. Hand drawings will be made using basic views and scales.

WELD 1311

2 Credits

Prints, Symbols and Joint Designs 1

This course covers basic principles of component, assembly and fabrication prints applied to welding manufacturing operations. Topics covered include drawing formats, terms and components of drawings, dimensioning, view interpretations, assembly, welding symbols and joint configurations. Hand drawings will be made using basic views and scales. Prerequisite: WELD 1311

WELD 1312

4 Credits

Welding Processes

The course introduces common welding processes used in industry today. Subjects covered include principles of joining methods, shielding gases, filler rods and wires, electrodes, power supplies, equipment and safety practices. Common industry codes are introduced to identify procedures, specifications and quality requirements. Detailed study will focus on the oxy-fuel and shielded metal arc welding (SMAW) process. Shop exercises will be used to introduce the welding methods, equipment set-up and operation, welding procedures and safety expectations.

WELD 1314

1 Credit

Gas Weld, Braze, Cut Shop 1

This shop course introduces oxy-fuel welding, brazing, and cutting. Students will perform welding, brazing and cutting exercises using oxyacetylene and other oxy-fuel combinations using various torch sizes and types and filler. In addition, various cutting exercises are introduced. Emphasis is placed on torch and filler rod techniques as well as joint quality.

WELD 1316 Shielded Metal Arc Shop 1 This shop course introduces basic skills related to the Shielded Metal Arc Welding process inducing electrodes, joint configurations, and electrode/puddle control. Close attention is paid to machine set-up and welding technique focused on the flat welding position.	2 Credits	WELD 1328 Gas Metal Arc Welding Shop 2 This shop course covers advanced procedures, techniques and skills necessary for proficient gas metal arc welding (GMAW) and flux cored arc welding (FCAW). Students will weld common joint configurations using procedures, materials and positions used in industry today.	4 Credits
WELD 1319 Gas Tungsten Arc Welding Shop 1 This shop course covers the fundamental procedures used in Gas Tungsten Arc Welding (GTAW), and provides hands-on exercises with a basic of joint designs in aluminum and steel.	1 Credit	WELD 1329 Gas Tungsten Arc Welding Shop 2 This shop course covers advanced procedures used in gas tungsten arc welding (GTAW), and provides hands-on exercises with a variety of joint designs, types of metals, thicknesses and joint positions used in industry.	2 Credits
WELD 1320 Computer-Aided Manufacturing This course introduces the student to applications of computer aided manufacturing. The student will learn basic functions of MasterCam software to operate equipment such as a CNC (Computer Numerical Control) mill, plasma cutting table, and robotic welder.	2 Credits	WELD 2100 Introduction to Machining This is a course for non-machine tool students. It is a course in basic machine tool operation of the lathe, vertical mill, and bench work. This is mostly hands-on training.	1 Credit
WELD 1321 Prints, Symbols and Joint Designs This course covers assembly and fabrication prints applied to welding manufacturing operations. Topics covered include dimensioning, view interpretations, assembly, welding symbols and joint configurations.	2 Credits	WELD 2101 Layout & Fabrication 1 This course is a study of fundamental sheet and plate layout techniques, allowances for forming, cutting, distortion, and warpage controls using fixturing. This course covers welding to close tolerances, layout methods for cylinders, and cones on pitch and square to rounds. Fabrication from drawing and prints are incorporated in this course using AWS and ASME specifications.	4 Credits
WELD 1322 Welding Processes, Metals and Fabrication This course expands on the Welding Processes course by focusing on gas metal arc welding, flux core arc welding, and gas tungsten arc welding. In addition, this course includes an overview of metals and how to weld them. Physical and mechanical properties of carbon steels, alloy steels, and cast irons, as applicable to the welder, are discussed. The shop/lab portion introduces students to each of the three welding processes and introduces basic concepts: related welding, layout, and fabrication techniques, machine set-up, and troubleshooting problems.	4 Credits	WELD 2103 Advanced GTAW Shop This more advanced shop work reinforces the basics. It challenges the student to produce high quality weldments to specific tolerances. The degree of difficulty is elevated.	2 Credits
WELD 1324 Gas Welding, Brazing and Cutting Shop 2 This shop course covers advanced techniques used on oxy-fuel welding, brazing and cutting. Students will perform several welding, brazing and cutting exercises on sheet metal and other shapes. Emphasis is placed on mastery of welding, brazing and cutting skills in multiple positions.	2 Credits	WELD 2105 Advanced GMAW and FCAW Shop In this course, small projects are fabricated to precise tolerances. Multiple Gas Metal Arc welding (GMAW) processes are used to welding carbon steels, stainless steel, and aluminum utilizing both light gauge material and heavy plate. AWS and ASME welding standards and procedures will be used. Prerequisite: WELD 1328	1-4 Credits
WELD 1326 Shielded Metal Arc Welding Shop 2 This shop course covers horizontal, vertical, and overhead arc welding in accordance to AWS and ASME welding procedures. Common joints types in various thicknesses are welded with 6010 and 7018 electrodes. Some sheet metal is welded with 6011 or 6013 electrodes. Proficiency will be demonstrated by qualification welds in flat, horizontal, vertical and overhead positions. Prerequisite: WELD 1316	3 Credits	WELD 2106 Metal Finishing Shop This class will allow the students to use the different power tools and abrasives to grind and finish welds to various standards.	4 Credits
WELD 1327 Gas Metal Arc Welding 1 This shop course provides an overview of the operation of gas metal arc welding (GMAW) equipment and introduces concepts including power supplies, shielding gases, short-arc and spray discharge, wire types and diameters, and welding in various positions. In addition, students will learn basic skills of the GMAW process.	1 Credit	WELD 2111 Layout and Fabrication 2 This course will combine CAD software and blueprints to develop and fabricate various weldments to the high standards and close tolerances required by industry. Prerequisite: WELD 1311	2 Credits
		WELD 2201 Pipe Layout and Fabrication This course involves pipe layout procedures on saddles, laterals, manifold construction, reducers, and flanges. Short and templet methods are used to do the layout of each job. Each of the above jobs are fabricated and welded in the shop to gain cutting and use pipe fitting procedures in accordance to ASME or API standards. Prerequisite: WELD 1311	3 Credits

WELD 2203**1-4 Credits****Pipe Welding Shop**

In this course, schedule 40 and 80 pipe will be prepared by cutting with a hand torch and machine beveled. Welding will be performed in four positions using various techniques, electrodes and processes. Students will learn the importance of proper preparation, fit-up and welding in accordance to AWS and ASME standards.

WELD 2204**1-4 Credits****Welding Qualification Shop**

In this course, students will study the qualification requirements of welding codes and specifications. Primary emphasis will be placed on AWS, ASME and API welder qualifications tests and procedures with ferrous and nonferrous sheet, plate and pipe. Visual and destructive testing will be used to evaluate the performance qualifications.

WELD 2206**1-4 Credits****Welding Fabrication Shop**

This course covers the phases of fabrication from design to fitup, welding and assembly as required for a specific fabrication project. The best welding process and practice will be used to complete the project. Students will sketch projects and then fabricate them using the various shop welding, cutting, and fabrication tools required.

WELD 2207**2 Credits****Welding Metallurgy and Qualifications**

This course will deal with the many different codes welders may work with and study the properties of ferrous and non-ferrous metals.

WELD 2828**2 Credits****Multi Axis CAM and Robotic Weld**

This course will develop skills in machine programming utilizing welding robotics, CNC plasma, shear, and CNC press brake. Students will coordinate the design, fabrication and welding of projects using automated equipment and processes.

WELD 2900**1-6 Credits****Internship**

This course provides students with a work-based learning experience within the field of welding and is intended to integrate classroom experience with targeted on-the-job experiences. The specific worksite and the training plan for each student must have prior approval of the instructor. In addition to meeting the prerequisite requirements, students are expected to be in their final semester and be able to satisfy all graduation requirements.

WELD 2950**1-6 Credits****Special Projects/Topics**

This course provides the opportunity for students to pursue topics and/or projects concentrating on concepts of current interest to Welding studies. The topics studied, and the projects chosen by the instructor and the students, will develop concepts that integrate and further develop skills and concepts essential to the Welding program.

WIRELESS COMMUNICATIONS (ELWC)

ELWC 2733**4 Credits****Radio Communication System Fundamentals**

This course presents the scope of the wireless communications industry, including government regulations and types of user systems and equipment. Antenna and transmission line theory, antenna multi-coupling and combining systems are also studied. Theory and application of cavity filters, duplexers, circulators, and RF-hybrids are also covered.

ELWC 2844**1 Credit****Voice Over IP Fundamentals**

This course focuses on the history of traditional POTS systems and the basic theories of Voice over IP design, planning, implementation, operation and troubleshooting. It covers a comprehensive overview of technologies, security, and design best practices. It also covers how traditional phone systems can interact with VoIP networks of the future. Prerequisite: CST 1700 (or for previous students ELEC 1712)

ELWC 2845**1 Credit****Radio and Voice over IP Network**

Radio over IP networking will introduce the student to the basics of radio over IP and voice over networking. Basic theory of traditional phone lines (POTS), designing, planning, applications, operation and troubleshooting of a ROIP/VOIP network will be covered.

CUSTOMIZED TRAINING AND CONTINUING EDUCATION

Customized Training and Continuing Education at Ridgewater College focuses on building long-term relationships with businesses and individuals. We play a significant role in central Minnesota's workforce development by helping organizations position themselves for the future.

CUSTOMIZED TRAINING

A partnership with Ridgewater Customized Training provides access to:

- Customized courses and workshops designed to meet organizations' specific needs for achieving performance improvement and accomplishing strategic plan objectives
- Proven, effective delivery systems and instructional methods
- Quality educational experiences with efficient pricing structures
- Broader access to college courses, programs, and workshops.

CONTINUING EDUCATION

Continuing Education identifies and provides individual and group lifelong learning opportunities. The objectives of continuing education at Ridgewater College include:

- Assisting adults in enhancing professional and personal development
- Providing courses that meet re-licensure requirements for occupational groups
- Responding to community needs, promoting interagency cooperation, and utilizing regional resources.

CERTIFICATIONS AND PREPARATION

The Certifications & Preparation training offered through Ridgewater's Customized Training and Continuing Education prepares people to meet certification and licensure requirements. Ridgewater is the region's leader in preparing workers to be top-notch. Be among the best!

Visit the website to view scheduled courses in one of our specialty areas:

- Crane
- Health Care
- Manufacturing & Trades
- Public Safety
- Transportation
- Non-Destructive Testing Technology
- Massage Therapy
- Custom Applicator
- Cosmetology
- Fire
- National Electric Code
- Boiler Operator

COMMERCIAL DRIVER'S LICENSE TRAINING (CDL)

Ridgewater College offers a unique, one-on-one training program for individuals looking to obtain their commercial driver's license. Students enrolled in our program enjoy the ability to schedule training time directly with our instructor when it works for them (upon availability). Additionally, because the instructional time is focused solely on their skills, abilities, and learning needs, students are able to complete the program with the same level of behind-the-wheel training as other programs at a fraction of the time. Our experienced instructors work to ensure that each student is competent in the skills they will need to be successful when taking their driving exam, and to become safe vehicle operators.

Pre-Training Requirements:

Students must complete all of these steps prior to beginning their CDL training:

- Obtain Commercial Learners Permit (CLP) by passing the state written DCL exam (must take behind-the-wheel exam within 6 months of obtaining CLP)
- Complete a DOT Physical Exam and have a health card
- Pass a DOT drug/alcohol screen (available at local clinics)
- Complete Student Vehicle Use agreement and be approved to drive State of MN vehicles

CUSTOM APPLICATOR

Ridgewater College partners with the University of Minnesota Extension Service, the Minnesota Extension Service, the Minnesota Department of Agriculture, and our own nationally-recognized agriculture program to provide quality safety skills, agronomy, equipment function, and maintenance. Learn from the best to be among the best. Commercial Driver's License training is available at the Willmar campus or on-site.

EMERGENCY MEDICAL SERVICES

Ridgewater's Customized Training and Continuing Education is a recognized regional leader in emergency medical services training for EMRs, EMTs, and paramedics. Our experienced instructors teach best-practice skills and share unique experiences. Become the EMS professional who remains calm and confident in your ability.

Visit the website to learn more about our training services:

- Emergency Medical Responder (EMR) initial and refresher
- Emergency Medical Technician (EMT) initial and refresher
- Emergency Medical Responder/Emergency Medical Technician bridge program
- Paramedic refresher
- EMR to EMT Bridge program

Customized Training

FIRE TRAINING

Ridgewater's Customized Training and Continuing Education fire instructors offer the broadest spectrum of training in the region. We can customize whatever training you may need. As a member of the Minnesota State Fire Training Consortium, Ridgewater is proud to offer relevant training, so when fire strikes, you are prepared to save lives. All training qualifies for Minnesota Board of Firefighter Training and Education (MBFTE) Reimbursement Funds.

HEALTH CARE

Ridgewater Customized Training and Continuing Education offers a variety of healthcare industry-specific courses. From our cutting-edge Simulation Centers, BLS and ACLS, these courses are designed to instruct participants in the many facets of one of Minnesota's strongest industries. We also offer federal- and state-approved training courses for physicians, nurses, nurse assistants, and other healthcare professionals.

Visit the website to view scheduled courses in one of our specialty areas:

- Emergency Medical Services/Prehospital
- CPR/First Aid
- Advanced Cardiac Life Support
- Pediatric Life Support
- Nursing Assistant Prep and Test-out
- Trained Medication Aide (TMA)
- Simulation

MANAGEMENT AND PROFESSIONAL DEVELOPMENT

Ridgewater College delivers a wide variety of classes aimed at helping businesses and employees thrive in the competitive world. Whether you are a business manager who wants to develop the skills of your workforce or you are an employee or job-seeker who recognizes the value of continuous improvement, we are here for you with a multitude of trainings and courses in Management and Professional Development.

Visit the website to view scheduled courses in one of our specialty areas:

- Leadership and Supervision
- Computer Training
- Human Resources
- Communication
- Team Building

MANUFACTURING AND TRADE

Ridgewater offers a wide spectrum of classes and training in the technical fields that are second to none. Whether your goal is to be more profitable in a global market or to enhance the safety of your local fabrication shop, Ridgewater is your resource for scheduled classes or customized training designed for you to address everything from welding to quality processes.

Visit the website to view scheduled courses in one of our specialty areas:

- Process Improvement
- Safety
- Welding
- Machining
- Machine Maintenance
- Automation/Robotics
- Entry-level Manufacturing
- Crane Operator

MOTORCYCLE TRAINING

Ridgewater College is a designated Minnesota Motorcycle Safety Center site with over 30 years of training excellence. Courses run from April to October.

- 3-day Weekend Basic Rider Courses
- 2-day basic Rider Courses
- Intermediate Rider Courses
- MN Advanced Rider Courses
- MN Expert Rider Courses

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INDEX

A

Academic Advising	16, 33
Academic Assistance.....	16
Academic Honors	21
Academic Standards & Financial Aid	10
Academic Suspension Guidelines & Procedures	21
Accountant.....	61
Accounting (ACCT)	94
Accounting Clerk	62
Accounting Technician	62
Activity Director (ADR).....	76, 95
Administrative Assistant (ADS)	63, 95
Admission Guidelines	5
ADV. MANUFACTURING & ENGINEERING TECH.	38-45
Advanced Placement (AP)	8
AGRICULTURE & VET TECH.....	46-55
Agriculture Course Descriptions (AGRI)	98
Agricultural Science and Technology.....	48
Agriculture Course Descriptions (AGRI)	92-98
Agriculture Power and Equipment Technician	48
Agri Business	46
Agronomy Applicator Technician.....	49
Agronomy Technology.....	49
Alcohol/Drug Abuse Policy	26
Alliss Education Foundation Grants	10
Anthropology	103
Appeals	22
Art	103
ART, DESIGN & VISUAL COMMUNICATIONS.....	56-58
Art Gallery	28
Articulated College Credit	6
Assessment for Course Placement	17
Associate Degree Nursing & Bachelor of Science-Nursing	79
Associate in Applied Science (AAS) Degree	34
Associate in Arts (AA) Degree	33
Associate in Science (AS) Degree	34
Athletics	28
Attendance	20
Audit	20
Auto Body Collision Technology (ABOD)	59, 104
Automation & Robotic Systems Technology (ENGT) .	38 105
Automotive Service Technology (AUTO).....	59, 106
AUTOMOTIVE TRADES.....	59-60

B

Baccalaureate Programs.....	34
Background Checks.....	9
Biology (BIOL)	108
Bookstores	17
Business (BUS)	109
BUSINESS & MARKETING	61-68
Business Transfer Pathway.....	85

C

Campus Recreation	28
Campus Security	26
Campus/Student Life Activities	27
Career Orientation (CAOR)	110
Career Services	16
Career Success Skills (CMAE)	110
Certificates	34
Chemistry (CHEM)	110
Classification of Student Status	7
CLEP	8
Clubs and Organizations	28
CNC Precision Manufacturing Technician.....	41
Coaching.....	82
College Admission	5
College Level Examination Program (CLEP).....	8
College Success (COLL)	111
Commons	27
Communication Studies Transfer Pathway	85, 111
Communications (Goal 1)	30
Computer-Aided Drafting and Design (DRFT)	40, 112
Computers and Networks	26
Computer Programmer (CST).....	81, 112
Computer Science	112
Computer Support Technician (CST)	82, 112
Consortium Credits.....	22
Cooperative Baccalaureate Programs	34
Cooperative Education.....	19
Cosmetology (COS).....	70, 116
Counseling Services	15
Course Descriptions	94-161
Course Placement	18
Course Test-Out	8
Credit by Examination	7
Criminal Justice Transfer Pathway.....	92
Critical Thinking (Goal 2)	30
Customized Training/Continuing Education	162-163
Cultural Diversity	28

D

Dairy Management	50
Data Privacy Policy	26
Degrees	29
Developmental Education	19
Diploma	34
Disability Services	16
Disclosure Statement	13
Discrimination	5
Discrimination and Harassment	5
Diversity	28
Drafting and Design (DRFT)	40, 112
Dropping and/or Adding Courses	14
Dropping Credits	13
Drug Abuse Policy	26

E

Early Childhood Education	73, 118
Earth Science (ESCI)	119
Economics (ECON)	120
Education (EDUC)	120
Educational Assistant (EDA)	121
Electrician/Electrical Technology (CNEL)	69, 122
Elementary Education Foundations Transfer Pathway	74
Email and Internet	26
Emergency Medical Services (EMS)	9, 124
Emergency Medical Technician (EMT)	76
Employment	11
Engineering (ENGR)	125
English (ENGL)	125
English Transfer Pathway	86
Entrepreneurship Certificate	67
Environmental Science (ENVS)	127
Equal Opportunity	5
Esthetics	71
Ethical and Civic Responsibility (Goal 9)	32

F

Family Education Rights and Privacy Act (FERPA)	26
Farm Operation and Management	51
Federal College Work Study Program	11
Federal Family Education Loan Program Guide	12
Federal Pell Grant	10
Federal Loans	12
Federal Supplementary Educational Opportunity Grant	10
Fees and Special Costs	12
FERPA	26
Financial Aid	10
Firearms	9
Formal Grade Appeal	24
Foundation Scholarship Program	11
Freshman/First Year	7
Full Time	7

G

General Information	5-28
General Studies	87, 129
General Studies Communications (GSCM)	127
General Studies Comp./Information Technology (GSCI)	127
General Studies Interpersonal Skills (GSIS)	128
General Studies Math/Sciences (GSMS)	128
General Studies Workplace Skills (GSWS)	128
Geography (GEOG)	129
Global Perspective (Goal 8)	32
Global Studies (GLST)	87, 129
Grade Appeal Policy	24
Grade Point Average	20
Grades	19
Graduation Requirements	20
Grants	10

H

Harassment	5
Health (HLTH)	129
HEALTH CARE	76-80
Health Information Technician (HIMC)	9, 76, 130
Health Promotions	19
Health Sciences Broad Field	77
Healthcare Administrative Assistant (ADS)	64, 95
Helpdesk Certificate	54
History (HIST)	131
History & the Social & Behavioral Sciences (Goal 5)	31
Honors	21
Human Diversity (Goal 7)	32
Human Services (HSER)	9, 132
Humanities (HUM)	132
Humanities and Fine Arts (Goal 6)	31

I

Incompletes	20
INFORMATION TECHNOLOGY	81-84
Interactive Television Networks	8
International Students	5
International Travel	17
Internet	26
Internships	19

L

Law Enforcement (LAWE)	132
Legal Assistant (ADS)	65, 89
LIBERAL ARTS PROGRAMS	85-89
Liberal Arts and Sciences	37, 88
Library	17
Linux Administrator	53
Loans	11

M

Machine Tool Careers (MACT).....	41, 134
Machining Technician	68
Manufacturing Production Technologies	40
Manufacturing Technology (CMAE).....	136
Marketing and Design	66
Marketing and Sales Management (MSM).....	66, 136
Massage Therapy (MTHE)	71, 137
MATH, SCIENCE & ENGINEERING.....	90
Mathematical/Logical Reasoning (Goal 4).....	30
Mathematics (MATH)	139
Medical Assistant (MEDA).....	9, 77, 141
Medical Coding Specialist (HIMC).....	9, 78, 130
Microsoft Office Specialist.....	74
Military Experience Credit	8
Minimum Standards.....	18
Minnesota State Grant	11
Minnesota Transfer Curriculum (MnTC).....	29
Multimedia Design Technology (MMDT)	56, 142
Music (MUSC).....	57, 143

N

NailCare Technology.....	72
Natural Sciences (Goal 3).....	30
Network Administration & Security (CST).....	83, 112
Nondestructive Testing Technology (NDT)	43, 144
Nondiscrimination	5
Non-Resident Tuition.....	13
Nursing (NURS).....	9, 79, 146
Nursing Assistant	9, 169

O

Occupational Skills	91, 148
Office Assistant.....	68
OnCourse	150
Orientation.....	26

P

Paramedic	9, 80, 149
Parking	26
Part Time	7
PEACE OFFICER, LEGAL & EMERGENCY SERVICES.....	92-93
Peace Officer.....	93
Peace Officer Transfer Pathway	93
Peer Tutoring	17
Pell Grant	10
People and the Environment (Goal 10).....	33
Personal Protective Equipment	27
Philosophy (PHIL)	149
Phlebotomy	80

Photography and Design	57
Photography Technology (Professional).....	57
Physical Education (PE)	150
Physical Education, Teaching and Coaching	88, 150
Physics (PHYS)	151
Political Science (POLS)	152
Poultry Management Certificate	53
Practical Nursing (PRNU)	79, 146
Precision Agriculture.....	53
Prior Learning Experience	8
Process Controls Technician.....	39
Professional Photography Technology	57, 152
Programs of Study Chart	36-37
PSEO	6
Psychology (PSYC)	154
Psychology Transfer Pathway	89
Public Health (PUBH)	155

R

Reciprocity	12
Refund of Tuition	13-14
Registration Adjustment	14
Registration Cancellation	13
Reinstatement of Financial Aid	10
Returning/Re-Admit Students	6
Ridgewater College Foundation Scholarship Program	11
Rights as a Transfer Student	26

S

Sales and Management Associate	68
Satisfactory Academic Progress	21
Science (SCI)	155
SELF Loan	11
Senior Citizens	6
Sociology (SOC).....	155
Sophomore/Second Year.....	7
Spanish (SPAN)	156
Special Education Transfer Pathway	75
Sports - Varsity Athletics	28
State Indian Scholarship	11
State Work Study	11
Student Center	28
Student Educational Loan Fund (SELF)	11
Student Exemptions	18
Student Help	11
Student Life	27
Student Senate	28
Student Services	15
Student Status	7

T

Technical Student Application Criteria	6
Test Center	19
Textbook Refund Policy	17
Theatre (THTR)	58, 157
Title IX	27
Tobacco Use	27
Transcripts	20, 26
Transfer	6, 25, 29
Transfer from Ridgewater	25
Transferring Credits	25
TRIO	16
Tuition Payment Options	11
Tutoring	17

V

Varsity Athletics	28
Veterans	6
Veterans Benefit Information	7
Veteran's Educational Benefits	11
Veterinary Technology (VNTE)	55, 157
Visiting Student	7

W

Waivers	14
Web Developer	84
Welcome	3
Welding (WELD)	44, 159
Windows Administrator	87
Wireless Communications	161
Withdrawals	13, 14
Withdrawing from All Courses	15
Withdrawing from a Single Course	15
Work Study	11
Written Intrasystem Agreements	25