## Century

 College D
# Century College Course Catalog 



3300 Century Avenue North, White Bear Lake, Minnesota

## NOTICE:

This catalog is for general information concerning Century College. It should not be considered a contract between the College and others. All charges for fees are subject to change as determined by the Minnesota State Colleges and Universities system. College procedures and course and program offerings may be altered upon recommendations of the faculty and the College Advisory Committee, and approved by the state board. All provisions within this bulletin are subject to change. Changes will be communicated on the website (century.edu). Students are responsible for understanding those changes that are announced publicly.
Chapter 1 General Information ..... 4
Chapter 2 Admissions and Registration ..... 6
Admission ..... 6
Determination of Minnesota Residency ..... 9
Assessment Services ..... 10
Orientation and Registration ..... 12
Costs. ..... 13
Refunds ..... 15
Chapter 3 Student Services \& Resource Information ..... 16
Admission Services ..... 16
myCentury Student Portal System/Email ..... 16
Advising, Counseling, \& Career Center ..... 17
Degree Audit Reporting System and Transferology ..... 18
English for Speakers of Other Languages (ESOL) Advocate ..... 18
Financial Aid for Students ..... 18
GPS LifePlan. ..... 20
Health Service ..... 20
Records \& Registration Office ..... 21
Services for Students with Disabilities ..... 21
TRiO Programs ..... 21
Student Resource Centers ..... 21
Transportation and Additional Services .....  23
Child Care ..... 23
Chapter 4 Academic Policies and Information ..... 27
Graduation Requirements ..... 30
Standards of Academic Progress ..... 33
Chapter 5 Educational Programs ..... 33
Educational Program Comparison ..... 33
Program Requirements ..... 33
Minnesota General Education Transfer Curriculum ..... 34
Preparation for a Bachelor's Degree ..... 39
Associate in Arts Degree ..... 40
Associate in Fine Arts Degree ..... 41
Associate in Science Degree ..... 42
Associate in Applied Science Degree ..... 42
Certificates and Diplomas ..... 43
Chapter 6 Programs of Study ..... 44
Chapter 7 Course Descriptions ..... 123
Chapter 8 Continuing Education and Workforce Training ..... 236
Chapter 9 College Administration and Faculty ..... 238
Chapter 10 Minnesota State Colleges and Universities ..... 244
Chapter 11 Student Handbook ..... 245
Chapter 12 Transfer Guide. ..... 253

## Chapter 1

## General Information

## Mission Statement

Century College inspires, prepares, and empowers students to succeed in a changing world.

This means:

- We inspire students to learn and to develop as whole people: intellectually, physically, and emotionally
- We inspire students to continue learning throughout life
- We prepare and empower students to be successful by helping them develop knowledge, skills and abilities needed to enter or progress within the work force or to transfer to a four-year institution, and to adapt and thrive in our increasingly diverse and ever-changing world.


## Values Statement

The Century College community values:

- inspiring learning
- broadening perspectives
- pursuing excellence
- responding to community needs
- achieving goals
- transforming lives
- celebrating achievement



## Vision Statement

To be a national leader in transforming lives through an innovative, rigorous, and compassionate approach to education.

This means:

- We continually strive to strengthen and improve the positive impact we have on our students and community: transforming their lives, as well as our own, through our work
- We will become known nationally as an institution that "makes a difference"
- We continually strive to innovate - finding new and more effective ways to educate and serve students
- We sustain rigor in our work - holding high standards and expectations for both our students and for ourselves
- We approach our work with compassion acknowledging the whole person, working
with integrity and caring, accepting people where they are and moving them forward without sacrificing standards or expectations; bringing joy, honesty, and understanding to our work.


## Accreditation

Century College is accredited by the Higher Learning Commission, a commission of the North Central Association of Colleges and Schools, 30 North LaSalle Street, Suite 2400, Chicago, IL 60602-2504; phone 800.621.7440. This facilitates the transfer of credit to Minnesota universities and colleges as well as to institutions throughout the United States. Additionally, the Century College Nursing Program is accredited by the National League for Nursing Accrediting Commission; the Dental Assistant and Dental Hygiene Programs are accredited by the

American Dental Association Commission on Dental Accreditation (ADA-CODA); the Paramedic Program is accredited by the Commission on Accreditation of Allied Health Education Programs; the Radiologic Technology Program is accredited by the Joint Review Committee on Education in Radiologic Technology; the Orthotic and Prosthetic Technician Programs are accredited by the National Commission on Orthotic
and Prosthetic Education; the Orthotic and Prosthetic Practitioner Programs are accredited by The Commission on Accreditation of Allied Health Education Programs; the Medical Assistant Program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon recommendation of the Medical Assistant

Education Review Board (MAERB); and the Automotive Service Technology Program has been evaluated by the National Automotive Technicians Education Foundation (NATEF) and is certified by the National Institute for Automotive Service Excellence (ASE). The Kitchen and Bath Design Program is endorsed by the National Kitchen and Bath Association.


## Chapter 2

## Admissions \& Registration

## General Admission Policies \& Procedures

Century College considers all applicants without regard to race, creed, color, sex, religion, age, national origin, or disability, and marital status, status with regard to public assistance, sexual orientation, gender identity, or gender expression. This institution abides by the provisions of Title IX, federal legislation forbidding discrimination on the basis of sex, and by all other federal and state laws regarding equal opportunity. Students who have graduated from high school or the equivalent (GED certificate holders) as well as current high school students who meet the Post-Secondary Enrollment Options program criteria or supplemental enrollment criteria are eligible for admission to Century College. Students will be charged a \$20.00 application fee.

Programs fill on a first come, firstserved basis unless otherwise noted. Admission to the college does not guarantee admission to a specific major or program.
All applicants must submit an application for admission either online or to the Admissions Office. Immunization documentation is required if applicants were born after 1956, but not required if applicants graduated from a Minnesota high school in 1997 or after.


## Steps to a Successful Start

## 1. Apply for Admission: 651.773 .1700

Complete a Century College application for admission at www.century.edu/apply/ or complete a paper copy and return it to the Admissions Office. Next pay the $\$ 20$ application fee. After your application has been processed, you will receive your student ID number in the mail along with instructions for activating your MnSCU Star ID account. If you have attended another MnSCU school and have an active Star ID you will not need to obtain a new Star ID account.
2. Apply for Financial Aid: (if needed) 651.779.3305

Complete the Free Application for Federal Student Aid (FAFSA) online at www.fafsa. gov Century College's financial aid school code is 010546 . For more information, go to www.century.edu/finaid

## 3. Submit Official Transcripts: 651.779.3908

- High School Transcript/GED Certificate- Submit to Admissions Office an official high school transcript/ GED certificate after graduation. Call Admissions at 651.773 .1700 for more information.
- College or University TranscriptsTransfer students will need to provide transcripts from each college/institution attended sent directly to the Transfer Student Services/DARS Office. Your intent, visiting or degree seeking, will determine whether an unofficial or official document is required. For more information go to: http://www.century. edu/currentstudents/transferservices/ transferin.aspx
- Or call the Transfer Student Services/DARS Office at 651.779.3908.

An official transcript must be sent directly from an institution to Century in a sealed envelope, or if hand-carried, transcripts must be delivered unopened with the
official seal intact. eTranscripts: if you have attended one or more MnSCU institutions (not including the University of Minnesota) and have applied to Century, your official transcript from a MnSCU institution(s) may be electronically retrieved by Century College at no cost. For more information go to www.century. edu/currentstudents/transferservices/ default.aspx
4. Take Assessment Test: 651.779.3352

Students must complete the Accuplacer test in Reading, English, and Mathematics or Accuplacer ESL prior to registering for courses at Century College. The results of your Accuplacer test will provide you with an accurate course placement based on your current skills. Afterwards, meet with an advisor to learn more about your results. For more information go to www. century.edu/futurestudents/assessment/
5. Complete Orientation: 651.779.3404

All new students to Century College (including transfer students) are required to attend an orientation session. All students must make an online reservation for the orientation session they plan to attend. Information about reserving your orientation session will be emailed to you prior to the beginning of registration.
The Nursing, Radiologic Technology, Paramedic, Dental Assisting, Dental Hygiene, Medical Assistant, Orthotic \& Prosthetic Clinical Applications, PostSecondary Enrollment Options and Supplemental Enrollment programs each have their own applications and admissions requirements. These programs have limited enrollment and admission is not guaranteed. These programs may require students to take the Century College assessment tests, regardless of previous college credits earned.

International students must see the International Student section for application details.

## TRANSFER STUDENT APPLICANTS

Students seeking a degree, diploma, or certificate and who have previously attended a college(s) must have official transcripts sent directly from the institution to the Transfer

Student Services/DARS Office at Century College, or if hand-carried by students, transcripts must be delivered unopened with the official seal intact. Student copies and faxed transcripts are not considered official.

If you are transferring credits to Century College and plan to complete a degree or program at Century College, your official transcript(s) will be evaluated as long as you are enrolled in courses at Century College for the current semester or summer and based on the date the transcript was received. Every effort will be made to evaluate transcripts in time for the next scheduled registration session and/or in time for your graduation. You will be notified via your Century College student email address when your transfer credits have been processed and are reflected in your degree audit report.
eTranscripts: If you have attended or are currently attending one or more MnSCU institution(s), not including the University of Minnesota, and have applied to Century College, your official transcripts from that MnSCU institution may be electronically retrieved by Century College. There is no cost for this service. Transcripts cannot be electronically retrieved if you have holds on your records from the MnSCU institution you previously attended including, but not limited to, unpaid balances. It is your responsibility to ensure that your records are free of holds in order for institutions to send or electronically retrieve your academic transcript. You must notify the Century College Transfer Student Services/DARS Office (dars@century.edu) when your records have been cleared for retrieval.

## TRANSFER STANDARDS

1. Transfer credit from institutions accredited by regional associations (North Central, Middle States, etc.) will normally be accepted by Century College subject to limitations in this catalog.
2. Treatment of grades: Grades earned prior to transfer are evaluated according to the following standards:
a) All college courses in which students have received a grade of $A, B, C$, or $D$ shall be considered for transfer evaluation. Grades of $P$ shall be accepted as earned credit. No F grade
course credits will be accepted in transfer. Programs with their own application standards may accept transfer grades differently. Transfer GPA is not used in computing Century cumulative GPA. Returning students who have not received a course-by- course evaluation should see a Century College advisor/counselor.
b) Based on the 2001 Omnibus effective January 1, 2002, once a course has met the criteria necessary for inclusion in the Minnesota Transfer Curriculum (MnTC) in any goal area(s), the course will be accepted for full credit in that goal area(s) at Century College. Completed MnTC goal area(s) and the 40 credits MnTC package transfer as well. See chapter 5 for more details pertaining to the MnTC.
c) Century College will consider for transfer applicable coursework transcripted by an accredited college as "Credit by Examination."
d) Credit achieved through experiential learning processes shall be evaluated, following students' petitions, according to published national standard guidelines established by the American Council on Education (ACE), the Council for Adult and Experiential Learning (CAEL), or other similar national organizations, as approved by MnSCU.
e) Competency Based Education (CBE) credits will transfer as general electives unless approved for other distribution requirements.
3. Comparability: Courses approved for transfer must be comparable in nature, content, and level and match at least 75\% of the content and goals of the course syllabus for which students are seeking equivalent credit.
4. Time limit: General education and elective credits shall have no transfer time limit.
5. Timeliness: The timeliness of credits applied to career programs will be considered when evaluating transfer credits. Technical career courses must have been taken within the past five years to qualify for transfer and to fulfill technical program requirements.
6. Equivalency: The number of transfer credits granted per course shall not exceed

## 2 Admissions \& Registration

the number granted by the originating institution.
7. Conversion: The conversion of quarter hours to semester hours is 0.667 for each quarter hour.
8. Repeated courses: When students transfer courses and later successfully repeat a course at Century College, only credit from Century College will be granted.
9. Applicability: Coursework accepted in transfer may not always be applicable toward a specific program.
10. Appeals: Students have the right to appeal transfer evaluations. Call 651.779.3908 for a Transfer Course Evaluation Appeal Form or see the college website under "Transfer Students."

## NONDEGREE-SEEKING APPLICANTS (NOT PLANNING TO EARN A CENTURY COLLEGE DEGREE, DIPLOMA OR CERTIFICATE)

Students who have completed other college work and want to use the credits to improve their registration priority must have official transcripts sent directly from the college(s) to the Transfer Student Services/DARS Office before the deadlines. For deadlines, see section: Transfer Student Applicants.

## APPLICANTS CURRENTLY ENROLLED IN HIGH SCHOOL: POST SECONDARY ENROLLMENT OPTIONS (PSEO)

The Post-Secondary Enrollment Options (high school options program) enables 11th and 12th grade students who meet PSEO-specific admissions requirements to enroll in courses for secondary school credit. PSEO is NOT an open enrollment program.

Students must meet specific minimum requirements to qualify for PSEO. The specific purposes of this program are to promote rigorous educational pursuits and provide a wider variety of options for students.

This program is not available during the summer session. However, students may enroll under supplemental enrollment guidelines (see below) during the summer. For an enrollment packet outlining PSEO application procedures, deadlines and requirements, students should contact their high school guidance counselor and the Century College Admissions Office at 651.773.1700.

## SUPPLEMENTAL ENROLLMENT

Students may qualify for supplemental enrollment but must meet the same entrance requirements as Post Secondary Enrollment Options (PSEO) students. This program is used primarily by PSEO students enrolling during the summer. Students are responsible for all costs. For an enrollment packet outlining application procedures and deadlines, please contact the Admissions Office at 651.773.1700.

## INTERNATIONAL STUDENT APPLICANTS

Prospective international students seeking an I-20 Form for full time F-1 visa status will be considered for admission after submitting the following:

1. The International Student Application for Admission. Forms are available from the Admissions Office or online at century.edu/futurestudents/admissions/ internationalstudentadmissions.aspx.
2. Official transcripts from each secondary school/high school, college, university, and English as a Second Language program attended. Transcripts must be sent directly from the institution to Century College. If students intend to transfer international education credits to Century, they must request an evaluation through World Education Services at www.wes.org or Educational Credential Evaluators, at www. ece.org, to request transcript evaluations. (NOTE: Students who have entered the United States to attend a college or university other than Century College must successfully complete one quarter/semester of academic work prior to transferring to Century College.)
3. Proof of English proficiency in the form of an official TOEFL score, MELAB score, or IELTS score. Scores must be sent directly to Century College from the testing organization.
a. Acceptable minimum scores for TOEFL are: 500 (paper test), 173 (computer) and 61 (IBT).
b. Acceptable minimum score for MELAB is 70 .
c. Acceptable minimum score for IELTS is 5.5 .
d. English proficiency for prospective international students may also be
determined by sufficient placement on the Accuplacer ESL test. The minimum placement for admission is ESOL 30s in all components of the test including: grammar, reading and listening.
e. Students transferring from a U.S. college who have completed collegelevel English composition and Reading courses with grades of $C$ or better may be waived from submitting official test scores as listed above.
4. A Financial Guarantee along with supporting bank documents or proof of support. Students must demonstrate they have sufficient financial resources available to pay for tuition, fees, books, room and board, transportation, and all incidental expenses before they can be admitted to Century College.

Once admitted to Century College, international students are required to purchase the Minnesota State Colleges and Universities (MnSCU) International Student Injury and Sickness Insurance in addition to providing proof of immunization for diphtheria, tetanus, measles, mumps, and rubella. International students will be required to take a Tuberculin Skin Test to determine exposure to tuberculosis during their first semester.

In addition to complying with all Century College policies related to academic performance and student conduct, international students are required by law to remain in compliance with all regulations put forth by the United States Citizenship \& Immigration Services that pertain to their student status.

## Minnesota Cooperative Admissions Program (MnCAP) - University of Minnesota

Century College and the University of Minnesota have signed an agreement that will simplify transfers and improve educational options for college students.
Individual agreements have been established with the Colleges of Biological Sciences, Design, Education and Human Development, Food, Agriculture and Natural Resource Sciences, Liberal Arts and Science and Engineering on the Twin Cities Campus of the University of Minnesota.

Joint admission allows students who meet admission requirements to enter a community college and have the same opportunity to enter upper division university programs as students who enter the University of Minnesota as freshmen. Students must complete designated courses and maintain requisite grade point averages.

Students who begin their studies at Century College have four years in which to transfer to the University of Minnesota. For more information, contact any Century College advisor/counselor.

## Determination of Minnesota Residency

Minnesota residency is determined by the information provided on the application at the time the application is submitted. The residency policy in effect at the time the student applies will be used to determine residency. Students who have been classified as non-residents may petition for in-state tuition by demonstrating domicile in Minnesota before the beginning of the semester. It is the students' responsibility to prove domicile for the purpose of in-state tuition. The Registrar will make a determination on the petitioner's request within 10 days of receiving the petition and supporting documentation. Petitions for Residency may be picked up at Records and Registration. Refer to the MnSCU Board Policy for additional information or clarification of residency.

## Definition of Domicile

Domicile is a person's true, fixed, and permanent living space. It is the place to which a person intends to return after temporary absences. A person may have only one domicile at a time.

## Part I: Minnesota Residency Qualifications

Students shall be eligible to pay in state tuition if they meet one of the following criteria:

1. Reside in Minnesota for at least one calendar year prior to applying for admission, or dependent students whose
parent or legal guardian resides in Minnesota at the time students apply. Students must have an eligible immigration status for residency.
2. Demonstrate temporary absence from the state without establishing residency elsewhere.
3. Residents of other states or provinces who are attending a Minnesota institution under a tuition reciprocity agreement. Please note that it is the students' responsibility to file the necessary paperwork with the home state in order to qualify for reciprocity. Each state will post its own deadline.
4. Persons who: (i) were employed full time and were relocated to the state by the person's current employer, or (ii) moved to the state for employment purposes and, before moving and before applying for admission to a public post secondary institution, accepted a job in the state, or students who are spouses or dependents of such persons. A letter from the employer substantiating employment must be submitted at the time of application. J-1 students accepting employment as an au pair prior to moving to Minnesota and before applying for admission are eligible for in state tuition. Form DS-2019 must be submitted with international application for review.
5. Students who have been in Minnesota as migrant farm workers, as defined in Code of Federal Regulations, Title 20, section 633.104, over a period of at least two years immediately before admission or readmission to a Minnesota public postsecondary institution, or students who are dependents of such migrant farm workers.
6. Nonimmigrant Japanese students who have completed a program of study of at least one academic year at Akita campus and have been recommended by the provost for transfer to a Minnesota state college or university and who retain their legal visa status.
7. Students who are recognized as refugees or asylees by the Office of Refugee Resettlement of the U.S. Department of Health and Human Services. (source: Minnesota Statute 135A.031, subd. 2).
8. U.S. Military personnel serving on active duty assigned in Minnesota and their spouses and dependent children. Documentation must be provided at the time of application.
9. Nonimmigrant students on K visas married to military personnel will be granted in-state tuition. Documentation must be provided at the same time of application.

## Part II: Students Eligible to Petition for Residency

Any student who has been classified as nonresident may petition eligibility for in-state tuition by demonstrating domicile in Minnesota before the beginning of any semester. Please note that residence in Minnesota must not be merely for the purpose of attending a college or university. The following nonimmigrant students may be eligible to petition for residency:

1. Nonimmigrant students on H, K, L, P, TN, or TD visas that have resided in Minnesota for 12 months prior to registering for classes may petition for resident tuition status. Students must submit the Petition for Residency with appropriate documentation before the first day of the semester.
2. Enrolled nonimmigrant international students on F1 visas may receive resident tuition status through the International Student Incentive Program. To be eligible students must have (I) completed a minimum of 45 college-level credits at Century College, (II) maintained a 2.00 GPA, (III) met all their financial obligations to the college, and (IV) maintained F1 status. Students must submit the International Student Incentive Program Application with appropriate documentation before the first day of the semester. Applications may be picked up in the Multicultural Student Center.
3. Permanent Residents/Resident Aliens and Asylees are not eligible to petition for in-state tuition until they have been awarded permanent residence or asylee status, provided they live in Minnesota for at least 12 months prior to the first day of the semester.
4. Students on Temporary Protected Status (TPS) are eligible to petition for residency, if

## 2 Admissions \& Registration

they can prove the TPS status is still valid. Students on TPS will be required to petition annually for resident tuition.

## PART III: PETITIONING FOR RESIDENCY

Petitions for Residency are available in the Records and Registration Office. Petitions and supporting documentation must be filed no later than the first day of semester for which students are seeking resident tuition rates. Each of the following facts and circumstances will be considered when responding to a petition for in-state tuition. No one of these factors is either necessary or sufficient to support a claim for in-state tuition. For each factor, the student petitioner must submit appropriate documentation to support the claim. Examples of acceptable documentation are listed on the Petition for Residency itself.

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

Examples of acceptable documentation:
a. Voting registration.
b. The lease of living quarters.
C. A statement of intention to acquire a domicile in Minnesota.
d. Automobile registration.
e. Domicile of a student's spouse in Minnesota.
f. Other public records, e.g., birth and marriage records.

Assessment Services

## ASSESSMENT TESTING

Students must complete the Accuplacer tests in Reading, English, and Mathematics prior to registering for courses at Century College (see Assessments for Transfer Students for possible
exceptions). The Minnesota State Colleges and Universities System requires assessment testing to determine proper course placement and to support students' academic success. Students must complete the appropriate assessment(s) prior to enrolling in any course for which a given assessment level is required. Students must begin any course work in reading, writing, and mathematics at their assessed skill levels. Students may not register for courses above their assessed skill level. Lack of English skills will not be a barrier to admission or participation. In order to eliminate barriers we take appropriate measures to assess each student's ability to participate and benefit through placement testing and advising/counseling. Based on assessment and advising/counseling, students are then provided with campus services or a referral to community services to be better prepared for successful participation at Century College.

Students who are non-native speakers of English and who have had fewer than eight (8) years of education in the United States must complete the Accuplacer ESL and may also be asked to take the Accuplacer test in reading, English, or mathematics. Students who qualify to take the Accuplacer ESL must have a referral form signed by the ESOL Advisor before he/she can take the Accuplacer.

Students must have a valid picture ID and a Century College Student ID number in order to take the assessment test. If students do not have a Century College Student ID number, they will have to complete a Century College application prior to taking the assessment test. Century College has mandatory placement into courses based on test results. (Exception: High school students applying for PSEO or the Supplemental Enrollment Program do NOT need to provide a Century ID number, nor have completed an application.) Children are not allowed in the testing center, and must not be left unattended anywhere on campus.

Accuplacer, Accuplacer ESL, Companion to Accuplacer, and the ACT test are approved for placement purposes by the Minnesota State Colleges and Universities Assessment/ Placement Director and Committee and Century College. Accuplacer scores in reading are valid indefinitely. ACT scores in reading and assessment scores in English and ESOL are valid for six (6) semesters, and assessment scores in mathematics are valid for four (4)
semesters, following the test date (excluding summer session). After this period of time, if a student has not begun taking the required reading, English, or mathematics, or ESOL courses, the appropriate Accuplacer test(s) must be retaken.

An official copy of a student's assessment scores must be mailed, or faxed 651.779.5831 to the Century College Testing Center from the institution where they took the assessment test. A copy of a student's ACT scores must be hand carried, mailed, or faxed 651.779.5831 to the Century College Testing Center.

Prospective students enrolling in one course for their own enrichment are not required to take the placement tests, providing the course they are interested in does not have any prerequisites pertaining to placement testing. However, should these students find that they wish to expand their educational pursuits; it is highly recommended that they take the placement assessment. Failure to do so may result in delays in registering for desired classes that have placement testing requirements.

## Preparation for Assessments

These assessments are important because they determine which courses a student must take at Century College. The Accuplacer assessments consist of reading comprehension, sentence skills, and mathematics tests. The questions include evaluating grammar in a series of sentences; answering several questions following the reading of a particular passage; and completing arithmetic, elementary algebra, and college level mathematics. Generally, special preparation is not required.

However, students may benefit from becoming familiar with the testing format and may wish to review sample test questions at web sites listed on the Century College assessment web page: century.edu/futurestudents/assessment/ default.aspx

Note: The College does not endorse these sites or require students to make special preparation for the assessment testing process.

## Assessment Scores

Students will receive a printed report of their assessment scores upon completion of testing. The report indicates the assessment scores

along with the appropriate course placements in reading, English and mathematics. Assessment scores will be maintained in the students' files at Century. Students must bring their assessment score report to New Student Orientation to present proof of testing and to register according to their assessment placement.

## Assessment Advising

Upon completion of assessment testing, students will meet with an Assessment Advisor to review their scores and learn about resulting placement levels in reading, English, and mathematics. Additionally, Assessment Advisors will provide students with direction on completing specific entrance steps and help students brainstorm initial ideas for first semester courses. By the end of the meeting, the student and advisor will have created a checklist and contact sheet which will help the student move forward in enrolling at Century. The Assessment Advising Office is located in W2410 and advising is on a walk-in basis. Students must bring their assessment scores and student ID number to Assessment Advising. As advising includes conversations about a student's personal and academic information, advisors ask to meet with students on an individual basis in order to comply with federal privacy laws.

## Retesting

Students may retest only once within twelve (12) months of their first testing date regardless of where the test was administered to the student. Upon retesting the student may register based on either placement or consult an advisor/counselor for advice. There is a $\$ 10$ fee that must be paid at the Business Office and a receipt must be given to the testing center staff prior to retesting.

## Accommodations for Students with a Disability

Students who need accommodations for assessment testing due to a disability should contact the Access Center at 651.779.3354 or 651.779.3477. PLEASE NOTE: To receive accommodations, you must provide the Access Center with appropriate documentation about your disability.

## ASSESSMENTS FOR TRANSFER STUDENTS

Students transferring college-level courses and holding an associate in arts or baccalaureate degree from a United States college/university that holds regional accreditation may not need to complete some parts of the assessment. Students planning to complete a degree/ program at Century College must submit an official transcript(s) from institutions previously attended to determine any assessment exceptions. Students planning to take one course or just a few courses and who do
not intend to complete a degree/program at Century College may provide an unofficial or student copy of their transcript(s) from institutions previously attended to determine any assessment exceptions. Unofficial transcripts are not retained by Century College. Unless or until an official transcript is received, the student may not be eligible to register for other mathematics, English, or reading courses. Transfer students may be exempt from parts of the assessment tests for the following reasons when transferring from a United States college/university that holds regional accreditation:

1. Students who are transferring credits in college composition equivalent to English 1021 with a grade of "C" or better do not need to take the English assessment.
2. Students who are transferring credits in college-level mathematics (Math 1025 or higher) with a grade of "C" or better do not need to take the mathematics assessment.
3. Students who are transferring credits in college reading equivalent to Reading 1000 with a grade of " $C$ " or better do not need to take the reading assessment.
4. Students who are transferring credits and have completed a minimum of three (3) reading intensive courses with grades of "B" or better do not need to take the reading assessment. Reading intensive courses may include English literature, philosophy, history, humanities, sciences and the social and behavioral sciences.
5. Students who are transferring credits and have completed an associate in arts or bachelor's degree do not need to take the reading, English, and mathematics assessments. Students are still responsible for meeting any specific course prerequisites, however. Mathematics and science courses may require students to complete the mathematics assessment and meet prerequisites.
6. Students who have international education credentials must take the Accuplacer ESL and/or reading, English, and mathematics assessments. If students intend to transfer international education credits to Century, they must request an evaluation of their transcripts through World Education Services (WES) or Educational Credential

## 2 Admissions \& Registration

Evaluators (ECE) for credits earned outside the United States. Refer to the WES website at wes.org or the ECE website at ece.org.

## Initial Placement Appeal Process

The appeal process is determined by the Reading, English, Mathematics, and ESOL departments respectively. After retesting, if the student wishes to appeal a specific placement, he or she must fill out the Placement Appeal form. The Placement Appeal form and printouts of the scores from the original testing and retest should be taken to the department faculty representative to make an appointment for the next step in the appeal process. A student's placement into a course can only be appealed once per discipline.

- For reading, the student must bring the appeal form to the Reading/Student Success Department and make a twohour appointment for an interview and an evaluation of reading and textbook processing skills. The results of the evaluation and the interview will be used by the Reading/Student Success Department for placement.
- For English, the student must bring the appeal form to the English Department and make a two-hour appointment to provide a monitored writing sample on an assigned topic. This essay will be used by the English Department for placement.
- For mathematics, the student must bring the appeal form to the Mathematics Department and make a two-hour appointment to complete an exam in the appropriate course. The results of this test will be used by the Mathematics Department for placement.
- For ESOL, students must see the ESOL Advocate.

Judgments concerning the appeal shall rest solely with the Reading, English, Mathematics, or ESOL Department faculty, respectively. Each department shall keep a record of appeals and their results for year-end reporting purposes. The appeal process itself may take place by appointment before or during the semester. However, if an appeal results in a course change, the student may add or change courses only within the drop-add period during the first week of each semester. In the event
that an appeal is granted after the drop-add period, the student must wait until the next semester to register for the course in question.

## Orientation

Orientation provides new students with an opportunity to get acquainted with Century College. To help facilitate a successful transition to college life, students will have an opportunity to meet with an advisor for help with course selection, receive assistance with Century technology, attend workshops, and take a tour of the campus. After attending orientation, students will feel prepared to begin their first semester at Century.

## Registration

Students should register carefully. Students are liable for tuition/fees for any registered courses. Students must cancel/drop their registration at the Records Office, online or in-person if they do not plan to attend. For registration information regarding auditing, repeating courses and credit loads, please see Chapter 4, Academic Policies and Information. For specific course descriptions, course prerequisites and course restrictions, see Chapter 7, Course Descriptions.

## Online and On-Campus Registration

Century College offers interactive online registration for returning students only. If you are a new student, you will register at orientation. Students can register for classes, check for holds on their records, look up open class sections, look up and print their class schedules, look up their grades, add and drop classes, and withdraw online. Please check Century's website for instructions and details at century.edu.

Returning students register in order of the number of credits earned. The returning students' priority registration schedule is published prior to each semester online at century.edu Counselors, advisors, or program advisors are available by appointment and quick-stop to help students plan a program prior to registration and on a quick-stop
basis during registration. Call the Advising, Counseling, \& Career Center or contact the program advisor for more information.

Registration will not be permitted for returning students with financial, library, or academic holds on their records. It is the students' responsibility to satisfy any obligation to the college before registering and/or requesting a transcript.
New students register by attending an orientation. Students will be given a short overview of the college, which covers essential Century information and have the opportunity to meet with an advisor/counselor and/or program advisor for help with first semester course selection. Completion of the college assessment is required prior to attending orientation.

Transfer students have the opportunity to complete an online orientation and registration process. For more information about the online orientation and registration process, students can visit century.edu/futurestudents/ orientation/transfer.aspx.

## Wait lists

If a class is full, students have the option to add themselves to a wait list to be notified if a seat becomes available. Students will be notified at their Century College email address as their position on the wait list moves up. Once a seat in their wait listed class is offered, they have 24 hours to register (the email will indicate the registration deadline). It is extremely important that students monitor their email closely so they do not miss their wait list opening. The wait list is shut off the night before the first day of the semester. Wait listing is not available for late start courses. Please see website for more information.

## Change of Registration

## Adding Courses

Courses may be added during the first five days of fall and spring semester and the first three days of summer session. Students should register carefully. Students are liable for tuition/fees for any registered courses. Students must cancel/drop their registration online or at the Records Office if they do not
plan to attend. Late adds will be processed only with the approval/signature of the instructor and the appropriate academic Dean. Students must be on the grade sheet at the end of the term in order to receive a grade, regardless of attendance. Instructors' signatures are not required to add day courses before the semester begins or during the first three days of the semester, unless consent of instructor is normally required. Instructors' signatures are required beginning the fourth day of the fall and spring semester for day courses. Instructors' signatures are required to add evening, Saturday, alternative start courses, and all summer session courses after the first class meeting.

## Dropping Courses

Courses may be dropped through the first five days of the semester/session without the instructor's permission and dropped courses will not be recorded on students' transcripts.

## Withdrawals from Courses (Student-Initiated)

Students are expected to withdraw from a course as soon as possible after their last active participation. Students who withdraw from courses after the first five days of the semester will have the grade of W recorded on their transcripts. Students may withdraw (without instructor's approval) until three weeks prior to the end of the semester unless otherwise specified. No withdrawals will be permitted during the last three weeks of any semester. (Exception: A withdrawal can be processed after the deadline during the current term if there are special circumstances that prevent further participation. Students must complete a Refund or Late Withdrawal Petition form available at the Business Office and provide a doctor's statement for injury or illness.)
Students who do not process a withdrawal (W) shall receive the grade assigned by the instructor. Students having withdrawn from a course after four weeks may visit thereafter until final exam week with instructor's approval. Withdrawals do not influence GPA, but do negatively impact academic progress (see Chapter 4, Standards of Academic Progress).

Note to financial aid recipients: Withdrawing from one or more of your classes may result in your need to repay funds distributed to you.

## Withdrawals from Courses (Instructor-Initiated)

If a student never attends or actively participates in a course, the instructor may record an FN grade to indicate "faculty initiated never-attended". In cases where an instructor has evidence that a student has stopped actively participating in the course, and where no student-initiated contact has been made, the instructor may assign an FW grade to indicate "faculty initiated withdrawal". The student has the opportunity to be reinstated with the instructor's written permission. Withdrawals, FN or FW grades do not influence GPA, but do negatively impact academic progress. See Chapter 4, Standards of Academic Progress Policy. An instructorinitiated withdrawal does not generate tuition reimbursement.
Important: Three ways to add, drop and withdraw with your Star ID and Password:

1. Via Century's website at century.edu (click on eServices).
2. In-person at the Records Office, room 2220 west campus.
3. Written request with your signature by U.S. mail.

Telephone messages or email requests for Records Office staff are not considered valid processing methods.

## Costs

The Board of Trustees for Minnesota State Colleges and Universities (MnSCU) establishes the tuition for the state colleges. Current tuition and fee rates will be posted on the Century College website at century.edu.

## Tuition Payment

All registered students are financially committed for tuition and fees. Students' registration involves a seat reservation in each of their classes, all of which have a limited number of seats available. In requesting this reservation, students have incurred a tuition obligation. Students are required to pay tuition and fees unless they drop classes by the deadline listed on the refund policy. Please check the Century College website at century.
edu for payment information and dates. Students can view their fee statement online at century.edu. Click on eServices. Contact the Business Office at 651.779.3278 for payment options.
Important note: Students who have not made payment arrangements by the down payment due date MAY be dropped from all of their classes unless at least one of the following conditions is met:

1. You have paid at least $15 \%$ or $\$ 300$ of the amount owed.
2. You have applied for the NBS e-cashier (NELNET) Tuition Management Payment Plan and have submitted the required down payment.
3. Your agency submitted a Third Party Billing Authorization to the Business Office. This will defer your charges until you're agency billing has been processed.
4. You have applied for financial aid at any MnSCU institution.

NOTE: If you have not sent FAFSA results to Century College, you will not be eligible for financial aid at Century. Even though you will not be dropped, you will still owe the amount of tuition and fees for your registered courses and are responsible for the payment. Students who do not plan on attending registered classes must drop online at century.edu or complete a drop form in person at the Records Office up through the 5th day of the semester.
5. The Business Office has received a scholarship notice to cover tuition and fees.
6. You have enrolled in the Post-Secondary Enrollment Options (PSEO) program and have submitted your PSEO enrollment form to the Business Office. This form must be completed and submitted each semester.

Do NOT rely on the college to drop you from your courses. Students who do not plan on attending registered classes must drop online at century.edu or complete a drop form in person at the Records Office up through the 5 th day of the semester.

## Deferred Payment

Persons whose tuition/fees will be paid by a government agency or established organization

## 2 Admissions \& Registration

must notify the Business Office so that payment can be deferred.

## Reciprocity

Students who are legal residents of Wisconsin, North Dakota, South Dakota, and Manitoba can attend Minnesota public colleges at special tuition rates. Formal applications must be made according to application deadlines and filed with the higher education services office in the student's home state. For more information, contact the Records Office, 651.779.3299.

## Application Fee

A nonrefundable fee is charged at the time of application for all new students applying for admission.

## Fee Rates

The following per-credit fees are charged each semester:

- Minnesota State College Student Association (MSCSA): Students are required to pay a fee to the Minnesota State College Student Association.
- Parking (not assessed for online courses): The parking fee supports parking lot maintenance and repair.
- Student Life: This fee supports student activity programs, health services, fine arts programs, symposiums, lounge furniture, and day care equipment.
- Technology: The technology fee is used for purchasing instructional equipment and materials such as computers and software, audio-visual equipment, and library technology.

Fees are subject to change annually. Current fee rates will be posted on the Century College website at century.edu.

## Transcript Processing Fee

There is a charge for each academic transcript requested for mailing or pickup within three business days (approximately one week for technical college courses). An additional fee is charged for rush/immediate transcript preparation. You may request delivery of an official, sealed transcript online through your student portal, online through National Student Clearinghouse, by mail, fax, or in-person. If you have attended or are currently attending one or more Minnesota State Colleges and Universities (MnSCU), your official transcripts can be electronically retrieved by all MnSCU institutions, including Century College. If you want your Century transcript sent to another MnSCU institution, please contact the other institution to find out what their procedure is for them to retrieve your Century transcript.

## Late Payment Fee

Tuition payments received after the due date will be subject to a one-time administrative fee and monthly late fees.

## Administrative Fee

A single administrative fee for placing students on the college payment plan is assessed if tuition and fees are not paid in full by the due date.

## Returned Payment Fee

A fee is charged if a payment is returned to the College due to insufficient funds, closed account, or any other reason.

## Diploma Replacement Fee

A fee is charged for a replacement graduation display diploma.

## Books and Supplies

Books may be purchased in the Bookstore, room 1320 west campus, or online at

centurycollegebookstore.com Textbooks and supply costs vary greatly from program to program. Contact the program advisors or bookstore for more specific information.

## Senior Citizen Fee

Senior citizens who are 62 years or older, legal residents of Minnesota, and who register for credit the day after the first day of class are charged a nominal fee per credit if space is available or no charge if they audit. If a senior citizen registers prior to the second day of class, they must pay full tuition and fees.

## Canceled Classes

When a class is canceled, students receive either a phone call or a letter notifying them of the cancellation and the Records Office is notified. If students do not register for another class in its place, tuition and fees will be refunded. Students do not have to petition for a refund.

## Special Course Fees

With the approval of the Minnesota State Colleges and Universities board, Century College may require special fees to cover supply costs, field trip expenses, loss or breakage to college property, physical education expenses, private music instruction or technology fees. Fees will be established before the semester registration period and will be indicated in the class listing at century.edu.

## EXCEPTIONS

$100 \%$ refunds are given after the first five days of the semester/session, when a class is canceled. Refunds other than the scheduled amount may be given when there is injury or illness, or when there is college error. This is done through the petition process. Complete a Refund or Late Withdrawal Petition form at the Business Office, room 2340 west campus. Documentation will be required. Refund requests must be made by the end of the following semester for the course in question. Note: Refunds are based on the first day of the semester/session, not the first day of the class (except for late-start classes).

## Late Start Courses:

Courses starting after the first 5 days of the semester/session. Refunds are calculated

## Refund Policy

Dropping a course or totally withdrawing from school according to college policies may result in a refund of tuition and fees. Credit card
payments will be refunded to the same credit card that was used when tuition was paid. Refunds for payments made by cash
and check will be processed through Higher One based on the disbursement option selected by the student when the Century Choice Card was activated.

| Registration Changes | Drop/Withdrawal from some, but <br> not all classes | Drop/Withdrawal from all classes |
| :--- | :---: | :---: |
| Prior to 1st day of the semester <br> Prior to 1st day of the summer session | $100 \%$ | $100 \%$ |
| 1st-5th day of the semester | $100 \%$ | $100 \%$ |
| 1st-5th day of the summer session | $100 \%$ | $100 \%$ |
| 6th-10th day of the semester | $100 \%$ | $100 \%$ |
| 6th-10th day of the summer session | $0 \%$ | $75 \%$ |
| 11th-15th day of the semester | $0 \%$ | $50 \%$ |
| Remainder of the summer session | $0 \%$ | $50 \%$ |
| 16th-20th day of the semester | $0 \%$ | $0 \%$ |
| Remainder of the summer session | $0 \%$ | $25 \%$ |
| Remainder of the semester | $0 \%$ | $0 \%$ |
| Remainder of the summer session | $0 \%$ | $0 \%$ |

according to the beginning date of the course. $100 \%$ refunds are available only through the day after the first scheduled class day.

## Short Courses:

For short courses running less than three weeks, $100 \%$ refunds are available only through the day after the first scheduled class day.

## Refund Policy for Financial Aid Return of Title IV Funds

If a student completely withdraws from all credits (either officially or unofficially) in a term before the $60 \%$ point of that term, the financial aid disbursed is subject to the federal and state "Return of Title IV" policy. Students earn financial aid in proportion to the time they are enrolled up to the 60\% point. The unearned share of financial aid is returned to the programs from which they
were paid as prescribed by federal and state regulations. The student will be required to repay all unearned financial aid. Students also may need to repay a portion of financial aid they received if courses are not completed satisfactorily. Please contact the Financial Aid Office prior to withdrawing if you have any questions regarding your possible repayment obligation.

## Refunds for Students in the Armed Forces

Refunds to students who are members of any branch of the U.S. military reserves and who are unable to complete a semester due to having been called to active duty shall to the extent possible be provided one of the following options:

1. Students may be given a full refund of tuition. Students receiving financial aid
who choose this option should be made aware that they may be liable for any required refunds of state or federal financial aid funds.
2. Students may be given a grade of incomplete in a course and complete it upon release from active duty. Course completion may be accomplished by independent study or by retaking the course without payment of tuition. Under federal financial aid policies, a course that is retaken this way may not be counted toward students' enrollment load.
3. If, in the instructor's judgment, students have completed sufficient course work to earn a grade of $C$ or better, students may be given credit for completion of a course.

## Chapter 3

## Student Services \& Resource IInformation

## Campus News

## Cancellation of Classes

Classes may be canceled due to an instructor's illness or faculty professional development activities or other emergencies. When absences are known in advance, instructors will notify students during class periods and give alternative assignments. For unplanned absences, a notice will be posted outside the classroom and on the Century College website at century.edu informing the students that the class will not be held, and it may include special instructions.

Cancellation due to inclement weather will be announced on a local radio station (WCCO-830 AM) and posted on the Century College website at century.edu

## All Student Email

This email is sent weekly to your my.century.edu email account. This assists in informing students of important reminders, events and activities on campus.

## Students' Notices

Bulletin boards are posted around the campuses for students, clubs, and college use. For more information contact marketing@century.edu


## Admission Services

The office of Admissions and New Student Services, located in room 2303, West Campus, serves prospective students as well as students preparing for their first semester of enrollment at Century. The office provides services pertaining to applications for admission, international students, high school student enrollment, applications for programs requiring supplemental admission materials, and New Student Orientation. For more information, call 651.773.1700.

## myCentury Student Portal System/Email

Century College utilizes many forms of communication for official College business such as the U.S. Postal Service, telephone, email, and the Internet. Official College business includes all actions of the College, including but not limited to providing general information, course information, disciplinary
notice, and performing other administrative functions of the college.

Email is the primary means by which the College communicates important information with students; as such, the College has provided an email account to every student. The Century address is the only email address the College will maintain and use to communicate to students. Vital college communications are sent to students via their Century email addresses on a regular basis. Students are held responsible for the information communicated via email.

By activating your myCentury account you will gain access to college computers, software, and printers. From the myCentury Portal you will be able to check your email, manage your personal or shared files on the network, access Library resources, and numerous other services.
The College encourages all students to activate their account upon admission at century.edu/centurydirect/index.aspx and to check it often. The account is free. To activate your myCentury account you will need your Star ID and Password. Go to century.edu and look for the myCentury Portal link.

## Advising, Counseling, \& Career Services

## Academic Advising

An advisor/counselor will assist you with developing an educational plan that is realistic for you. Advisors/Counselors have the professional skills to help you sort through a variety of academic issues, concerns, and options. Areas for exploration could include program requirements, class scheduling, assessment testing, transfer planning, and graduation requirements. Resources are available in the Advising, Counseling, \& Career Center, room 2410 West Campus, such as:

- Century program guides that list required courses for certificates, diplomas, and degrees.
- Transfer guidesheets that list Century courses that fulfill specific major requirements for transfer schools.
- Information guides that describe Century policies, resources, and advising tips.
- Degree Audit Reporting System (DARS) that indicates courses completed at Century College along with transfer courses and which courses fulfill specific degree or program requirements.
- Transferology: www.transferology.com

All of these resources can be found on the Education Plan at gpslifeplan.org/century/ .

## Preparation for Transfer

It is important for students to know whether the courses for which they register reflect the latest degree requirements and will transfer to a specific school as a required course, an elective, or not at all. To obtain this information, use Transferology, contact the transfer college, use appropriate Century College transfer guide sheets, refer to transfer college catalogs online or available in the Century College Advising, Counseling, \& Career Center, room 2410 west campus, and work with a Century advisor/counselor. Additional transfer information is posted on bulletin boards outside of the Advising, Counseling, \& Career Center. Periodically,
college representatives from various in-state and out-of-state schools visit the campus to provide information to students. Century College sponsors "Transfer Information Days" during fall semester where representatives from many schools are in attendance.

Public colleges and universities in Minnesota have developed a common general education curriculum called the Minnesota General Education Transfer Curriculum (MnTC). Completion of this defined transfer curriculum at one institution enables students to receive credit for all lower-division general education upon admission to any other Minnesota public institution. The transfer curriculum includes 40 credits, has 10 goal areas and is the core of the AA degree. Students who have completed the MnTC or the AA with the MnTC core and have submitted an application for MnTC notation or AA degree graduation will receive a MnTC notation on their academic transcript. (See also Chapter 5, regarding the MnTC, the AA, AFA, and AS degrees, and Transfer. Refer to the Transfer Guide located at the back of the catalog, and mntransfer.org, the Minnesota Transfer website.)

## Personal Counseling

Personal counseling gives you the opportunity to enhance your emotional and social development while at Century. Professional counselors facilitate student growth through a supportive environment in which students can express themselves freely and confidentially. You can discuss and explore areas of concern that may interfere with academic success, such as:

- Transition to college
- Test anxiety
- Chemical abuse
- Time management
- Stress management
- Relationships
- Identity issues
- Mental health
- Veterans' issues

Through the counseling experience, counselors can help you broaden your personal
perspectives, gain insights, challenge biases, and develop a sense of purpose consistent with your own values and goals.

Students in crisis are encouraged to come
to the Advising, Counseling, \& Career
Center, room 2410 West Campus, for immediate short-term counseling. Referrals to community agencies will be made when longterm counseling is needed. See Personal Plan at gpslifeplan.org/century/.

## Career Counseling

Century's counselors are here to assist you in your career decision-making. Interest and personality inventories are tools to help you identify your interests, abilities, values, learning, and work styles. Counselors will help you use the information to explore and identify educational and career options.

Career and Life Planning (CRRS 1010) is a two-credit course offered at Century each semester. The course will help guide you through the career exploration and decisionmaking process. You will learn how to use the GPS LifePlan Career Plan and many other online resources in addition to Century's Career Center, room 2400 west campus, to explore occupational and educational options. Encouragement is given to establish and achieve your life and career goals.

Counselors are available in the Advising, Counseling, \& Career Center, room 2410 west campus, by appointment or on a quick-stop basis. For more information, call 651.779.3285, and see Career Plan at gpslifeplan.org/century/.

## Career Center

The Career Center, room 2400 west campus, is your resource to gain up-to-date information on careers (for example, employment outlooks and salary ranges) and educational planning (for examples, college catalogs and scholarship information). Computer-assisted career guidance programs, such as the Internet System for Education and Employment Knowledge (ISEEK), and Minnesota Career Information System (MCIS) are tools that help you identify your career interests and skills, research occupations, and prepare for the world of work. For more information call 651.779.3285.

## 3 Student Services \& Resource Information

## Degree Audit Reporting System (DARS) and Transferology

## Degree Audit Reporting System (DARS)

The Degree Audit Reporting System (DARS) is part of Century's commitment to academic advising for students. A DARS report is an electronic summary of a student's academic progress toward completion of a degree or program.

Students may run their own DARS report anytime on the web through Century's eServices. A DARS report indicates requirements that have already been completed, requirements that remain unsatisfied, and how transfer courses fulfill requirements. The report offers suggestions for appropriate courses that may be taken to meet specific requirements and is particularly helpful when meeting with counselors and academic advisors. More information about DARS is available on Century's website at century.edu/dars.aspx and at the Advising, Counseling, \& Career Center.

## TRANSFEROLOGY WILL MY COURSES TRANSFER?

Students who have completed courses in higher education want to know which colleges and universities will accept those courses and apply them to a degree. Transferology will provide quick answers from hundreds of institutions in a streamlined and dynamic interface. www.transferology.com

## English for Speakers of Other Languages (ESOL) Advocate

The English for Speakers of Other Languages (ESOL) Advocate is available to help any non-native speaker of English at Century College, even if they have never taken ESOL classes. The ESOL Advocate can help if a student is struggling with any aspect of college (e.g., Accuplacer ESL testing, classes, studying, registration, financial aid). For more information call 651.747.4087.

The ESOL Center is located in E1551-1552 and is open to all students learning the English language. The center includes a state-of-theart Digital Language Lab for high-tech voice recording and pronunciation practice as well as a regular computer lab for practicing grammar, pronunciation, and word processing. Lab assistants, nearby teachers, and student tutors can answer questions about American culture, the English language and provide academic support for ESOL classes. For more information call 651.747.4039.

## e-Services

e-Services is an online service for students to review all their student service information such as course registration, grades, financial aid, student bills and update your contact information. You will log into your personal account using e-Services to access your specific information (which is the same information college student services personnel view). You should be very familiar with this site as it contains valuable information on you.

Dashboard gives you a quick summary view of critical information.

Account Management allows you to update your personal and $\log$ in information.

Courses \& Registration allows you to find courses, register for courses, view/modify your class schedule, check registration holds, view your registration window (when can you register for classes), view your registration access code, view your registration log (when did you take action on registration activity), and course cart.

Grades and Transcripts allows you to check your grades, view your academic record, or run a DARS (Interactive Degree Audit Report).

Financial Aid allows you to view your financial aid status, tracking letter, financial aid awards, award letter, estimated award levels (how much aid based on enrolled credits), and loans (request loan funds and completed needed Master Promissory Note and Entrance Counseling, monitor status of loan) and know your Overage/Refund Selection.

Bills and Payment shows your account detail (your college bill), make payments, prepayments, your payment plan and get your year end 1098-T tax form.

Student Employment shows your earnings by pay period and allows you access to your year end W-2 Tax Form

## Financial Aid for Students

The Financial Aid Office located in room 2201 west campus assists students in applying for and receiving financial aid to help pay the cost of education. The financial aid website contains a wealth of information about application procedures and links to many non-Century sites to make the search for financing easier. The office staff can be reached at 651.779 .3305 or by email at finaid@century.edu.

## 1. APPLICATION PROCESS

## When to Apply:

Students should apply for financial aid after filing their income tax returns but not before January 1st for fall enrollment. Students are encouraged to apply early and MUST APPLY ANNUALLY.

## How to Apply:

To determine eligibility for grants, loans, and student employment, students are required to complete the Free Application for Federal Student Aid (FAFSA) and have the results sent to Century College.

The FAFSA is completed online at fafsa.gov. A signature is required to complete the FAFSA and can be signed electronically provided the student (and parent of a dependent student) has a PIN number. To apply for a PIN, visit pin. ed.gov. The Federal Code to release FAFSA results to Century College is 010546 .
STUDENTS MUST APPLY FOR FINANCIAL AID EVERY YEAR.

## What to Expect After Applying:

After the FAFSA is completed online and an email address was provided, the student will receive an email in a few days with a secure link to the Student Aid Report (SAR) on the

Web. Review the SAR as it is the product of your FAFSA application and contains eligibility information. The SAR will not tell you what your financial aid award is but will tell you important information about the EFC (expected family contribution) used to calculate your award, the colleges that you chose to release the information to, and/or if more information is needed to compile your award.

## Additional Information/Verification

Students may be required to submit additional documents to complete the financial aid application such as tax transcripts and citizenship status information. The Financial Aid Office will contact you for more information if necessary. Failure to respond will result in a delay in determining what financial aid you may be eligible to receive.

## Award Notice

The College will determine award eligibility after all documents are received and verified and send the student an email with instructions on how to access their award notice online at century.edu. Students can access application and award information with their Century password and pin at Century College's e-Services.
Important Note: Receiving the Award Notice is not necessarily the last step for receiving financial aid. Additional steps are required for both student loans and student employment.
See the Century College website for details at century.edu.

## 2. FINANCIAL AID POLICIES

## Financial Aid for Summer

Students may be able to utilize financial aid for summer provided the eligibility has not been used for the preceding academic year. Students who have a complete financial aid application and have registered for summer classes will receive a financial aid award for summer for any eligibility that may exist.

Students must be registered for at least 6 credits to be eligible for a student loan.

## Financial Aid for Developmental/ Remedial Coursework

Students who are eligible for federal financial aid (Pell Grants and Direct Student Loans) can receive financial aid for up to 30 credits of
developmental coursework. Developmental/ remedial courses are numbered below the 100 level (i.e. Math 0030, English 0080). If you have received financial aid for 30 such credits and enroll in additional developmental/ remedial credits, you will not receive federal financial aid for those credits.

## Withdrawal from College/ Return of Title IV Funds

If a student completely withdraws from all credits (either officially or unofficially) in a term before the $60 \%$ point of that term, the financial aid disbursed is subject to the federal and State "Return of Title IV" policy. Students earn financial aid in proportion to the time they are enrolled up to the 60\% point. The unearned share of financial aid is returned to the programs from which they were paid as prescribed by federal and state regulations. The student will be required to repay all unearned financial aid. Students also may need to repay a portion of financial aid they received if courses are not completed satisfactorily. Please contact the Financial Aid Office prior to withdrawing if you have any questions regarding your possible repayment obligation.

## Changes in Enrollment (Add/Drop/Withdraw)

When you change your enrollment (add/drop/ withdraw), your financial aid eligibility may change. The financial aid source and the date of your drop or withdrawal has an impact on the change of financial aid. Contact the Financial Aid Office if you have questions.
Late Start Classes: If you drop a late start class before it begins and have been paid financial aid for your enrollment in the class, the Financial Aid Office will recalculate your eligibility and you may have to refund all or part of the financial aid for the term

Pell Grant Recipients: Federal regulations require colleges to establish a Pell Grant lock date to determine the courses that are counted toward a student's Pell Grant eligibility. Century College has established the 10th day of class as the lock date. Financial aid disbursements then begin on the 11th day of class based on your lock date enrollment.

Dropped courses that are eligible for a tuition refund will have Pell Grant eligibility reduced to the new credit level.

If you could not register for a class prior to the Pell Grant lock date, we may be able to manually adjust for late-start courses in certain circumstances. To be considered for additional Pell Grant funds, complete the Request for Pell Recalculation form and submit completed form to the Financial Aid Office.

## Satisfactory Academic Progress Policy for Financial Aid Summary:

The Satisfactory Academic Progress Policy for Financial Aid requires that a student maintain acceptable academic standards in the pursuit of their chosen degree, diploma, or certificate. The student is required to maintain, at a minimum:

- A cumulative GPA of 2.0, and,
- Completion rate of $67 \%$ of credits attempted, and
- Have not reached or exceeded $150 \%$ of the maximum credits needed to attain the chosen academic goal (including transfer credits).

The complete policy and appeal process can be found on the website at century.edu/finaid.

The Satisfactory Academic Progress Policy for Financial Aid differs from the College's Standard for Academic Progress. It is possible to be suspended from financial aid and not be suspended from the College. Students can appeal their suspension.

## 3. SOURCES OF FINANCIAL AID

## Federal Pell Grant:

Available to undergraduates only and does not need to be repaid.

## Federal Supplemental Educational Opportunity Grant (SEOG):

The SEOG is a grant for exceptional need students but has limited availability. The Financial Aid Office determines eligibility on a first-come, first-served basis.

## Minnesota State Grant:

State grant assistance for Minnesota residents who have not exceeded four years of enrollment past high school.

## On-Campus Employment:

Part-time employment positions are available for qualified students from either the Federal

## 3 Student Services \& Resource Information

or Minnesota State Workstudy Programs. Job openings are posted outside the Financial Aid Office.

## Federal Direct Loan Programs:

A low interest loan program is available under the Subsidized or Unsubsidized Direct Loan Programs. Students must be enrolled for at least six credits to apply for these student loans. First year students can borrow up to $\$ 5500$ and second year students (after earning 30 credits) are eligible for $\$ 6500$.
LOAN PRORATION: A Federal Direct Loan borrower is subject to certain prorated loan limits if the student is enrolled in a program of study that is less than 30 credits. Loan limits must also be prorated if the program's duration is equal to or longer than 30 credits but the borrower is completing the remainder of the program in a period of enrollment that is shorter than an academic year such as with a fall term graduation.

## 4. ADDITIONAL FUNDING SOURCES

## Century Foundation Scholarships:

The Century Foundation awards more than $\$ 100,000$ each year in scholarships to new and returning students. Awards are designed to encourage cultural diversity, service learning, academic achievement, and career development. Application information is available in the Foundation Office, room 2511 east campus, by calling 651.779.3356, or visiting the website at century.edu/ foundation/.

## Alliss Education Foundation Grants:

The Alliss Grant helps adult learners begin or return to college. It is a non-renewable grant. In addition, the Alliss Grant:

- Pays for one course up to five credits (course must be transferable and lead to a degree);
- Is not based on family income;
- Funding is limited and is available on a first-come, first-served basis;
- The grant does not cover the application fee, course fees, or books.

Grant recipients must:

- Be a legal resident of Minnesota;
- Be out of school for at least seven years;
- Be first-time community college enrollee who graduated from high school at least seven years ago or former college student who hasn't been in college for seven years;
- Enroll in a college course that is a transferable course that would be accepted as an integral part of a degree program;
- Pay for all student fees, above tuition, themselves;
- Not hold a bachelor's degree or higher;
- Not be receiving financial aid or any other grant funding or tuition waivers.

For more information, contact the Financial Aid Office, room 2201 West Campus, 651.779.3305.

## Outside Agencies:

Students are encouraged to seek financial assistance from outside sources. Examples include Bureau of Indian Affairs, Minnesota Indian Scholarship Program, Department of Rehabilitation Services, and church or local civic organizations.

## GPS LifePlan (Goals + Plans = Success)

One of the many resources available to students at Century is the GPS LifePlan. This tool is designed to help students get answers to their questions, develop goals, make plans, and be successful academically, personally, and in their career objectives. In order to meet students' needs, the GPS LifePlan is organized into 5 sub-plans including: the EducationPlan, FinancePlan, CareerPlan, PersonalPlan, and LeadershipPlan.

Students can explore the GPS LifePlan through a variety of delivery methods such as workshops, campus resources, or on the web. You get to work at your own pace and get answers to the questions you need help with most. Visit the GPS LifePlan website at gpslifeplan.org/century to start exploring the wealth of resources available to you!

The GPS LifePlan Center located in room 1230 west campus, is a place where students can attend free workshops in all five areas of the LifePlan, get assistance with and work on eFolio, and receive help with developing goals.

## Health Service

## College Health Service

The College Health Service is located in room 2232 east campus and is staffed by registered nurses. Services available at no charge are:

- Alcohol, drug \& tobacco use assessment \& referral
- Blood pressure checks
- Condoms
- Diabetic screens
- First Aid
- Health education
- Mental Health counseling \& referral
- Over-the-counter medications
- Pamphlets on a variety of health issues
- Pregnancy tests
- Referrals for medical care
- Special needs assistance
- Stress management
- Student insurance information
- Triage nursing

All visits are confidential. We give tuberculin skin tests for a fee. We also have a doctor on campus 3 hours a week to see credit students at no charge.

## Student Accident or Illness Insurance

A group health insurance policy is available to purchase for students enrolled in 6 or more credits. Application forms and information are available from the Advising, Counseling, \& Career Center, room 2410 west campus, and the College Health Service, room 2232 east campus.

## The Minnesota College Immunization Law (Minnesota Statutes Section 135A.014)

Since the fall of 1991 there has been a state mandate for college students to have documentation of up-to-date immunization against diphtheria, tetanus, measles, mumps and rubella, with the exception of students who graduated from a Minnesota high school in 1997 or later.

The newest amendment extends this law to provide education about viral hepatitis,
including information about the hepatitis A and $B$ vaccines. For more information, call the College Health Service 651.779.3954.

## Records \& Registration Office

The Records Office, located in room 2220 west campus, provides services pertaining to student schedules, veteran certifications, registration, grade changes, withdrawals, residency, change of programs, address and name changes, graduation confirmation, evaluation of academic progress, and academic transcript requests. For enrollment verification/certification use the myCentury Student Portal. Please see website for information and Records forms. Note: All students are responsible for keeping address and phone number information current with the Records Office.

Transcript Service: Transcripts are sent at the written request of the student through the myCentury Student Portal or online at getmytranscript.com, with designated fee. Transcripts will NOT be faxed. There is an additional $\$ 5.00$ charge for rush transcripts. Note: NE Metro transcripts cannot be done as a rush. Refer to the Records and Registration webpage at http://www.century.edu/ currentstudents/records/transcripts.aspx. The college follows the Student Privacy Act. See the Student Handbook section in this catalog for student privacy information.

Voters Registration Forms are available at the Records Office. For complete information regarding voting and downloadable forms go to: : http://www.sos.state.mn.us/index. aspx?page=204.

## Services for Students with Disabilities

## Access Center

The Access Center is a Student Services office, which provides accommodation, advocacy, support, and referral information for students with various types of physical, psychological, or learning disabilities. Based
on the individual needs of the students, services may include, but are not limited to, early registration, note-taking, test-taking accommodations, and the provision of sign language interpreters. Documentation must be provided within the first semester of service.

The Access Center ensures the rights of disabled students and assists Century College in meeting its obligations under the Rehabilitation Act of 1973 (P.L.93-112, Section 504) and the Americans with Disabilities Act. The center's commitment is to remove educational, programmatic, and attitudinal barriers, allowing students with disabilities equal access and opportunity to participate fully in all education programs and activities. This is made possible by the provision and arrangement of reasonable accommodations on a campus-wide level. Services provided are based on individual need.

The office is located in room 2440 West Campus. Contact the Director/ADA Coordinator at 651.779 .3354 or the Disability Service Advisor at 651.779.3477 or accesscenter@ century.edu or Minnesota Relay Service 711 or 1.800.627.3529 or by fax at 651.779.5831,

## TRiO Programs

TRiO programs, funded by the U.S. Department of Education, assist selected students in their pursuit of and persistence with postsecondary educational goals. Participating students must possess academic potential, yet demonstrate a need for academic support.

Three Century College TRiO programs serve participants who are from low income families or are first-generation to complete college. Student Support Services is designed to serve enrolled Century students, while Upward Bound and Educational Talent Search are targeted toward middle and high school youth who are college-bound.

## Student Support Services

The Student Support Services program serves 200 students who intend to transfer into a bachelor degree program. The program seeks to enhance academic skills among its participants and increase their retention and graduation rates through tutoring, academic
support, and personal enrichment activities. Students must meet eligibility for one of the following: family income, parent education, and/or documented disability. For more information, call 651.779.3226.

## Upward Bound

Upward Bound seeks to develop the skills and motivation necessary for its participants to successfully complete high school and prepare for a college education. Century College's Upward Bound program serves 65 students at St. Paul's Como Park, Harding, and Johnson High Schools. Students receive a variety of services that include; after-school tutoring, academic advising, ACT prep, college admission assistance, Saturday sessions, and a six-week academic summer program. For more information, call 651.779.3328.

## Educational Talent Search

Educational Talent Search program promotes education for individuals in grades 6-12, by encouraging students to graduate from high school and assists them in enrolling in and completing a postsecondary education at a college of their choice. The 636 participants receive information and support in academic, career, and college planning, and are encouraged to remain focused on personal goals. Program staff provides services at six secondary locations in the St. Paul Public Schools. For more information, call 651.779.3967.

## Resource Centers

## West Academic Support Center

The Academic Support Center is located in room 2461 west campus and houses the Peer Tutoring, Tutors Linked to Classes, and the Student Support Services offices. For more information about these programs see Student Support Services under TRiO Programs and Peer Tutoring Program under Resource Centers. A Student ID is required for services.

## East Academic Support Center

Located in room 2542 east campus, the center provides academic support. Other services include professional and peer tutoring, assistance with organizing study groups, and GPS LifePlan workshops. All services and opportunities are free and available to all

## 3 Student Services \& Resource Information

students enrolled in Century College classes for credit. A student ID is required for services.

## Information Technology Division Open Computer Centers

Information Technology Services provides two open computer centers (room 3165 west campus and room 1710 east campus) which provide computer access to all registered Century students. The centers provide support for college courses and offer both Windows and Macintosh computers. Staff members are available to provide assistance in the use of the computer equipment. Open computer centers are available with extended hours throughout the term - check online at http:// www.century.edu/technology for current calendar and availability.

## Language Laboratory

Located in room 1190 west campus, the Language Laboratory provides opportunities for language students to converse with native speakers and/or tutors In Spanish and Chinese. The Language Laboratory also supports noncredit activities for college members interested in various language conversation groups and/ or participating in the Spanish, Chinese, and Intercultural Clubs. For more information call 651.779.3978.

## LGBTO Center

The LGBTO (Lesbian, Gay, Bisexual, Transgender, and Queer) Center located in room 1216 west campus is a safe space for students of all gender identities and sexual orientations. There are resources available about a wide variety of topics which impact our LGBTQ students and their families. We have several programs each semester including the Spring Drag Show, Trans 101 workshops, and other trainings. It is both a programming space and a space to just hang out and talk about issues surrounding sexuality, gender, and identity. For more information call 651.779.3452.

## Library

The Century College Library is located on the first floor of the Library/Science Building on the East Campus. The library's print and online collection includes many thousands of books, journals, magazines, newspapers, audio and video recordings. The online portion of the collection is available both on and off
campus. Materials that are not in the Century Library collection can be borrowed from other libraries through interlibrary loan. To check out materials or use online library resources from off campus, students must have a Century College student photo ID, which serves as their library card. Any Minnesota resident may obtain a courtesy card for library access for a small fee. For more information call 651.779 .3968.

The library also provides PCs and laptops for use on site, eReaders for checkout, photocopiers/scanners, local faxing service, and space for quiet and group study. Staff are available to introduce students to the library and support them in their use of its resources.

## Mathematics Resource Center

The Mathematics Resource Center, located in room 3315 west campus, is available for all students enrolled in mathematics courses at Century College. The Center is staffed by two professional assistants and several student tutors. Students are welcome to come for assistance with their course, for a quiet place to study mathematics, and to use the additional resources that are available. The Mathematics Department encourages students to use this resource as an extension of the classroom. For more information call 651.779 .3375.

## Multicultural Student Center

The Multicultural Student Center, located in room 1220 west campus, provides a comfortable place where students can network, study, lounge, and just socialize. To support and retain students the center provides multicultural programming, sponsors guest lecturers, and referral services for students. Center staff are dedicated to promoting a campus environment that embraces multiculturalism, celebrates diversity, and enriches the campus experience for students. The center maintains active outreach initiatives to inform prospective students about educational opportunities available at Century College. For more information call 651.773 .1794.

## Peer Tutoring Program

The Century College Peer Tutoring Program located in the West Academic Support Center in room 2461 west campus and in the East Academic Support Center in room 2542
east campus, provides one-on-one tutoring assistance free to everyone currently enrolled in classes at Century College. Tutors are available in a variety of courses. Appointments are encouraged, but not required.
The Tutors Linked to Classes Program is also located in the Peer Tutoring Offices with liberal arts courses coordinated out of the West Academic Support Center and Science and Technical programs coordinated out of the East Academic Support Center. For more information please call 651.779 .3258 on the west campus and on the east campus call 651.779.3293. A Student ID is required for services.

## Reading and Student Success Center

The Reading and Student Success Center located in room 3250 west campus is open to all students seeking assistance in reading and study skills. The center is also a classroom resource for students in Reading and Student Success classes. Students may visit the center to use computers for research and coursework, get ideas on engaging books to read and check out library books. A center coordinator, peer tutor and faculty are available to assist students. Appointments are not required but are recommended. For more information call 651.779.3351.

## Veterans Resource Center

Located in room 1217 west campus, the Veterans Resource Center is a place where veterans can study, socialize and network. A newly formed student club for veterans will hold its meetings there. Century currently has over 240 student veterans. For more information call 651.779.3218.

## Writing Center

The Century College Writing Center, located in room 3280 on the west campus, is an encouraging environment where writers from all disciplines come together for mutual support and assistance with invention, drafting, revision, and editing. The Writing Center is staffed by English faculty members, the Writing Center Coordinator and Assistant Coordinator, and student tutors. The Writing Center staff is available to answer specific questions about grammar, punctuation, and mechanics, and to help students identify patterns or errors in their writing. The Writing Center staff can also provide assistance at any point during the writing process by helping
students in areas such as development, focus, and organization. Computers, reference materials, and grammar exercises are just a few of the resources available in the Writing Center. All Century College students are welcome. A Century College Student ID is required. For more information call 651.779.3400.

## Transportation

## Bus Service

Metro Transit buses stop at both the east and west campuses and provide connecting service to Maplewood Mall and downtown St. Paul. Schedules are available at The Connection, room 1205 west campus, and reception desk, second level, east campus or by calling 612.373.3333 or visiting metrotransit.org Discounted bus passes are also available for purchase at The Connection.

## Parking

Parking is available on campus for students, college staff members, and visitors. Parking regulations are in effect 24 hours every day and are enforced by Public Safety and the White Bear Lake Police Department. Since the college is located on state property, police can tag cars with expired license plates.

## Additional Services

## Bookstore

The Century College Bookstore is located in room 1320 west campus. Books may be purchased in the Bookstore or online at centurycollegebookstore.com. Some of the merchandise available includes new and used textbooks, backpacks, school and art supplies, imprinted clothing and trade books. You can also order textbooks online. The bookstore sponsors a "textbook buy back" during finals week of each semester. For more information, call 651.779.3284 or go to bookstore@century. edu.

## Business Office

The Business Office located in room 2361 west campus, processes payments and distribution of financial aid, grants, loans, and
scholarships. Students may pay their tuition and fees online, via mail, or in person at the Business Office.

## Century Foundation

The Century Foundation is a supporting organization of Century College. The purpose of the foundation is to:

- promote interest, commitment, and financial assistance to further the mission of the college;
- provide financial assistance for scholarships, special education and cultural projects;
- enhance academic and personal student services;
- remove barriers to higher education for students who have financial hardship; and
- integrate new technology into the instructional process.

The Foundation encourages philanthropic support from community members. Donations help Century College provide scholarships, upgrade outdated equipment, expand learning resources, ensure facilities meet the needs of students with disabilities, and support life enrichment programs to benefit the community.
Each year the Century Foundation awards more than $\$ 100,000$ in scholarships to new and returning students. Awards are designed to encourage cultural diversity, service learning, academic achievement, and career development. For more information contact the Foundation Office, room 2511, east campus, call 651.779.3356, or visit the website at century.edu/foundation/.

## Child Care

The Busy Bees Child Care Center has served the college since 1979. Busy Bees offers quality child care at reasonable rates in room 1251 east campus. The hours are Monday through Friday from 6:30 a.m. to 5:30 p.m. Childcare is available for children 33 months and potty trained through 11 years of age, on a full-time, part-time, and hourly basis. Dropins are accepted if there is space available. Available to serve staff, faculty, and the community, as well as students of Century College. For more information, please contact the center director at 651.779.3468.

## Emergency Calls

Century College does not have a message system for students. Students will be contacted for medical emergencies only. Contact the Vice President of Student Services office at 651.779.3929.

## Food Pantry

Through a collaboration with the White Bear Area Emergency Food Shelf, current students in need of food assistance can now get help on campus. The Food Pantry is located in room 1010 west campus. For more information call 651.779.3452.

## Food Service

Century College provides quality cafeteriastyle food service for students and staff. Hot entrees, sandwiches, salads and snacks are available every day that courses are in session. Vending machines are available at all times.

## Housing

Century College does not own or operate housing or apartment facilities for students living away from home. Students may find information on housing options near the college through one of the local newspapers or a rental agency such as Apartment Search. Notices of available housing and apartment vacancies are posted in the hallway adjacent to the west campus caféteria, room 1400 west campus. The college does not inspect or certify such housing, nor will it assume responsibility for problems arising from private housing.

## Lockers

West Campus: lockers are located in various areas around the west campus. There is a charge that is payable at the Connection, room 1205 west campus.
East Campus: lockers are available from program advisors free of charge, but students must purchase a lock at the Connection, room 1205 west campus.

## Lost and Found

Inquiries pertaining to lost and found articles should be made at the Bookstore in room 1320 west campus or the Public Safety office in room 1392 east campus.

## eServices

Students may access many online services and programs that are offered at century.

## 3 Student Services \& Resource Information

edu. With a STAR ID and password, which the student activates through MnSCU after admission to the college, students are able to:

- Sign up for orientation
- Search for open class sections
- Register for classes
- Print class schedule
- Adjust schedule (add, drop, withdraw)
- Check holds on records
- View or change address
- View grades
- View account and charges
- Pay tuition and fees
- Print unofficial transcript (academic record)
- Conduct a Degree Audit Report (DARS)

The college website includes notices and information available in the registration guide, college catalog and student handbook. In addition, the website offers links to other online services that make it easy for students to:

- File a FAFSA (Free Application for Federal Student Aid)



## Chapter 4

## Academic Policies and Information

## Academic Calendar

You can find a copy of the Academic Calendar along with the Semester Calendar on the college website.

You can find information about registration days, final examination days, and nonclass days on the website or by contacting the Advising, Counseling and Career Center, West Campus.

Academic calendars in the Minnesota State Colleges and Universities System (MnSCU) are subject to modification or interruption due to occurrences out of control of the college. In the event of any such occurrences, the College will attempt to accommodate its students. It will not, however, guarantee that courses of instruction or other college programs or events will be completed or rescheduled. Refunds will be made to eligible students only according to the policies adopted by MnSCU and Century College.


## Topics are listed in alphabetical order.

NOTE: The policies and procedures listed in this chapter are subject to change.

## Academic Renewal Policy

The Academic Renewal policy, also known as Academic Forgiveness and Fresh Start, recognizes that for various reasons, some students who completed previous coursework at Century College have not met scholastic requirements. This policy acknowledges that students can change, mature or rediscover their potential and an appreciation of the benefits of an education. Academic Renewal allows students a one-time opportunity to establish a new Grade Point Average (GPA), at Century College. Instead of needing to enroll at another college/institution to get a fresh start, Academic Renewal provides an opportunity for students to continue to pursue their educational goals at Century.
Academic Renewal parameters include the following:

- A student may only be granted Academic Renewal one time.
- A student must be currently attending Century to request Academic Renewal.
- The student cannot have earned a degree, diploma or certificate at Century following initial attendance at Century and
applied any of those credits for which the Academic Renewal is sought toward the award(s). Century College awards include those earned from Lakewood Community College and/or Northeast Metro 916 Technical College.
- The student must not have been enrolled in credit-based coursework at Century for a minimum of three (3) consecutive years prior to requesting Academic Renewal.
- Upon readmission to Century, the student must request Academic Renewal before earning 24 credits cumulatively. Academic Renewal will not be granted at point of graduation.
- A student may request to exclude the following:

1. All courses with grade of $F$, or
2. All courses with grades of $D$ and, $F$
3. Courses with grades of NC, FN, and FW do not count in the GPA therefore do not need to request to exclude from GPA
Courses identified for Academic Renewal will no longer be calculated in any GPA (cumulative, career/occupational and MnTC). However, these courses and grades will remain on the student's transcript.

- A possible implication for choosing to exclude courses with $D$ grades for


## 4 Academic Policies and Information

Academic Renewal may be the need to complete additional requirements for graduation. Courses with D grades are considered passing though some requirements accept only courses with a grade of $C$ or better.

- The student must meet and consult with an academic advisor or counselor to determine whether Academic Renewal will be beneficial, that all above parameters have been met and to complete the procedure for requesting Academic Renewal.
- The student and academic advisor or counselor must complete and submit the Academic Renewal Application form to the Vice President of Academic Affairs.


## Activity Participation Credit

You can register for activity credit only during the semester you complete the activity and this must be done during the first five days of the semester. Credits earned in activity courses can be applied as elective credits in any program. You cannot earn credit for the same activity course more than 4 times.

## Adding Courses

Please see Chapter 2, Change of Registration Policies.

## Articulation Agreements

1. To help you transfer more easily, Century College develops and maintains articulation agreements with all MnSCU institutions, the University of Minnesota, and many other colleges and universities. For more details, please visit the Minnesota Transfer Website (www.mntransfer. org) articulation database or contact the Advising, Counseling and Career Center for specific agreements and more information. In addition, Century College offers you the Minnesota General Education Transfer Curriculum (MnTC), a collaborative effort among all two-and four-year public colleges and universities in Minnesota to help you transfer their work in general education. If you complete the Minnesota General Education Transfer Curriculum at Century College and then transfer to any other Minnesota public baccalaureate-degreegranting university, you will have fulfilled all lower division general education requirements. (See also Chapter 5, regarding MnTC, AA, AFA and AS degrees,
and Transfer. and www.mntransfer.org, the Minnesota Transfer website.)
2. You may be awarded college credit upon successfully completing Career and Technical Education (formerly Tech Prep) through the Northeast Metro Career and Technical Center. Please refer to the Century College Transfer Student Services Office or the website for details. Please note that only those high school courses identified in the articulation agreements will be accepted. Your Career and Technical Education courses may fulfill elective credit(s) for some program/degree requirements at Century College.

In order to receive Career and Technical Education credit for courses taken through Northeast Metro Career and Technical Center you must:

- Complete the course goals in your high school.
- Maintain a grade of A or B in your course.
- Enroll in courses at Century College within three years of completing your high school course(s).
- Submit a high school transcript to Century College that shows graduation in good standing.
- Present your Career and Technical Education Certificate of Credit or Northeast Metro Career and Technical Center transcript to the Century College Transfer Student Services Office.

Transfer credit will be awarded when your enrollment at Century College is verified and when you have the criterxia above. You will also need to remain in courses at Century College past the tenth day of Fall or Spring semester (summer session would not apply). A Century College transcript will be developed for you only if you enroll at Century College. If you would like more information about receiving college Career and Technical Education credit, please contact Century's Director of Transfer Student Services, 651.779.3908, or the Northeast Metro Career and Technical Center Supervisor of Outreach, 651-415-5610, or refer to the websites: http:// www.nemetro.k12.mn.us/career/techcenter. html or www.techprepmn.com.

If you have been awarded college credit(s) at Century for Career and Technical Education
and plan to transfer from Century to another college or university, you should contact the Transfer Specialist at that college or university to learn how your Career and Technical Education credit(s) would be accepted at that institution. Each college or university decides which, if any, credit(s) transfer and whether those credits meet specific degree requirements.

## Attendances and Absences

You are expected to attend all scheduled classes. If you are ill, or other factors exist to prevent you from attending classes for a period of time, contact your instructor as soon as possible. If you experience an extended illness and wish to withdraw, you may do so online or at the Records Office.

## Auditing

Registration for a course without credit (AU grade) carries the same prerequisites, tuition and fees as courses taken for credit. You must consult with the course instructor concerning audit requirements and submit an audit form with the instructor's signature to the Records Office during the first five days of the semester or the first three days of summer session. Late start course audit forms must be submitted within one business-day of course start date. Once you have registered, you cannot earn a letter grade. A course you have previously audited may be re-taken later for credit and a letter grade.

## Adult Learners

Century College offers opportunities for adult learners to reach personal and professional goals through credit and non-credit courses, certificates, diplomas, and programs. These courses are offered to you through evening, online, Saturday, and Fast-Track (accelerated) options, in addition to the expansive day course schedule. Multiple options provide you with flexibility that fits into your busy life. For adults interested in designing their own degree, we anticipate approval of new Individualized Studies awards. If you are an adult learner, help is available through the Admissions Office, Advising, Counseling, \& Career Center.

## Change of Address or Name

Address changes can be made online through eServices or by submitting a Student Change of Information form to the Records Office room 2220, West Campus. Name changes
require legal documentation. A Student Change of Information form with valid photo identification (see form for details) and your Social Security Card, both with correct name must be submitted to the Records Office. The College reserves the right to request more than one form of documentation for verification purposes. If the college attempts to contact you using the information you have given us, we will consider the communication delivered to you.

## Classification of Students

Full-Time: You are registered for 12 credits or more
Part-Time: You are registered for 11 credits or fewer
First Year: You have earned less than 30 semester credits
Second Year: You have earned 30 or more semester credits

## Credit for Prior Learning

Students with a variety of work and life experiences may receive college credit. You have the opportunity to demonstrate collegelevel knowledge and skills gained outside a formal classroom from experience such as:

- Work
- Volunteer and community activities
- Travel
- Parenting
- Independent study
- Non-credit college courses
- Seminars/workshops/training
- Military service
- Hobbies

College credit for prior learning is awarded and recorded on your Century College transcript as equivalent to a particular college course, a Minnesota Transfer Curriculum goal area, or as elective credits. These credits can accelerate your progress toward completing your degree or program of study.

Various methods are used to evaluate and award college credit for prior learning. The final determination and award of credit is completed by Century College. Methods to assess credit for prior learning include: national standardized testing, credit by exam, evaluation of non-college programs, and individual portfolio assessments.

## NATIONAL STANDARDIZED EXAMS

A complete list of standardized exams and how they may transfer to Century is available through Transferology. www.transferology.com You must have your official exam score report sent directly from the issuing examination program to Century's Transfer Student Services Office.

## ADVANCED PLACEMENT (AP)

The AP program is administered by the College Entrance Examination Board through which high school students complete designated college-level courses in high schools and earn college credit by demonstrating a specified level of performance on AP exams. An AP exam score of 3 or higher will be considered for transfer.

## COLLEGE LEVEL EXAMINATION PROGRAM (CLEP)

The CLEP is administered by the College Entrance Examination Board through which students of any age have the opportunity to demonstrate college-level achievement through a program of exams in undergraduate college disciplines. Students must have their official CLEP score report sent directly to Century's Transfer Student Services Office. Century College will award credit for a CLEP test score of 50 or higher with the exception of Level 2 foreign language examinations for which a minimum score of 63 for German language, 62 for French language, and 66 for Spanish language is required.

## INTERNATIONAL BACCALAUREATE (IB)

The International Baccalaureate Organization (IBO) Diploma Program (DP) is a course of study for students aged 16 to 19 that leads to examinations in various subjects. Students who participate in the full Diploma Program are required to study and take examinations in 6 different academic subjects. Exams with a score of 30 or higher, and higher-level exams with a score of 4 or higher will be considered for transfer.

## DEFENSE ACTIVITY FOR NONTRADITIONAL EDUCATION SUPPORT (DANTES/DSST)

DANTES and DSST program sponsors a wide range of examination programs to assist military personnel in meeting their educational goals. DANTES and DSST exam scores that meet American Council on Education
(ACE) minimum score recommendations are considered for transfer.

## CREDIT BY EXAM

Credit by exam is administered by Century College faculty. Students who have acquired knowledge and skills comparable to those obtained by completing a course may take an examination in some courses and, if passed, receive college credit for that Century course. Courses completed by examination have a notation on the century transcript with a grade of CR (credit) or NC (no credit). Students will be charged a per-credit fee for credit by exam.

## EVALUATION OF NONCOLLEGE PROGRAMS

- Military

Military education and experience will be considered for college credit according to the Guide to the Evaluation of Educational Experiences in the Armed Services by ACE. Veterans who receive financial assistance should check for rules that do not permit payment for courses that are taken more than once and refer to Century's Veterans Benefits Information. You must have your official military transcript sent directly from ACE or SMART or AARTS to Century's Transfer Student Services Office.

- Certified Professional Secretary (CPS) Students who successfully completed the CPS exam in the past 7 years and have earned 10 Century College credits will receive a maximum of 16 elective credits.


## INDIVIDUAL PORTFOLIO ASSESSMENTS

Portfolios are developed through a process outlined in a series of workshops and an online course. The workshops will help you reflect on the knowledge and skills you have acquired and develop your portfolio to demonstrate the college-level learning you gained through written essays, documentation, performance, and discussion, and other pieces of evidence. A committee evaluates the portfolio and determines the equivalent courses and credits to award you for your prior learning. Students will be charged a per-credit fee for faculty assessment of the portfolio. Portfolios are evaluated by a team of college faculty.

Successful students will receive a grade of $P$ (pass) or No Credit which will be reflected on your Century transcript and will not be included

## 4 Academic Policies and Information

in the calculation of GPA. Century College adheres to MnSCU policies and procedures on credit for prior learning and the Council for Adult and Experiential Education (CAEL) national standards for awarding college credit for previous learning outside the classroom.

For complete and current information on the process for assessment of prior learning, please see the Century website.

## CREDIT LOAD

You are considered a full time student if you are enrolled for 12 credits or more. You are not required to take a minimum number of credits, but 15-18 credits are typically needed each semester to complete a program in two years (not including summer school).

You should check the number of credits required to qualify for financial aid programs or medical insurance programs. If you receive financial aid benefits, you are expected to know the course load required for those benefits.

> If you wish to take more than 18 credits during a semester you must receive permission from a counselor/advisor, room 2410 West Campus or the
> Registrar, Room 2220 West Campus.

## Credit Transfer Guarantee

If you plan to transfer after completing your coursework in liberal arts and sciences, Century College will guarantee that your credits taken and listed on a dated Century College guide sheet will transfer. You must meet certain criteria and complete a credit guarantee form at the Vice President of Student Services' office, West Campus. For more information, call 651.779.3929.

## Deans' List

If you are a full-time student (you have taken 12 or more college-level credits during the semester), you will be recognized as having achieved the Deans' List if you have no grades of F or I and have attained a semester grade point average of at least 3.75 . Note that college-level courses are those numbered 1000 or above.

## Diplomas

See Transcripts and Diplomas in this chapter.

## Dropping Courses

See Chapter 2, Change of Registration Policies.

## Drugs and Alcohol

Drugs and alcohol are not permitted on campus or at any college function. Students using drugs or alcohol on campus will be subject to disciplinary action. (Please also see the Student Handbook in this catalog.)

## Faculty Office Hours

Most faculty have specific times they are scheduled to be in their offices to assist you. Please check with individual faculty for office hours, open labs, or individual appointment schedules.

## Grading System

Century College uses the following grading system to report academic achievement and to compute your grade point average:
A - 4 grade points per credit
HA - 4 grade points per credit (indicates an Honors class of Honors option)
B-3 grade points per credit
$H B-3$ grade points per credit (indicates an Honors class or Honors option)
C - 2 grade points per credit
CR - denotes a Credit by Exam, credit earned represents work equivalent to or above 2.0 level. Credit by Exams are not included in GPA calculation.

D - 1 grade point per credit
F - 0 grade points (no credit earned)
FN - faculty initiated non-attendance withdrawal. This grade is awarded to a student who never attended the course, but did not drop the course prior to the end of the term drop period. FN grades do not influence GPA calculations, but count against successful completion for the purpose of measuring both academic and financial aid satisfactory progress.
FW - faculty initiated withdrawl. This grade is awarded to a student who never attended the course, but did not drop the course prior to the end of the term drop period. FN grades do not influence GPA calculations, but count against successful completion for the purpose of measuring both academic and financial aid satisfactory progress.
I- upon student's request, the instructor consented to an extension of time
for course completion. I grades automatically become F grades at the end of the next term (not including summer sessions) if requirements have not been satisfactorily completed
CR/NC- used for credit by exam only. A grade of CR (credit, passing with a grade of C or higher) or NC (no credit) will be entered for the specified course on the student's transcript for the examination and is not used in the calculation of GPA nor do the credits count toward financial aid eligibility.
P - successful demonstration of competence. Credits earned under the pass/fail system will not be included in computing GPA. A grade of P represents work equivalent to or above 2.00 level. Only certain courses have the option of P/F. Students should be informed that some institutions will not accept the $P$ grade in transfer.
IP- in progress. This grade may be awarded to a student enrolled in a course that is of clinical or field internship nature, whether in part or in full. IP grades automatically become F grades at the end of the next term (not including summer sessions) if requirements have not been satisfactorily completed. IP grades do not influence GPA calculations, but count against successfully completion for the purpose of measuring both academic and financial aid satisfactory progress.
W - student formally withdrew from the course after the first week and not later than two weeks before final exams began. These time frames differ from Summer Session classes and classes that do not follow the normal start/ end dates for a semester. These dates are listed in the class schedule. W's do not influence GPA. Normally student initiated, but the college may assign a W under special circumstances. (See Student Withdrawal and Academic Alert).
AU - student was a visitor in the course. AUs are assigned for audits and registration in restricted courses. Carries same tuition and fees as for credit. (Senior citizens receive a reduced rate if they register on or after the first day of class if space is available). Student must
consult with instructor concerning audit requirements. Students should be informed that institutions will not accept AU grade in transfer. Audit forms must be completed in the first week of the semester and one business day for latestart courses.
Z- denotes a course in progress.
GPA - (Grade Point Average) total grade points you achieved in a given time period divided by total credits of courses for which grades of $A, B, C, D$ and $F$ were received.

## Graduation Requirements

All awards (degrees, diplomas, and certificates) require:

- Century college-level GPA of 2.0
- Cumulative college-level GPA of 2.0
- Required career and occupational courses GPA of 2.0
- MnTC GPA of 2.0


## ASSOCIATE DEGREE GRADUATION REQUIREMENTS

Century College offers four degrees: Associate in Arts, Associate in Fine Arts, Associate in Science, and Associate in Applied Science. To earn any of these four degrees, you must meet the following requirements:

1. You must earn at least 60 college-level credits (numbered 1000 or above)
2. Of the credits applied toward your Associate Degree, at least 20 must be earned at Century College. The requirement will be reduced to 12 college-level credits for students transferring at least 8 college-level credits from another MnSCU institution and/ or the University of Minnesota. (see also Degree Residency Requirement)
3. You must earn a grade of $C$ or better in ENGL 1021
4. You must have a Century college-level GPA of 2.0; cumulative college-level GPA of 2.0; required career and occupational courses GPA of 2.0; MnTC GPA of 2.0
5. You must have a distribution of credits in general education/MnTC (Minnesota General Education Transfer Curriculum) courses; each of the four degrees differs in the required distribution of general education credits (refer to Chapters 5 \& 6 for details)

There may also be specific course grade requirements in your program. Please see Chapter 6, the Advising, Counseling, \& Career Center, or your program advisor.

## DIPLOMA/CERTIFICATE GRADUATION REOUIREMENTS

You can earn diplomas and certificates from Century College. Course and credit requirements for diploma and certificates vary depending on the program. For specific requirements for all programs, please see Chapters 5 \& 6 .

1. Diplomas: At least 31 earned college-level credits; a minimum of at least one third of the credits must be earned at Century College
2. Certificates: up to 30 earned college-level credits; you must earn one third of the credits at Century College
3. You must have a Century college-level GPA of 2.0; cumulative college-level GPA of 2.0; required career and occupational courses GPA of 2.0 and MnTC GPA of 2.0
4. You must earn a grade of $C$ or higher in ENGL 1021 IF this is the Goal 1 course you selected (exception: 16 credits or less certificates)
There may also be specific course grade requirements in your program. Please see Chapter 6, the Advising, Counseling, \& Career Center, or your program advisor.

## MINNESOTA GENERAL EDUCATION TRANSFER CURRICULUM NOTATION

The Minnesota General Education Transfer Curriculum ( MnTC ) is a total of 40 credits fulfilling ten goals. (Please see Chapters 5 \& 6 for specific requirement information). If you complete the MnTC at one of the Minnesota public higher education institutions and then transfer to any other Minnesota public baccalaureate-degree-granting college or university, you will have fulfilled all lower division general education requirements. The MnTC is the core of the Associate in Arts (AA) degree. When you have completed the MnTC or the AA with the MnTC core and have submitted an application for MnTC notation or AA degree graduation, you will receive a MnTC notation on your academic transcript.
Requirements include:

1. You must be a Century College student.
2. You must earn at least 40 college-level
credits and have attended at least one semester at Century College.
3. You must have a distribution of credits from the ten Minnesota General Education Transfer Curriculum goal areas as represented in the MnTC.
4. You must have a MnTC GPA of 2.0 or higher.

## Awarding Associate Degrees and Diplomas

Degrees, diplomas, and certificates will be awarded at the end of each semester but a formal commencement ceremony will be held only at the end of the spring semester. If you receive degrees, diplomas, or certificates at the end of other semesters, you will be invited to participate in the ceremony.

## Application for Graduation

You can obtain graduation application forms by viewing graduation information at http:// www.century.edu/currentstudents/records/ graduation.aspx. The application for graduation is available once you have reviewed the Apply to Graduation information. Submit the graduation application in to the Records Office by the deadline listed. Graduation requirements are available in the Advising, Counseling, \& Career Center, room 2410 West Campus, on the website, and in chapters 5 and 6 of this catalog. Apply for graduation at the beginning of your final semester or summer session. You must also apply to graduate to receive the transcript notation for completion of the Minnesota General Education Transfer Curriculum.

## Time Limit for Meeting Graduation Requirements

You must apply for graduation and follow any catalog in effect during the six-year period preceding the date of your graduation. You must declare which catalog year requirements your graduation evaluation will follow on your graduation application. You must have attended Century College during the catalog year you select. (For technical programs, please see below).
If you are enrolled in a technical/occupational program with agency/licensing rules and regulations, you may be required to follow changes in the career course requirements that occur in the five/six year period prior to your date of graduation. Program requirements

## 4 Academic Policies and Information

are subject to change for other unforeseen circumstances as well. These changes will be announced and published in college materials.

## Time Limit for Meeting Technical/ Occupational Graduation Requirements

If you are enrolled in a technical/occupational program you may follow any catalog in effect during the five-year period preceding your date of graduation. You must have attended during the catalog year selected. If you have a break in your attendance for one semester or longer and return, you must meet with your program advisor and discuss your education plan. You will be required to follow any changes in the technical/occupational requirements that have occurred.
To insure you graduate with up-to-date skills, technical credits are valid for five years. This includes transfer technical credits being used for specific technical program requirements.

## Attendance at Graduation

Attendance at graduation is optional. You will receive an invitation to the ceremony. There is one ceremony each year in May. Detailed information is available online. No formal ceremony will be held when fewer than 100 graduates plan to participate.

## Degree Residency Requirement

To receive a degree from Century College, you must earn 20 degree semester credits through enrollment in Century College courses. The requirement will be reduced to 12 collegelevel credits for students transferring at least 8 college-level credits from another MnSCU institution and/or the University of Minnesota. At least one third of the credits for the diploma or certificate must be earned at Century. To receive a MnTC notation on the Century College transcript, you must have attended one semester at Century College.

## Honors at Graduation

Associate degrees and diplomas will be awarded with distinction if you graduate with a Century College cumulative grade point average of 3.50 to 3.74 in college-level courses. Associate degrees and diplomas will be awarded with high distinction if you graduate with a Century College cumulative grade point average of 3.75 or greater in college-level courses.

## Honors Program

Century College offers a special invitation to you, as a student of excellence, to investigate
the Honors Program. The Program welcomes you if you have already established a record of academic achievement or if are interested in seeking an academic environment wherein you can experience significant personal and intellectual growth. The program offers opportunities for new and creative courses, advantages for acceptance and transfer to other institutions, opportunities to participate in the activities of a new and challenging community of fellow students, and opportunities to build an academic record of special interest to potential employees.

## Honors Program Entry Requirements

Opportunity for entry to the Honors Program is extended if you are a currently enrolled student, transfer student, or a high school senior using the PSEO program. Admission to the program requires you to have an overall minimum college grade point average of 3.25 , demonstrated communications skills and approval of the program director.

## Early Warning Communications and Academic Alert System

A warning notice may be sent to you if you have not been attending class (including not ever showing up), have not been completing assignments, or are at risk for not successfully completing the course. At the request of the instructor, a letter can be sent to you at any time, but typically at midterm (approximately the eighth week). Upon receipt of a letter, you should immediately contact your instructor to discuss the feasibility of completing course requirements. You should consider visiting with a counselor or advisor to consider options. If you are in a technical/occupational program, you should also contact your program advisor. Also, you may withdraw from the course at the Records Office or online. Please note that some instructors may not choose to initiate an early warning letter. If you are performing inadequately in any of your courses, you are likely at risk and should meet with your instructor immediately.

## Petitions for Exceptions

Students may request an exception to Century policy or procedure when extenuating circumstances have occurred. Students may also request an exception for a degree/ program requirement when the student would be better served by allowing substitutions or waivers. Students complete Century's Academic Petition form with an academic
advisor or counselor and attach their Century transcript and DARS along with supporting information such as a course outline or syllabus, course description, information from Transferology, or evidence of earned certification/training (e.g., CPR). If an instructor and/or program advisor has information that support the request they shall provide such information to include with the request. Submit one petition for each request; if the request applies to more than one certificate or degree submit one petition with rationale for each. Refer to the Century College Transfer Credit Appeals and Academic Petitions Policy, 3.12.0.0 about requirements for petitions for exceptions.

In order to petition for a waiver of serving either a first or second suspension and to seek re-admittance for the next academic term, you must complete an Academic Plan and a Waiver of Academic Suspension with the help of a counselor. Please note: Final approval of all appeals rests with the Dean of Students.

## Refund or Late Withdrawal Petitions

If you are seeking an exception to the refund policy, you must complete a Request for Refund or Late Withdrawal Petition form at the Business Office, 2340 West Campus and submit the form to the Director of Finance. Appeals are reviewed by the Petition Committee. All decisions are final.

## Repeat Courses

If you repeat a course, you must complete a "Repeat of Course" form at the Records Office when you finish the repeated course.

1. Your original grade remains on the transcript, but is not computed into your GPA.
2. Grades of W, FN, FW and AU do not affect this policy. All courses remain on your permanent academic records.

You can repeat courses as often as you want, but only the most recent grade will be computed into the GPA (see also Grading System). You may also petition to repeat using a substitute course if the original course is not available due to changes in curriculum. Contact a counselor/advisor for assistance.

## Restricted Course Waiver

A restriction is placed on courses that cannot be taken for credit based on completion of similar credits taken in high school or college.

If you are taking a restricted course, you need an instructor's signature to receive credit for the course. The "Restricted Course Waiver" form must be submitted to the Records Office during the first five days of the semester.

## ROTC-Air Force

A cooperative program between Century College and the University of St. Thomas provides you with the opportunity to enroll concurrently in credit courses in Aerospace Studies at St. Thomas. Credit is transferable. Scholarships that pay up to full tuition are available to you, especially in engineering, mathematics, physics, and computer science. If you would like more information, please contact the Department of Aerospace Studies at the University of St. Thomas at (651) 9626320 or 1-800-328-6819, ext. 6320.

## ROTC-Army

The Army Reserve Officer Training Corps is a leadership development program designed to prepare you for commissioning as a second lieutenant in the U.S. Army. A cooperative program between Century College and the University of Minnesota provides the opportunity for you to enroll concurrently in the Army ROTC basic course. Scholarships are available to you if you have prior service, are a member of the National Guard or Army Reserve, or wish to join. Upon graduation from a four-year program, you may serve in a full-time or part-time Army career. For more information, please contact the Department of Military Service at the University of Minnesota at (612) 626-1584 or http://www1.umn.edu/ arotc.

## Service Learning

Service Learning is a type of experiential learning that engages you in service within the community as an integrated aspect of a course. Service Learning courses involve you in course-relevant activities in partnership with a community organization. It also structures opportunities for you to reflect on your service experience to gain a better understanding of course content and an enhanced sense of civic responsibility.

Service learning participation provides the following benefits:

- Valuable opportunities to help gain a better understanding of topics learned in the classroom
- A way to gain greater understanding of economic, political, and cultural structures
in society and how they affect and impact individual lives, families, and communities
- Opportunity to examine your own values, attitudes, and beliefs by engaging you in new environments that lead to new questions about the world
- Sharpening of creative problem-solving abilities, collaboration skills, and leadership skills
- Expanding personal and professional networks, allowing the chance for career exploration
- Fulfilling requirements for admission into some university programs "and looked upon favorably by potential employers"
- College transcript recognition. Service learning hours are logged and listed in your official academic records.
- Graduation recognition. If you complete at least 40 hours of service learning before college graduation, you will be noted in the commencement program and during the commencement ceremony.

Students across the country say they enjoy and benefit from service learning. "We learn these theories in school, but until we really apply them or see them in action, they're not real."
At Century College, service learning

- Is integrated into specific courses at the discretion of faculty members or academic departments. Service learning students must meet specific requirements, such as serving a minimum number of hours and selecting a service site that meets certain criteria.
- Occurs on a semester basis.
- Is monitored by the Service Learning Department. The Service Learning Department communicates with community partners, students, and faculty members to ensure that needs are being met through their involvement.

For a list of courses and instructors that incorporate service learning, please contact the Director of Service Learning at 651.748.2602. For more information, please visit www. centuryservicelearning.project.mnscu.edu.

## Standards of Academic Progress

Century College wants you and every student to have a successful learning experience. We maintain an open door admissions policy, assess students admitted, and provide developmental course work and other programs
of assistance to support student success. However, it is your responsibility to perform at an acceptable academic level to continue enrollment.

Century College is publicly supported by Minnesota taxpayers, resulting in a significant reduction in the actual cost of enrollment. This reduction is even greater for students who are receiving financial aid. (See Financial Aid for Students, regarding Student Academic Progress for maintaining need based awards.) The College, therefore, is obligated to follow rules and regulations set forth by the state and federal governments to monitor accountability standards regarding student academic progress. To encourage satisfactory progress, the college intervenes in appropriate ways when students experience difficulty completing courses, suggesting practices that may foster success. The Standards of Academic Progress Policy establishes specific standards that must be met by all students enrolled in credits courses at Century College. The policy is in compliance with MnSCU policy 2.9 and is as follows:

## Academic Progress and Probation/ Suspension Policy

Minimum standards of academic progress are defined and measured by Century College in the following ways:

A cumulative GPA of 2.0 , and a cumulative completion rate of at least $67 \%$ of credits attempted.

1. Grade Point Average (Qualitative Measure): You are required to maintain a minimum of a 2.0 cumulative grade point average on a 4.0 A to F scale.
2. Completion Rate (Quantitative Measure): You are required to maintain a completion rate of $67 \%$ of credits attempted cumulatively. Your completion rate is calculated beginning with the first attempted credit and is calculated for grades $\mathrm{A}, \mathrm{B}, \mathrm{C}$, $D$, and $P$. Courses for which a you receive a letter grade of I, W, FN, FW, F, and Z are considered credits attempted and not successfully completed.
3. Evaluation Period: Your academic progress is monitored at the end of each academic term (Fall, Spring, and Summer semesters) beginning with the first attempted credit.
Academic Warning: If you do not meet the minimum cumulative 2.0 GPA or $67 \%$ completion

## 4 Academic Policies and Information

rate standard of academic progress, you will be placed on academic warning for the next term you are in attendance. If you are on warning, you may continue attending college; however, you are expected to take corrective actions.

Academic Suspension: If you are on warning and fail to meet the minimum cumulative 2.0 GPA or 67\% completion rate standard of academic progress during your next term of enrollment, you will be immediately placed on suspension.

Notification: You will be notified in writing upon being placed on warning, and the notice will inform you of the conditions of the warning period. You will be notified in writing when placed on suspension and the notice will include information about reinstatement.

For the First Suspension: You may not attend the college for one semester (not including summer term). After serving the suspension, you may be readmitted on probation after consulting with a counselor and submitting a signed Readmit Form to the Records Office.

## For the Second and Subsequent

 Suspensions: You may not attend the college for two semesters (not including summer term). After serving the suspension, you may be readmitted on probation after consulting with a counselor and submitting a signed Readmit Form to the Records Office.Appeals: In order to appeal for a waiver of serving either a first or second suspension and to seek re-admittance for the next academic term, you must complete an Academic Progress Plan and a Waiver of Academic Suspension Form with the help of a counselor. Academic Progress Plans are developed with students on suspension in Pre-scheduled group sessions. Approval of the request to waive the suspension is decided by the Satisfactory Academic Progress Committee.

Continued Probation: A student is placed on probation after serving suspension or receiving an approved academic suspension appeal. The student will stay on probation and may continue to attend school if they receive a 2.0 GPA and 67\% completion rate for the term even though they have not met the cumulative standards. Once a student has met the cumulative standards (cumulative 2.0 GPA and cumulative 67\% completion rate), they will be in good standing and no longer on probation.

Students who do not meet the term standard will be suspended again.

## ADDITIONAL ELEMENTS

Treatment of Grades: Courses for which again receive a letter grade of $A, B, C, D$, and $P$ are included in the calculation of cumulative credit completion as courses successfully completed.

Courses for which you receive a letter grade of I, W, FN, FW, or F shall be treated as credits attempted but not successfully completed. Blank grades (Z) will be treated as credits attempted but not successfully completed.

Course Repeats: For a course that is repeated, the original grade will remain on the transcript but will not be used in the GPA calculation. The original course credits remain in the number of attempted credits but are removed from the credits earned calculation. While this has no punitive impact on GPA, the percentage of completion will reflect the original course as attempted but not earned.

Transfer Credits: Transfer credits accepted by the institution shall be counted as credits attempted for calculation of the cumulative completion percentage, but will not be used in calculating the cumulative GPA.

Withdrawals: You may withdraw from a course or courses after the posted drop period. A grade of ' $W$ ' is given and will not impact GPA. But, a withdrawal will impact completion rate negatively as credits attempted and not earned are calculated in your percentage of completion.

## Technical Education Guarantee

If you graduate with a State Board approved Associate in Applied Science degree or diploma, but are judged by your employer as lacking technical job skills, you will be provided up to 12 semester credits of instruction free of charge. Certain standards apply to this guarantee. Please contact the Vice President of Student Services, West Campus, for more information or call 651.779.3929.

## Transcripts and Diplomas

Century College provides transcripts for a fee through National Student Clearinghouse at www.getting transcript.com., or through your myCentury student portal. Upon earning an award at Century College, the diploma is mailed to the student. For a replacement diploma, contact the Records office for
fee information. The College will withhold issuance of transcripts and/or diplomas to you until all money due the College has been paid. The only exceptions to this policy are student loans scheduled to mature at a future date.

## Transfer Agreements

Please see Chapter 4, Articulation Agreements.

## Transfer of Credits from Other Institutions

Transcripts will be evaluated in time for New Student Orientation sessions for new students who have reserved an orientation session and whose transcripts were submitted by the Priority Deadlines of March 15 (for Summer) and June 15 (for Fall Semester) and October 15 (for Spring Semester). If you are enrolled in courses during the current semester, you will receive a full evaluation for registration for the next semester. Transcripts that arrive after the deadlines will be evaluated after registration during that semester. If you are not enrolled in courses during the current semester you will not receive a full evaluation until you register. Transcripts will be retained on file for one year.

All passing credits (A, B, C, D, P) earned at a regionally accredited institution will be accepted towards a Century College program.

## Transfer of Credits to Other Institutions

If you wish to earn a four-year degree, you should check the lower division requirements of your chosen transfer college. Since requirements and acceptance of Century College credits differs from one college to another, you should consult the transfer college catalog and website early in your first year, use the applicable Century College transfer guide sheets, discuss transfer plans with advisors from the transfer college, and work with a Century College counselor. Also, you can look up how credits transfer by using the Transferology website at www. transferology.com. You can also refer to Chapter 5, which contains information regarding Minnesota General Education
Transfer Curriculum and Transferring to another college. Additional information is located in Chapter 12, The Transfer Guide, in this catalog or go to www.mntransfer.org, the Minnesota Transfer Website.

## Withdrawing from Courses

See Chapter 2, Change of Registration Policies.

## Chapter 5

## Educational Programs

## Career Exploration and Planning

Counselors are available to assist you with career exploration and career planning in the Advising, Counseling, \& Career Center located on West Campus, Main Entrance, Room 2410. Counselors can help you decide which programs are most appropriate for your educational goals, which may include transitioning to a new career, career advancement, transferring to a bachelor's program, or continuing education. The colleges GPS LifePlan, web site www.gpslifeplan.org/century can also be used to help you explore your personal career interests and goals.

If you are undecided about your career direction, you may use the counseling services and the Career Center to start your career decision-making process while taking general education courses. In the Career Center, you will find occupational information, placement data reports, interest and skill assessments, resume and interview resources, books, videos, computer career guidance programs, and Internet search information.

You are encouraged to use Minnesota Career Information System (MCIS) and Internet System for Education and Employment Knowledge (ISEEK) website: www.iseek.org. These easy-to-use computerized systems will help you gather occupational information on job descriptions, aptitudes, working conditions,earnings, employment outlook, training and education required, and much more. Century also offers Career Studies courses, such as Career and Life Planning (CRRS 1010), to assist you.


## Educational Program Comparison

Century College offers six types of academic programs to help you achieve a wide variety of educational and career goals. These programs are as follows:

## Associate in Arts Degree

Associate in Fine Arts Degree
Associate in Science Degree
Associate in Applied Science Degree Diploma
Certificate
The degree programs (AA, AFA, AS, and AAS) are distinguished from one another by the distribution of credits required to earn each type of degree. The diplomas and certificates are distinguished from degrees by being specifically focused on an occupational area or academic focus, and requiring fewer credits.

## Program Requirements

## Minnesota General Education Transfer Curriculum

The Minnesota General Education Transfer Curriculum ( MnTC ) is an agreement signed by all Minnesota public higher education institutions. It is a collaborative effort among all two-and four-year public colleges and universities in Minnesota to help you transfer your work in general education. When you complete the Minnesota General Education Transfer Curriculum at one of the participating colleges/universities and then transfer to any other Minnesota public baccalaureate degree-granting university, you will have fulfilled all lower-division general education requirements. Within the 40 credits required, there are ten goals. One course may fulfill a maximum of two goals; however, credits will only be counted once in total. If you fulfill the ten goal areas in fewer than 40 credits, you can select courses within any of the goals to achieve the 40 -credit total. In addition to the 40 credit core, the AA requires you to complete 18 additional credits, which may be MnTC goal-fulfilling courses, pre-major

## 5 Educational Programs

requirements, or electives and 2 credits in Health/Physical Education. The AFA, AS and the AAS degrees and the diplomas and certificates at Century College also use MnTC courses to fulfill their general education requirements

The Minnesota Transfer Curriculum is in place to help you meet the social, personal, and career challenges of the 21st Century. Therefore, the Minnesota Transfer Curriculum commits all public colleges and universities in the state of Minnesota to a broad educational foundation that integrates a body of knowledge and skills with a study of contemporary concerns. The goals and competencies emphasize our common membership in the human community; our personal responsibility for intellectual, lifelong learning; and an awareness that we live in a diverse world. They include diverse ways of knowing-that is, the factual content, the theories and methods, and the creative modes of a broad spectrum of disciplines and interdisciplinary fields-as well as emphasis on the basic skills of discovery, integration, application and communication.

The Minnesota Transfer Curriculum is divided into ten areas of emphasis, known as goals.

You may transfer the MnTC in each of the following ways:

1. As an entire package: If you complete the transfer curriculum at one institution, it will be accepted as completion of the transfer curriculum at Century College.
2. As a goal area: completion of a goal area of the MnTC at one institution will be accepted as a goal completion at Century College.
3. As courses within goal areas: If you complete a course which is included as part of a goal area at the sending institution, it will be accepted for full credit within the same goal area at Century College. When a course you have taken meets requirements for two different goal areas at a sending institution, the course will be accepted in transfer at Century College for the same two goal areas.

If you would like more information, please refer to the Minnesota Transfer website at www.mntransfer.org.

## Minnesota General Education Transfer Curriculum Goals and Competencies

## 1. Communication

This goal is designed to help students develop as writers and speakers who use the English language effectively and who read, write, speak and listen critically. As a base, all students should complete introductory communication requirements early in their collegiate studies. Writing competency is an ongoing process to be reinforced through writingintensive courses and writing across the curriculum. Speaking and listening skills need reinforcement through multiple opportunities for interpersonal communication, public speaking, and discussion.

## 2. Critical Thinking

This goal is designed to help students develop as thinkers who are able to unify factual, creative, rational, and value-sensitive modes of thought. Critical thinking will be taught and used throughout the general education curriculum in order to develop students' awareness of their own thinking and problem-solving procedures. To integrate new skills into their customary ways of thinking, students must be actively engaged in practicing thinking skills and applying them to open-ended problems.

## 3. Natural Sciences

This goal is designed to improve students' understanding of natural science principles and of the methods of scientific inquiry (i.e., the ways in which scientists investigate natural science phenomena). As a basis for lifelong learning, students need to know the vocabulary of science and to realize that, while a set of principles has been developed through the work of previous scientists, ongoing scientific inquiry and new knowledge will bring changes in some ways scientists view the world. By studying the problems that engage today's scientists, students learn to
appreciate the importance of science in their lives and to understand the value of a scientific perspective.

## 4. Mathematical/Logical Reasoning

This goal is designed to increase students' knowledge about mathematical and logical modes of thinking. Mathematics and logic will enable students to appreciate the breadth of applications of mathematics, evaluate arguments, and detect fallacious reasoning. Students will learn to apply mathematics, logic, and/or statistics to help them make decisions in their lives and careers.

## 5. History and the Social and Behavioral Sciences

This goal is designed 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. Such knowledge will better equip students to understand themselves and the roles they play in addressing the issues facing humanity.

## 6. Humanities and Fine Arts

This goal is designed 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. Through study in disciplines such as literature, philosophy, and the fine arts, students will engage in critical analysis, form aesthetic judgments, and develop an appreciation of the arts and humanities as fundamentals to the health and survival of any society.

## 7. Human Diversity

This goal is designed 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. Students should be able to evaluate the United States' historical and contemporary responses to group differences.

## 8. Global Perspective

This goal is designed to increase students' understanding of the growing interdependence of nations and peoples
and develop their ability to apply a comparative perspective to crosscultural social, economic and political experiences.

## 9. Ethical and Civic Responsibility

This goal is designed 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. While there are diverse views of social justice or the common good in a pluralistic society, students should learn that responsible citizenship requires them to develop skills to understand their own and others' positions, be part of the free exchange of ideas, and function as public-minded citizens.

## 10. People and the Environment

This goal is designed to improve students' understanding of today's complex environmental challenges. Students will examine the interrelatedness of human society and the natural environment. Knowledge of both biophysical principles and sociocultural systems is the foundation for integrative and critical thinking about environmental issues.

## TECHNOLOGY AND INFORMATION RESOURCES

Students who complete the Minnesota General Education Transfer Curriculum are expected to use computers, libraries, and other appropriate technology and information resources which play an increasingly important role in our personal, educational, and work lives. Students will have many opportunities to use and refine technological and research skills throughout their lowerdivision general education.

Students who have not had experience with technology and information resources should contact a counselor or program advisor to obtain assistance in registering for appropriate courses.

## MnTC Distribution Requirements:

Goal 1 - Communication:
Minimum of 10 credits including ENGL
1021, ENGL 1022 and at least one 3-credit

Communication course from COMM 1021, 1031, 1041 or 1051.
Goal 2 - Critical Thinking:
Fulfilled when all MnTC goals are complete.
Goal 3 - Sciences:
Minimum of 7 credits. Two courses from two different disciplines, with at least one traditional lab course.
Goal 4 - Math/Logical Reasoning: Minimum of 3 credits. Courses must be numbered between MATH 1020 and 1082 or PHIL 1041.
Goal 5 - History/Social and Behavioral Sciences:
Minimum of 9 credits. Three courses from three different disciplines.
Goal 6 - Humanities and Fine Arts: Minimum of 9 credits. Three courses, at least one of which must be a literature course, from three different disciplines.
Goal 7-10 - Theme Goals:
3 credits in each of four goals 7-10. NOTE:
May be fulfilled by courses from Goals $1-6$, since many of those courses also meet Goals 7-10, or can be fulfilled with additional courses listed separately under Goals 7-10.
Remember: If you fulfill the 10 goal areas in fewer than 40 semester credits, select courses within any of the goals to achieve a 40 credit total.

## MINNESOTA GENERAL EDUCATION TRANSFER COURSE LIST

Courses marked with an asterisk* in goals 1-6 will also fulfill requirements in goals
7-10, goal number listed in parenthesis ( ) after course title.

For any additions or changes in the MnTC Course List, see the Advising, Counseling, \& Career Center or college website for information.

## GOAL ONE: COMMUNICATION

## Communication

*1021 - Fundamentals of Public Speaking (9)
*1031 - Interpersonal Communication (7)
*1041 - Small Group Communication (9)
*1051 - Intercultural Communication (8)
*1053 - Communication, Travel, and Tourism (8)
*2011 - Interviewing (9)
*2033 - Nonverbal Communication (7)
*2071 - Communication and Gender (7)
*2081 - Health Communication (7)

## English

1021 - Composition I (grade of C or better required)
1022-Composition II
GOAL TWO: CRITICAL THINKING
Fulfilled when all MnTC goals are complete.

## GOAL THREE: NATURAL SCIENCES

(+ with traditional lab) All Goal 3 courses contain a traditional lab or lab-like component.

## Anthropology

*1022 - Introduction to Physical Anthropology: Human Origins (10)

## Biology

1020 - Biology Concepts+
1021 - Biology of Women
1023 - Introduction to Forensic Biology+
1024 - Human Biology
*1025 - Field Biology (10)+
*1026 - Plants and Society (10)+
*1027 - Climate Change Biology (10)
*1028 - Ecology+ (10)
1029 - Microbes and Society: An
Introduction to Microbiology+
1033 - Introduction to Human Genetics
1041 - Principles of Biology I+
1042 - Principles of Biology II+
2031 - Human Anatomy \& Physiology I+
2032 - Human Anatomy \& Physiology II+
2035 - Microbiology+

## Chemistry

1020 - Chemistry Concepts+
1041 - Principles of Chemistry I+
1042 - Principles of Chemistry II+

## Earth Science

*1020 - Earth Science+ (10)
*1025 - Interdisciplinary Physical and Environmental Science (10)
*1030 - Physical Geology+ (10)
*1040 - Energy Concepts (10)
*1045 - Energy Concepts Lab+ (10)
*1050 - Introduction to Meteorology (10)
*1055 - Meteorology Lab+ (10)
*1060 - Introduction to Oceanography (10)
*1080 - Natural Disasters (10)
*1085 - Natural Disasters Lab (10)

## 5 Educational Programs

## Geography

*1021 - Physical Geography (10)

## Physics

1020 - Physics Concepts+
1030 - Astronomy Concepts (3)
1035 - Observational Astronomy (3)
1041 - General Physics I+
1042 - General Physics II+
1081 - Introductory Physics I+
1082 - Introductory Physics II+

## GOAL FOUR: MATHEMATICAL/ LOGICAL REASONING

## Mathematics

1025 - Statistics
1030 - Mathematics for the Liberal Arts
1050 - Finite Mathematics
1061 - College Algebra I
1062 - College Algebra II with Trigonometry
1070 - Survey of Calculus
1081 - Single-Variable Calculus I
1082 - Single-Variable Calculus II

## Philosophy

1041 - Introduction to Logic

## GOAL FIVE: HISTORY <br> AND THE SOCIAL AND <br> BEHAVIORAL SCIENCES

## Anthropology

*1023 - Introduction to Cultural Anthropology (8)
*1025 - Introduction to Archaeology (7)
*2031 - Sex and Gender (8)
*2061 - Anthropology of Human Nature (10)

## Communication

*1061 - Introduction to Mass
Communication (9)
*2051 - Minnesota's New Immigrants:
Communication, Culture and
Conflict (7)

## Economics

1021 - Macroeconomics
1023 - Microeconomics

## Geography

*1023 - Human Geography (8)
*1031 - World Geography (8)
*1041 - Minnesota Geography (7)
*2010 - Geography of the World Economy (8)

## Gender Studies

*1061 - Foundations of Women and Gender Studies (9)
*1071 - Introduction to GLBT Studies (7)
*2061 - Gender in Global Perspective (8)
*2081 - Gender and Public Power (9)

## Global Studies

*2010 - Introduction to Global Studies (8)

## History

*1021 - Western Civilization: Antiquity to the 18th Century (8)
*1022 - Western Civilization: 18th Century to the Present (8)
*1031 - United States to 1877 (7)
*1032 - United States Since 1877 (7)
*1035 - Minnesota History (9)
*1051 - East Asia Since 1600 (8)
*1060 - World History: to 1500 (8)
*1061 - World History 1400 to Present (8)
*2041 - Myths in American History (9)
*2043 - The United States Since 1945 (9)
*2045 - The American West: An Environmental History (10)
*2051-20th Century Global Conflicts and Crises (9)
*2053 - Southeast Asia and the Vietnam War (8)
*2063 - Gender, Health and Medicine (7)
*2065 - Women in America to 1890 (7)
*2066 - Women in America Since 1890 (7)

## Linguistics

*1030-Introduction to English Language Analysis (7)
2030 - Introduction to Socio-Linguistics

## Political Science

*1020 - Introduction to Political Science (9)
*1023 - International Relations (8)
*1031 - American Government (9)
*1033 - State and Local Government (9)
*1035 - Constitutional Law (9)

## Psychology

1020 - General Psychology
1030 - Psychology of Adjustment
1041 - Developmental Psychology
2001 - Brain Science Foundations
2002 - Sex, Drugs, and Rock 'n' Roll
2003 - Sensation, Movement, and Language
2004 - Thinking, Sleep, and Mental Disorders
*2021 - Abnormal Psychology (7)
*2043 - Child Development (9)
*2044 - Adolescent Development (9)
*2045 - Adulthood, Aging and Death (9)

## Sociology

*1020 - Introduction to Sociology (7)
*1033 - Sociology of Families in Crisis (7)
*1041 - Sociology of Social Problems (9)
*1080 - Introduction to the Criminal Justice System (9)
*2031 - Sociology of the Family (7)
*2051 - Sociology of Race and Ethnicity (7)
*2053 - Sociology of Disability (7)
*2061 - Sociology of Gender and Work (7)
*2071 - Social Psychology (7)
*2087 - Criminology and Criminal Behavior (8)

## GOAL SIX: HUMANITIES

 AND FINE ARTS
## Art

*1020 - Art Appreciation (8)
*1021 - Art History of the Western World I (8)
*1022 - Art History of the Western World II (8)
*1023 - American Art (7)
1024-2D Design
1025-3D Design
1031 - Photography I
1041 - Drawing I
1051 - Painting I
1055 - Watercolor
1071 - Ceramics I
2021 - History of Photography (8)
2031 - Photography II
2032 - Digital Photography

## English (Literature)

2011 - American Literature: Colonial to Civil War
*2012 - American Literature: Civil War to Present (7)
*2013 - African American Literature (7)
2014 - Minnesota Writers
*2015 - American Indian Literature (7)
*2018 - Introduction to Folklore (7)
*2031 - British Literature: Medieval to Romantic (8)
*2032 - British Literature: Romantic to Present (8)
*2035 - Shakespeare (8)
2043 - Literature and Film
*2051 - Modern World Literature (8)
*2052 - Contemporary World Literature (8)
*2055 - Mythology (8)
*2057 - An Introduction to African Literature (8)
*2058 - Middle Eastern Literature (8)
*2061 - Women in Literature: British and Colonial (8)
*2062 - Women in Literature: American (9)
*2063 - Women in Literature: World Voices (8)
2065 - GLBT Literature (7)
2071 - Children's Literature

2072 - Graphic Narratives: Comics as Literature
2073 - Short Novel
2075 - Science Fiction and Fantasy
2077 - Mystery
*2083 - Latin American Literature (8)
2085 - Bible as Literature
*2095 - Ethics and Environments: The Literature of Place (10)

## English (nonliterature)

2024 - Creative Writing: Fiction
2026 - Creative Writing: Creative Nonfiction
2028 - Creative Writing: Poetry
1027 - Creative Writing: Intro to Creative Writing

## Humanities

*1021 - Introduction to the Humanities: Europe and the United States (8)
*1025 - Introduction to the Humanities: A World View (8)
*1030 - Culture and Civilization of Spanish Speaking Peoples (8)
1035 - Culture and Civilization of French Speaking Peoples (8)
*1040 - Culture and Civilization of Chinese Speaking Peoples (8)
*1041 - The Art of Film (8)
*1043 - International Film (8)
*1045 - American Film (7)
*1051 - African American CulturalPerspectives (7)
*2061 - Women in the Arts (7)

## Music

1035 - Enjoyment of Classical Music
*1045 - Popular Music in American Society (7)
*2051 - World Music (8)

## Philosophy

1021 - Introduction to Western Philosophy
*1025 - Introduction to Eastern Philosophy (8)
*1031 - Ethics (9)
*1035 - Biomedical Ethics (9)
*1051 - World Religions (8)
2032 - Environmental Ethics (10)
2033 - Business Ethics (9)
*2051 - Philosophy of Religion (8)

## Theater

*1020 - Introduction to Theater (8)
1031 - Beginning Acting

1033 - Acting for the Camera
1041 - Theatre Production and Design
*1081 - World of Drama (7)
GOALS 7, 8, 9, 10-
THEME GOALS:
Credits in each of Goals 7-10 may be fulfilled with courses listed under Goals 1-6 above (denoted with an asterisk) OR by completing additional coursework from the following lists. (One course may fulfill a maximum of two goals, but the credits are only counted once.)

GOAL SEVEN: HUMAN DIVERSITY Anthropology
1025 - Introduction to Archaeology (5)

## Art

1023 - American Art (6)

## Communication

1031 - Interpersonal Communication (1)
2033 - Nonverbal Communication (1)
2051 - Minnesota's New Immigrants: Communication, Culture and Conflict (5)
2071 - Communication and Gender (1)
2081 - Health Communication (1)

## English

2012 - American Literature: Civil War to Present (6)
2013 - African American Literature (6)
2015 - American Indian Literature (6)
2018 - Introduction to Folklore (6)
2065 - GLBT Literature (6)

## Geography

1041 - Minnesota Geography (5)

## History

1031 - United States to 1877 (5)
1032 - United States Since 1877 (5)
2063 - Women, Health, and Medicine (5)
2065 - Women in America to 1890 (5)
2066 - Women in America Since 1890 (5)

## Humanities

1045 - American Film (6)
1051 - African American Cultural
Perspectives (6)
2061 - Women in the Arts (6)

## Linguistics

1030 - Introduction to English Language Analysis (7)

## 5 Educational Programs

## Music

1045 - Popular Music in American Society (6)

## Psychology

2021 - Abnormal Psychology (5)

## Sociology

1020 - Introduction to Sociology (5)
1033 - Sociology of Families in Crisis (5)
2031 - Sociology of the Family (5)
2051 - Sociology of Race and Ethnicity (5)
2053 - Sociology of Disability (5)
2061 - Sociology of Gender and Work (5)
2071 - Social Psychology (5)

## Theater

1081 - World of Drama (6)

## Women and Gender Studies

1071 - Introduction to GLBT Studies (5)

## GOAL EIGHT: GLOBAL PERSPECTIVE

## Anthropology

1023 - Introduction to Cultural Anthropology (5)
2031 - Sex and Gender (5)

## Art

1020 - Art Appreciation (6)
1021 - Art History of the Western World I (6)
1022 - Art History of the Western World II (6)
2012 - History of Photography (6)

## Chinese

1011 - Beginning Chinese I
1012 - Beginning Chinese II
2021 - Intermediate Chinese I
2022 - Intermediate Chinese II

## Communication

1051 - Intercultural Communication (1)
1053 - Communication, Travel, and Tourism (1)

## English

2031 - British Literature: Medieval to Romantic (6)
2032 - British Literature: Romantic to Present (6)
2035 - Shakespeare (6)
2051 - Modern World Literature (6)
2052 - Contemporary World Literature (6)

2055 - Mythology (6)
2057 - An Introduction to African Literature (6)
2058 - Middle Eastern Literature (6)
2061 - Women in Literature-British and Colonial (6)
2063 - Women in Literature-World Voices (6)
2083 - Latin American Literature (6)

## Gender Studies

2061 - Women in Global Perspective (5)

## Geography

1023 - Human Geography (5)
1031 - World Geography (5)
2010 - Geography of the World Economy (5)
Global Studies
2010 - Introduction to Global Studies (5)

## History

1021 - Western Civilization: Antiquity to the 18th Century (5)
1022 - Western Civilization: 18th Century to the Present (5)
1051 - East Asia Since 1600 (5)
1060 - World History: to 1500 (5)
1061 - World History: 1400 to Present (5)
2053 - Southeast Asia and the Vietnam War (5)
Humanities
1021 - Introduction to the Humanities:
Europe and the United States (6)
1025 - Introduction to the Humanities: A World View (6)
1030 - Culture and Civilization of Spanish Speaking Peoples (6)
1035 - Culture and Civilization of French Speaking Peoples (6)
1040 - Culture and Civilization of Chinese Speaking Peoples (6)
1041 - The Art of Film (6)
1043 - International Film (6)
Music
2051 - World Music (6)
Philosophy
1025 - Introduction to Eastern Philosophy (6)
1051 - World Religions (6)
2051 - Philosophy of Religion (6)

## Political Science

1023 - International Relations (5)

## Sociology

2087 - Criminology and Criminal Behavior (5)

## Spanish

1011 - Beginning Spanish I
1012 - Beginning Spanish II
2021 - Intermediate Spanish I
2022 - Intermediate Spanish II

## Theater

1020 - Introduction to Theater (6)

## GOAL NINE: ETHICAL AND CIVIC RESPONSIBILITY

## Communication

1021 - Fundamentals of Public Speaking (1)
1041 - Small Group Communication (1)
1061 - Introduction to Mass Communication (5)
2011 - Interviewing (1)

## English

2025 - Creative Writing: Media Writing
2062 - Women in Literature-American (6)

## Gender Studies

1061 - Foundations of Gender Studies (5) 2081 - Gender and Power

## History

1035 - Minnesota History (5)
2041 - Myths in American History (5)
2043 - The United States Since 1945 (5)
2051-20th Century Global Conflicts and Crises (5)

## Philosophy

1031 - Ethics (6)
1035 - Biomedical Ethics (6)
2033 - Business Ethics (6)

## Political Science

1020 - Introduction to Political Science (5)
1031 - American Government (5)
1033 - State and Local Government (5)
1035 - Constitutional Law (5)

## Psychology

2043 - Child Development (5)
2044 - Adolescent Development (5)
2045 - Adulthood, Aging and Death (5)

## Sociology

1041 - Sociology of Social Problems (5)
1080 - Introduction to the Criminal Justice System (5)

## GOAL TEN: PEOPLE AND THE ENVIRONMENT Anthropology

```
1022 - Introduction to Physical Anthropology: Human Origins (3) 2061 - Anthropology of Human Nature (5)
```


## Biology

```
1025 - Field Biology (3)
1026 - Plants and Society (3)
1 0 2 7 \text { Climate Change Biology (3)}
1028 - Ecology (3)
```

Earth Science
1020 - Earth Science (3)
1025 - Interdisciplinary Physical and
Environmental Science (3)
1030 - Physical Geology (3)
1040 - Energy Concepts (3)
1045 - Energy Concepts Lab (3)
1050 - Introduction to Meteorology (3)
1055 - Introduction to Meteorology Lab (3)
1060 - Introduction to Oceanography (3)
1080 - Natural Disasters (3)
1085 - Natural Disasters Lab (3)

## English

2095 - Ethics and Environments: The Literature of Place (6)

## Geography

1021 - Physical Geography (3)
History
2045 - The American West: An
Environmental History (5)
2032 - Environmental Ethics (6)
Philosophy
2032 - Environmental Ethics (6)

* course also fulfills a theme goal
+ traditional lab science course


## Preparation for a

 Bachelor's DegreeAn Associate in Arts degree allows you to complete both general education requirements and pre-major requirements for a wide range of majors and programs at fouryear colleges and universities. You should consult with a Century counselor/advisor so that you can be sure courses taken at Century
fulfill the requirements of a particular field of study, and contact the transfer institution. Listed below are examples of the bachelor's degree or pre-professional programs you may begin at Century:

| Accounting | Health |
| :--- | :--- |
| Agriculture | History |
| American Studies | Horticulture |
| Anthropology | Human Ecology |
| Architecture | Human Services |
| Art | Humanities |
| Art Education | Information |
| Art History | Technology |
| Astronomy Biology | Industrial Relations |
| Business | Journalism |
| Administration | Law* |
| Chemistry | Library Science |
| Chiropractic* | Linguistics |
| Child Psychology | Marketing |
| Chinese | Mathematics |
| Communication | Medical Technology* |
| Studies** | Medicine* |
| Computer Science | Mortuary Science |
| Criminal Justice | Music |
| Dentistry* | Music Education |
| Earth Science | Nursing |
| Economics | Occupational |
| Education, | Therapy* |
| Early Childhood | Philosophy |
| Education, | Physical Therapy |
| Elementary | Physics |
| Education, | Political Science |
| Secondary | Psychology |
| Engineering | Recreation |
| English | Social Work |
| Environmental | Sociology |
| Science | Spanish |
| Forestry | Sports Management |
| Gender Studies** | Statistics |
| Geography | Theater |
| Global Studies** | Veterinary* |
| * Preprofessional programs |  |
| ** Century Certificate available; see program listing |  |

## Transferring to Another College

Minnesota's public colleges and universities are working to make transfer easier for you. You can help if you plan ahead, ask questions, and use the established pathways created
by transfer agreements. Century counselors will assist you in planning the sequence of courses necessary to fulfill transfer program requirements. You can find copies of transfer guides for many of these programs in the Advising, Counseling, \& Career Center, West Campus. In addition,many colleges and universities send representatives to Century to answer your questions.

If you are thinking about transferring, please follow these steps:

1. Discuss your plans with a Century counselor.
2. Call or visit your intended transfer college and its website. Obtain the following materials and information:

- college catalog
- transfer brochure
- information on admissions criteria and on materials required for admission (e.g. portfolio, transcripts, test scores, etc.). Please remember that some majors have limited enrollments or their own special requirements such as a higher grade point average.
- information on financial aid (how to apply and the dead-line date).

3. After you have reviewed these materials, make an appointment to talk with an advisor/counselor in the college or program you want to enter. When you meet, be sure to ask about course transfer and admission criteria.
4. Refer to the Transfer Guide, Chapter 12, located at the back of the catalog, the Minnesota Transfer website www. mntransfer.org, and Transferology www.transferology.com

In addition, each fall, Century College Advising, Counseling, \& Career Center hosts "Transfer Information Days" for students which can help you in your planning process. See the Century website or Student Newsletter for dates and more information.

## Transfer Articulation Agreements

Articulation agreements facilitate your credit transfer and provide you with a smooth transition from one related degree program to another. Century College has formed articulation agreements with a number of

## 5 Educational Programs

public and private institutions of higher learning in Minnesota, North Dakota and Wisconsin to help you with your transfer goals. Consult the Minnesota State Colleges and Universities website at http://www.mntransfer.org/students/ plan/s_agreements.php to search by program or institution. Please see a counselor if you would like to see specific agreement benefits and requirements or if you need in further help or information.

## Understanding How Transfer of Credits Works

1. The receiving college or university decides which credits transfer and whether those credits meet its degree requirements. The accreditation of both your sending and your receiving institution can affect whether the credits you earn will transfer.
2. Institutions accept credits from courses and programs that are similar to those they offer. They look for similarity in course goals, content, and level.
3. Not everything that transfers will help you graduate. 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 the requirements of the degree or program you choose?"
4. If you change your career goal or major, you might not be able to complete all degree requirements within the usual number of graduation credits. If you change your degree/major program, complete the Student Change of Information form at the Records Office or at www. century.edu/currentstudents/records/ changingyourmajor.aspx.

## Applying for Transfer Admission

1. Completing an Application for Admission is always the first step in transferring. Fill out the application early to beat the deadline. Send the application fee.
2. Request that official transcripts be sent from every institution you have attended. You may be required to provide a high
school transcript or GED test scores as well. Failure to send a transcript from a school you have attended can result in serious consequences such as dismissal.
3. Confirm that you have supplied the college or university with all the necessary documentation. Most colleges make no decisions until all required documents are in your file.
4. After the college notifies you that you have been accepted for admission, request that your submitted transcript's credits be evaluated for transferable credits. Ask that a written evaluation be provided.
5. If you have questions about your evaluation, speak with a Counselor or the DARS Transfer Office. Ask why judgments were made about specific courses. Many concerns can be cleared up if you understand why the decisions were made. If you are not satisfied, you can appeal. See "Your Rights as a Transfer Student" below.

## Your Rights as a Transfer Student

As a transfer student, you have the right to the following:

1. A clear, understandable statement of an institution's transfer policy.
2. A fair credit review and an explanation of why credits were or were not accepted.
3. A copy of the formal appeals process. Common appeal steps are as follows:
a) You fill out an appeal form.

Supplemental information you provide to reviewers - a syllabus, course description, or reading list - can help.
b) Department or committee will review.
c) You will receive, in writing, the outcome of the appeal.
d) You can petition the decision.
4. At your request, a review of your eligibility for financial aid or scholarships.

If you would like help with your transfer questions or problems, please see a Century College counselor/advisor.

Associate in Arts Degree

## Overview

The Associate in Arts degree (AA) is intended primarily for students who plan to transfer to another college to complete a bachelor's degree. It can be considered the first two years of a four-year degree program. The AA degree is a general liberal arts degree, and no specific major is listed in conjunction with the degree. However, you may choose to concentrate in a particular field of study as preparation for a planned major at a four-year college or university. You must take at least 40 of the 60 credits within the Minnesota General Education Transfer Curriculum ( MnTC ) outlined in the preceding section. If you plan to transfer to a four-year college or university, you should work with one of Century's counselors/advisors prior to, and during, enrollment at Century College to help you plan an appropriate program (both general education and major requirements). An agreement with the Minnesota State Colleges and Universities (MnSCU) provides that Century College's Associate in Arts Degree or MnTC will satisfy all of the lowerdivision general education requirements of any of the state universities.

An agreement with the University of Minnesota provides that an Associate in Arts Degree or MnTC will satisfy the Liberal Education requirements.
Century also has agreements with private and out-of-state colleges/universities (e.g., Augsburg College, College of St. Scholastica, Concordia University-St. Paul, St. Catherine University, University of Wisconsin-River Falls, University of Wisconsin-Stout, North Dakota State University and University of North Dakota) to allow easy transfer of the AA degree.

## General Requirements for AA degree

1. At least 60 earned college-level credits (numbered 1000 or above). Of the credits applied toward the Associate in Arts
Degree, you must earn at least 20 credits at Century College.
2. A grade of C or better in ENGL 1021.
3. Century college-level GPA of 2.0 and MnTC GPA of 2.0.

Total credits required for an AA degree: 60
Minnesota General Education Transfer Curriculum: 40

Electives, additional MnTC, and/or
pre-major: 18
Physical Education/Health Required: 2

## MnTC Distribution Requirements for the AA Degree (or MnTC Notation):

Goal 1 - Communication:
Minimum of 10 credits including ENGL
1021, ENGL 1022, and at least one 3-credit Communication course from COMM 1021, 1031, 1041, or 1051

Goal 2 - Critical Thinking:
Fulfilled when all MnTC goals are complete.
Goal 3 - Sciences:
Minimum of 7 credits. Two courses from two different disciplines, with at least one traditional lab course.
Goal 4 - Math/Logical Reasoning:
Minimum of 3 credits. Courses must be numbered between MATH 1020 and 1082 or PHIL 1041
Goal 5 - History/Social and Behavioral Sciences:

Minimum of 9 credits. Three courses from three different disciplines.

Goal 6 - Humanities and Fine Arts: Minimum of 9 credits. Three courses, at least one of which must be a literature course, from three different disciplines.
Goal 7-10 - Theme Goals:
3 credits in each of four Goals 7-10. NOTE:
May be fulfilled by courses from Goals
$1-6$, since many of those courses also meet Goals 7-10, or can be fulfilled with additional courses listed separately under Goals 7-10.

Remember: If you fulfill the 10 goal areas in fewer than 40 semester credits, select courses within any of the goals to achieve a 40 credit total. NOTE: For goal course options, see MnTC course list on pages 37-40.

Health/Physical Education:
Minimum of 2 credits in Health/Physical Education, with at least one Physical Education activity course.

## Recommended

Computer Literacy: Recognizing the
importance of computer literacy in the world today, Century College recommends you develop computer skills appropriate for your major field by either selecting courses that are computer based or selecting a course(s) that will fulfill this need.

## Associate in

 Fine Arts
## Overview

The Associate in Fine Arts degree (AFA) is primarily intended for those students who plan to transfer to another college to complete a bachelor's degree. It can be considered the first two years of a fouryear degree program. The AFA degree is a liberal arts degree with a concentration in a designated discipline in the fine arts.

## AFA Degree Programs

AFA in Art
AFA in Music
Transfer note: Please see page 40 for articulation information and a Century counselor/advisor for specific transfer assistance.

## General Requirements for the AFA degree:

1. At least 60 earned college-level credits (numbered 1000 or above). Of the credits applied toward the Associate in Fine Arts Degree, at least 20 must be earned at Century College.
2. A grade of $C$ or better in Engl 1021.
3. Century college-level GPA of 2.0; required fine arts core courses GPA of 2.0; MnTC GPA of 2.0.
4. For any specific course grade requirements in programs, see Chapter 6, the Advising, Counseling, \& Career Center or program advisor.

## MnTC Distribution Requirements for the AFA degree:

Credit and course requirements are unique for each program. Refer to the curriculum requirements listed in Chapter 6, Programs of Study for specific requirements of the AFA degree programs.

## Associate in Science Degree

## Overview

The Associate in Science degree (AS) is primarily intended for you if you wish to balance liberal arts education with careeroriented classes. The primary purpose of the degree is to provide the credentials for a specific career and prepare you for admission to an upper-division college. The extent to which your credits transfer to a four-year college varies somewhat with the specific program completed and the subsequent major selected (see note below). Approximately one-half of the coursework consists of Minnesota General Education Transfer Curriculum (liberal arts and general education) credits and one-half is comprised of career or occupational courses.

## AS Degree Programs

Business Administration
Chemical Dependency
Computer Information Systems
Computer Science
Criminal Justice
Education
Engineering
Health Services Broad Field
Horticulture
Human Services
Individualized Studies
Law Enforcement
Nursing
Transfer note: While the AS degree has more limited general transferability than the AA degree, specific transfer agreements do exist with selected upper-division colleges. Please see page 40 and a Century counselor/ advisor for specific information.
General Requirements for the AS degree:

1. At least 60 earned college-level credits (numbered 1000 or above). Of the credits applied toward the Associate in Science Degree, you must earn at least 20 credits at Century College.
2. A grade of $C$ or better in ENGL 1021.
3. Century college-level GPA of 2.0; required

## 5 Educational Programs

career and occupational courses GPA of 2.0; MnTC GPA of 2.0.
4. For any specific course grade requirements in programs, please see Chapter 6, the Advising, Counseling, \& Career Center, or program advisor.

## MnTC Distribution Requirements for the AS degree:

The minimum Minnesota General Education Transfer Curriculum distribution requirements for the AS degree are listed below. Credit and course requirements are unique for each program. Please refer to the curriculum requirements listed in Chapter 6, Programs of Study, for specific requirements of each AS degree program.

## Required MnTC Distribution:

Goal 1 - Communication:
Minimum of 7 credits including ENGL 1021, Composition I and at least one 3-credit Communication course from COMM 1021, 1031, 1041 or 1051.
Goal 2 - Critical Thinking:
Fulfilled when all MnTC goals complete.
Goal 3 and/or 4 - Sciences/Math/ Logical Reasoning:
Minimum of 6 credits; two courses from either Goal 3 and/or 4 . Goal 4 courses must be numbered between MATH 1020 and 1082 or PHIL 1041.
Goal 5 - History/Social and Behavioral Sciences:
Minimum of 6 credits. Two courses from two different disciplines.
Goal 6 - Humanities and Fine Arts:
Minimum of 6 credits. Two courses from two different disciplines.

Goal 7-10 - Theme Goals:
3 credits in each of two Goals 7-10. NOTE: May be fulfilled by courses from Goals $1-6$, since many of those courses also meet Goals 7-10, or can be fulfilled with additional courses listed separately under Goals 7-10

NOTE: For goal course options, please see MnTC course list on pages 37-40.

## Recommended

Health/Physical Education: In recognition of the importance of health and wellness to a thriving society and personal well-being,
it is recommended that you take courses that emphasize life-long health, fitness, and wellness.

Computer Literacy: Recognizing the importance of computer literacy in the world today, it is recommended that you develop computer skills appropriate for your major field by either selecting courses that are computer based or selecting a course(s) that will fulfill this need.

## Associate in Applied Science Degree

## Overview

The Associate in Applied Science degree (AAS) is primarily intended if you plan to use the competence gained through your degree for immediate employment. The AAS degree is granted in a specific major and typically at least one-half of the coursework is in the program area, approximately one-third is from Minnesota General Education Transfer Curriculum (general education and liberal arts), and the balance of credits are either in your program area or general education depending on the specific program you chose..

## AAS Degree Programs

Accounting
Business Management
Cloud Computing and Virtualization Security Cosmetology
Cybersecurity, Virtualization, and Forensics
Dental Assistant
Dental Hygiene
Education
Energy Technical Specialist
Engineering CAD Technology
Enterprise Computing Technology
Facility Systems Technology
Heating, Ventilation, and
Air Conditioning Technology
Horticulture
Individualized Studies
Information and Telecommunications
Technology

Interior Design
Marketing: Marketing Communications Technology
Marketing: Marketing Management
Office Technology: Administrative Assistant
Office Technology: Medical Office
Orthotic Technology
Paramedic Science
Public Safety
Prosthetic Technology
Radiologic Technology
Renewable Energy
Translating and Interpreting
Visual Communications Technologies
Transfer note: The AAS degree is not designed to transfer to an upper-division college. However, the Minnesota General Education Transfer Curriculum courses typically do transfer and some of the career-oriented courses taken at Century may also transfer to specific majors at selected colleges or universities. Also, some articulation agreements exist between programs and upper division colleges, please see page 40. If you would like more information about transferring credits to other colleges and universities, please consult with a Century counselor/advisor for assistance.

## General Requirements for the AAS degree:

1. At least 60 earned college-level credits (numbered 1000 or above). Of the credits applied toward the Associate in Applied Science Degree, at least 20 must be earned at Century College.
2. A grade of $C$ or better in ENGL 1021.
3. Century college-level GPA of 2.0 ; required career and occupational courses GPA of 2.0 ; and MnTC GPA of 2.0.
4. For any specific course grade requirements in programs, please see Chapter 6, the Counseling, Career and Advising Center, or program advisor.

## MnTC Distribution Requirements for the AAS degree:

The minimum Minnesota General Education Transfer Curriculum distribution requirements for the AAS degree are listed below. Credit and course requirements are unique for
each program. Please refer to the curriculum requirements listed in Chapter 6, Programs of Study, for specific requirements of each AAS degree program.

## Required MnTC Distribution:

Goal 1 - Communication:
Minimum of 7 credits including ENGL 1021, Composition I, and at least one 3-credit Communication course from COMM 1021, 1031, 1041 or 1051.
Goal 2 - Critical Thinking:
Fulfilled when all MnTC goals complete.
Goal 3 and/or 4 - Sciences/Math/ Logical Reasoning:
Minimum of 3 credits; one course from either Goal 3 and/or 4 . Goal 4 courses must be numbered between MATH 1020 and 1082 or PHIL 1041.
Goal 5 - History/Social and Behavioral Sciences:

Minimum of 3 credits.
Goal 6 - Humanities and Fine Arts:
Minimum of 3 credits.
Goal 7 - 10 - Theme Goals:
3 credits in one of the four Goals 7-10. NOTE: May be fulfilled by courses from Goals 1-6, since many of those courses also meet Goals 7-10, or can be fulfilled with additional courses listed separately under Goals 7-10.

NOTE: For goal course options, see MnTC course list on pages 37-40.

## Recommended

Health/Physical Education: In recognition of the importance of health and wellness to a thriving society and personal well-being, it is recommended that students take courses that emphasize life-long health, fitness, and wellness.

Computer Literacy: Recognizing the importance of computer literacy in the world today, it is recommended that students develop computer skills appropriate for their major fields by either selecting courses that are computer based or selecting a course(s) that will fulfill this need.

## Certificates and <br> Diplomas

## Overview

Occupational diplomas and certificates are intended for those students who want to focus on learning specific occupational skills and use them for immediate employment or career advancement. Century offers certificates with up to 30 credits and occupational diplomas of at least 31 credits.

Diploma and Certificate Program Areas
Accounting
Auto Body Technology
Automotive Service Technology
Chemical Dependency
Cloud Computing
Communication Studies
Cosmetology
Cosmetology-Nail Care Technician
Criminal Justice
Cybersecurity, Virtualization, and Forensics
Dental Assistant
Dental Practice Management
Education
Emergency Medical Services
Engineering CAD Technology
Enterprise Computing
Entrepreneurial
Facility Systems Technology
Fire Services
Gender Studies
Global Studies
Health Support Specialist
Heating, Ventilation, and Air Conditioning
Individualized Studies
Technology
Horticulture
Human Services
Information \& Telecommunications
Technology
Interior Design/Home Furnishing
Kitchen and Bath Design

Marketing
Medical Assistant
Nursing Assistant
Office Technology: General
Office Technology: Medical
Orthotic Technology
Paramedic Technology
Prosthetic Technology
Public Safety
Renewable Energy
Solar
Sports Management
Translating and Interpreting
Visual Communications Technologies
Century offers academic certificates in Communication Studies, Global Studies, Genders Studies, and Global Studies.

## General Requirements:

1. Diplomas: At least 31 earned collegelevel credits, Certificates: up to 30 earned college-level credits.
2. Century college-level GPA of 2.0; required career and occupational courses GPA of 2.0; MnTC GPA of 2.0.
3. A grade of $C$ or higher in ENGL 1021 IF this is the Goal 1 course selected. (Exception: 16 credit, or less, certificates)
4. For any specific course grade requirements in programs, see Chapter 6, the Advising, Counseling, \& Career Center, or program advisor.

## Distribution Requirements:

Certificate: Up to 30 credits
Diploma: 31 credits and above
The minimum distribution requirements are listed above. Credit and course requirements are unique to each program. Please refer to the curriculum requirements listed in the next chapter of the catalog, for specific requirements of each program. A minimum of one third of the credits must be earned at Century College.
NOTE: For goal course options, see MnTC course list on pages 37-40.

## Chapter 6

## Programs of Study

## References to the Minnesota General Education Transfer Curriculum (MnTC)

Throughout the following curriculum listings, notations such as "MnTC Goal 5 - History/Behavioral and Social Sciences" are used in place of specific course numbers. These notations refer to the goals of the Minnesota General Education Transfer Curriculum found in this catalog on pages $35-39$. These goal areas list the specific courses from which students may choose to fulfill the requirements of the program.
For example, if a program requires a nonspecified, three-credit course in humanities, the curriculum list would include "Goal 6 - Humanities and Fine Arts: 3 credits." This means that any three-credit course listed under Goal 6 of the Minnesota General Education Transfer Curriculum could be used to fulfill that requirement.

Students should be aware that it may be necessary to select additional MnTC credits beyond the minimum required in each goal area to reach the total $\mathrm{MnTC} /$ General Education credits required for their degree or program.

See the Advising, Counseling, \& Career Center or college website for any changes or additions to the MnTC Course List.


## Educational Programs <br> of Study Index

## Accounting

Art-Fine Arts
Associate in Arts Degree (see chapter 5)
Auto Body Technology
Automotive Service Technology
Business
Administration
Management
Chemical Dependency
Communication Studies
Computer Science
Cosmetology
Nail Care Technician
Criminal Justice
Investigative Sciences
Cybersecurity, Virtualization, and Forensics
Dental Assistant
Dental Hygiene
Education
Paraeducation
Emergency Medical Services Paramedic
Community Paramedic
EMT
Energy Technical Specialist
Engineering
Engineering CAD Technology
Enterprise Computing Technology
Facility Systems Technology
Gender Studies

Global Studies
Heating, Ventilation, and Air Conditioning Technology
Horticulture
Human Services
Individualized Studies
Information and Telecommunications
Technology
Interior Design
Home Furnishing Sales
Kitchen and Bath Design
Law Enforcement
Investigative Sciences
Marketing
Marketing Management
Entrepreneurial
Marketing Communications
Medical Assistant
MnTC (Minnesota General Education
Transfer Curriculum) (see chapter 5)
Music-Fine Arts
Nursing
Nursing Assistant
Office Technology
General
Medical
Orthotic Technology
Pedorthic
Prosthetic Technology
Public Safety
Radiologic Technology
Renewable Energy/Solar
Sports Management
Translating and Interpreting
Visual Communications Technologies

> The following pages provide a listing of the required curriculum for each program of study at Century College. Also, check program guide sheets in the Advising, Counseling, \& Career Center and Century website for any mid-year changes or updates. Students are strongly encouraged to meet with a Century counselor/advisor and a program advisor to plan their course of study to assure that specific courses fulfill the requirements of their program.

## Accounting

## Program Options:

Accounting Clerk (9)
Accounting Technician Certificate (30)
Accountant Diploma (45)
Accounting AAS Degree (60)

## Certificate

Accounting Clerk

## Total Number of Credits: 9

Program Description: This program is intended for individuals who are seeking an entry-level accounting position. It is ideal for someone seeking an accounts receivable, accounts payable, payroll clerk, or accounting clerk position. It is also for those students wanting a base for starting on a longer accounting program.
Career/Occupational Requirements: 9 credits

| ACCT | 1010 | Introduction to <br> OR |
| :--- | :--- | :--- |
| ACCT | 2020 | Financial Acco |
| ACCT | 1020 | Payroll Accoun |
| ACCT | 1030 | Computerized |
|  |  |  |
| Certificate |  |  |
| Accounting Technician |  |  |
| Total Number of Credits: $\mathbf{3 0}$ |  |  |

Program Description: A comprehensive exposure to accounting practice fundamentals. Graduates are prepared for entry-level jobs as accounts payable clerks, accounts receivable clerks, payroll clerks, inventory clerks, tellers, bookkeepers, etc.
Application Requirements: Skills in keyboarding (30 WPM or OFFT 1001 recommended)

## Career/Occupational Requirements: 18 credits

ACCT 1010 Introduction to Accounting .................. . . 3
BMGT 1020 Introduction to Business ..................... 3
CAPL 1010 Introduction to Software Applications OR

| CSCI | 1020 | *Introduction to Personal Computers and Information Systems |
| :---: | :---: | :---: |
| ACCT | 1020 | Payroll Procedures. |
| ACCT | 1030 | Computerized Accounting Applications |
| BMGT | 1030 | Survey of Business Economics OR |
| ECON | 1021 | *Macroeconomics. |

## General Education/MnTC Requirements: 3 credits

Goal 1 - Communication: 3 credits
Select one of the following communication courses:
ENGL 1021 Composition I
COMM 1021 Fundamentals of Public Speaking
COMM 1031 Interpersonal Communication
COMM 1041 Small Group Communication
COMM 1051 Intercultural Communication

## Additional Requirements:

Sufficient credits to total $30^{*}$
ACCT 2020 recommended
*See Advisor or Counselor for assistance in selecting course(s)

## Diploma

Accountant

## Total Number of Credits: 45

Program Description: An expanded exposure to accounting practice. Graduates are prepared for entry-level jobs as junior accountants, full charge bookkeepers, associate accountants, accountants, etc.
Application Requirements: Skills in keyboarding (30 WPM or OFFT 1001 recommended)

Career/Occupational Requirements: 31 credits
ACCT 1010 Introduction to Accounting .................. . . 3
ACCT 1020 Payroll Procedures .....  3
ACCT 1030 Computerized Accounting Applications ..... 3
ACCT 2025 Managerial Accounting ..... 4
ACCT 2035 Federal Income Taxation ..... 3
ACCT 2050 Intermediate Accounting ..... 4
ACCT 2060 Professional Issues in Accounting ..... 3
BMGT 1020 Introduction to Business ..... 3
BMGT 1030 Survey of Business EconomicsOR
ECON 1021 * Macroeconomics ..... 3
CAPL 1010 *Introduction to Software ApplicationsOR
CSCI 1020 Introduction to Personal Computersand Information Systems.3

## 6 Programs of Study

## General Education/MnTC Requirements: 7 credits <br> Goal 1 - Communication: 7 credits <br> ENGL 1021 Composition I. ................................. . 4 <br> Select one of the following COMM courses: <br> COMM 1021 Fundamentals of Public Speaking <br> COMM 1031 Interpersonal Communication <br> COMM 1041 Small Group Communication <br> COMM 1051 Intercultural Communication <br> Additional Requirements: <br> Sufficient credits to total 45* <br> ACCT 2020 and 2025 recommended <br> *See Advisor or Counselor for assistance in selecting course(s) <br> Associate in Applied Science Degree Accounting Total Number of Credits: 60

Program Description: This degree is designed to prepare the student for entry level positions ranging from management of accounts payable and accounts receivable to a position that requires the professional skills to be a full charge accountant. The second year of the program will emphasize research of financial and managerial accounting topics, the development of professional contracts and the writing of professional reports. The graduate will find employment opportunities in profit and non-profit entities.

## Program Requirements <br> Career/Occupational Requirements: 42 credits

ACCT 1020 Payroll Procedures. . ......................... . . 3

ACCT 1030 Computerized Accounting Applications ...... 3
ACCT 2020 Financial Accounting . . . . . . . . . . . . . . . . . . . . . 4
ACCT 2025 Managerial Accounting. . . . . . . . . . . . . . . . . . . 4
ACCT 2035 Federal Income Taxation ..................... . 3
ACCT 2050 Intermediate Accounting . . . . . . . . . . . . . . . . . . 4
ACCT 2099 Accounting Capstone. . . . . . . . . . . . . . . . . . . . . 3
BMGT 1020 Introduction to Business . . . . . . . . . . . . . . . . . 3
$\begin{array}{lll}\text { BMGT } & 1030 & \text { Survey of Business Economics OR } \\ \text { ECON } & 1021 & \text { Macroeconomics ........................... . . } 3\end{array}$
BMGT 2060 Business Communications. ................... . . 3
BMGT 2090 Business Finance. ............................ . 3
CAPL 1010 Introduction to Software Applications OR
CSCI 1020 Introduction to Personal Computers and
Information Systems . . . . . . . . . . . . . . . . . . . . 3
$\begin{array}{lll}\text { CAPL } & 1025 & \text { Microsoft Excel OR } \\ \text { CSCI } & 1021 & \text { Spreadsheet and Database Software ......... } 3\end{array}$
General Education/MnTC Requirements: 16 Credits
Goal 1 - Communication: 7 credits
ENGL 1021 Composition I................................. . 4

Select one of the following COMM courses 3
COMM 1021 Fundamentals of Public Speaking
COMM 1031 Interpersonal Communication
COMM 1041 Small Group Communication
COMM 1051 Intercultural Communication
Goal 2 - Critical Thinking is fulfilled when all MnTC
goals are complete
Goal 3 and/or Goal 4 - Sciences/Math/Logical Reasoning: 3 credits
Goal 5 - History/Social and Behavioral Sciences: 3 credits
Goal 6 - Humanities and Fine Arts: 3 credits
Goals 7-10: Three credits in ONE of the four goals (fulfilled by COMM course)

## Additional Requirements:

Sufficient credits to total 60 (2 credits)
*See Advisor or Counselor for assistance in selecting course(s).

## Art

## Program Options: <br> Art AFA Degree (60)

## Associate in Fine Arts Degree

Art

## Total Number of Credits: 60

Program Description: This program is a focused, two-year study of Fine Arts with a strong grounding in principles of design, practical studio practices, and art history. The Associate of Fine Arts degree is intended primarily for students who plan to transfer to another college to complete a baccalaureate degree in fine art. It can be considered as the first two years of a four-year program in Fine Arts.
Application Requirements/Program Prerequisites: Applicants must demonstrate interest and a basic level of proficiency through a review of completed portfolio works.
Program Core Requirements: 36 credits
Complete the following 15 credits
(*The following courses are also MnTC Goal 6)
ART 1021 Art History of the Western World I . . . . . . . . . . 3
ART 1022 Art History of the Western World II .......... 3
ART 1041 Drawing 1 ..................................... . . 3
ART 1024 2D Design ................................... . 3
ART 1025 3D Design .................................... . 3
AND select 21 credits from the following:
ART 1051 Painting | . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
ART 2051 Painting II. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
ART 1071 Ceramics I ..................................... . . 3
ART 2071 Ceramics II...................................... . 3

| ART | 2041 | Drawing II | 3 |
| :---: | :---: | :---: | :---: |
| ART | 2042 | Figure Drawing | 3 |
| ART | 1031 | Photography I. |  |
| ART | 2031 | Photography II | 3 |
| ART | 2032 | Digital Photography. | 3 |
| ART | 2021 | History of Photography | 3 |
| ART | 1055 | Watercolor | 3 |
| ART | 1061 | Sculpture I |  |

General Education/MnTC Requirements: Additional 24 credits (for a total of 39 MnTC courses when 15 credit ART course above is included). Choose appropriate courses according to the graduation requirements of your transfer institution.

Note: The MnTC credit requirement in this program does not fulfill the 40 -credit MnTC requirement for transfer university graduation. While students may complete the 40 -credit MnTC requirement at Century College, the AFA Art curriculum is not designed to ensure MnTC requirement completion. Students transferring to MSU Mankato or MSU Moorhead see ** below also.
Goal 1 - Communication: 7 credits
ENGL 1021 Composition I............................... . . 4
ENGL 1022 Composition II ................................ . . 3
Select one of the following COMM Courses:
COMM 1021 Fundamentals of Public Speaking ............ 3
COMM 1031 Interpersonal Communication................ . 3
COMM 1041 Small Group Communication. ................. . 3
COMM 1051 Intercultural Communication.................. 3
Goal 2 - Critical Thinking is fulfilled when all MnTC goals are complete
Goal 3 and/or Goal 4 - Sciences/Math/Logical Reasoning: 6 credits

Two courses from Goal 3 and/or Goal 4
Recommend one traditional lab course
Goal 5 - History/Social and Behavioral Sciences: 6 credits
Two courses from two disciplines
Goal 6 - Humanities and Fine Arts:
No additional credits
*ART Core Requirements listed above fulfill Goal 6
Goals 7-10: Three credits in each of two goals (can be fulfilled by courses completed in goals in 1-6, see MnTC course list for options)
**Students transferring to MSU Mankato should expect to take an additional 9 MnTC credits including up to 7 credits of Goal 3 and/or Goal 4. Students transferring to MSU Mankato will complete Goal 2 when all other goal areas are fulfilled. Students transferring to MSU Moorhead should expect to take an additional 12 credits of MnTC course work including up to 7 credits of Goal

3 and/or Goal 4 and a Goal 2 course to fulfill MnTC graduation requirements. Please see a counselor for assistance with academic and transfer planning.

Possible Electives: (Transfer of theses electives will depend on the accepting institution's policies; please consult with your intended school prior to registering for these courses.)
ART 2099 Portfolio: Professional Practices
ART 1790 Independent Study

## Auto Body Technology

## Program Options:

Nonstructural Repair Certificate (30)<br>Automotive Body Technician Diploma (60)

## Certificate <br> Nonstructural Repair <br> Total Number of Credits: 30

Program Description: This certificate is designed for students interested in repairing minor impact damage and car detailing. Students may be employed in entry-level positions, such as painters' helpers.

Application Requirements: Assessment score placement in RDNG 0950 or completion of RDNG 0900 with a grade of " C " or higher; and assessment score placement in ENGL 0090 or completion of ENGL 0080 with a grade of "C" or higher. NEW: Arithmetic assessment score of 64 or higher or elementary algebra assessment score of 76 or higher OR completion of MATH 0010 (previously) or MATH 0015 or MATH 0030 with a grade of C or higher. We strongly encourage students who score below 64 to meet with an advisor or counselor to discuss their review and course options PRIOR to Math assessment retesting or registering for a Math course. Contact the Advising, Counseling, and Career Center at 651.779.3285, West 2410.
Career/Occupational Requirements: 27 credits

| ABOD | 1000 | Introduction to Auto Body Trade |
| :---: | :---: | :---: |
| ABOD | 1010 | Introduction to Welding for Auto Body |
| ABOD | 1020 | Auto Body Sheet Metal |
| ABOD | 1030 | Introduction to Auto Body Refinishing. |
| ABOD | 1040 | Corrosion Protection and Body Fillers |
| ABOD | 1050 | Glass Trim and Hardware |
| ABOD | 1060 | Collision Repair and Overall Refinishing . . . . . . 3 |
| ABOD | 1070 | Auto Body Electrical and |
|  |  | Mechanical Components. |

## General Education/MnTC Requirements: 3 credits

Goal 1 - Communication: 3 credits

## 6 Programs of Study



Select one of the following communication courses:

| ENGL | 1021 | Composition I |
| :--- | :--- | :--- |
| COMM | 1021 | Fundamentals of Public Speaking |
| COMM | 1031 | Interpersonal Communication |
| COMM | 1041 | Small Group Communication |
| COMM | 1051 | Intercultural Communication |

## Diploma <br> Automotive Body Technician Total Number of Credits: 60

Program Description: This award is designed to expose students to all facets of the auto body industry: unibody and frame, computer estimating, damage analysis, refinishing, and major structural repair. This diploma prepares students to meet the collision industry's expectations of a quality entry-level technician.

Application Requirements: Assessment score placement in RDNG 0950 or completion of RDNG 0900 with a grade of " $C$ " or higher; and assessment score placement in ENGL 0090 or completion of ENGL 0080 with a grade of "C" or higher. NEW: Arithmetic assessment score of 64 or higher or elementary algebra assessment score of 76 or higher OR completion of MATH 0010 (previously) or MATH 0015 or MATH 0030 with a grade of C or higher. We strongly encourage students who score below 64 to meet with an advisor or counselor to discuss their review and course options PRIOR to Math assessment retesting or registering for a Math course. Contact the Advising, Counseling, and Career Center at 651.779.3285, West 2410.

Career/Occupational Requirements: 57 credits

| ABOD | 1000 | Introduction to Auto Body Trade |
| :---: | :---: | :---: |
| ABOD | 1010 | Introduction to Welding for Auto Body |
| ABOD | 1020 | Auto Body Sheet Metal. |
| ABOD | 1030 | Introduction to Auto Body Refinishing. |
| ABOD | 1040 | Corrosion Protection and Body Fillers |
| ABOD | 1050 | Glass Trim and Hardware |
| ABOD | 1060 | Collision Repair and Overall Refinishing . |
| ABOD | 1070 | Auto Body Electrical and |
|  |  | Mechanical Components |


| ABOD | 2000 | Specialty Refinishing |
| :---: | :---: | :---: |
| ABOD | 2010 | Computer Estimating |
| ABOD | 2020 | Unibody and Frame Damage . |
| ABOD | 2030 | Major Collision Lab |
| ABOD | 2040 | Auto Body Management |
| ABOD | 2050 | Refinishing Lab |
| ABOD | 2060 | General Auto Body Lab |
| ABOD | 2070 | Mechanical Suspension and Wheel Alignment Lab |

General Education/MnTC Requirements: 3 credits
Goal 1 - Communication: 3 credits
Select one of the following communication courses:
ENGL 1021 Composition I
COMM 1021 Fundamentals of Public Speaking
COMM 1031 Interpersonal Communication
COMM 1041 Small Group Communication
COMM 1051 Intercultural Communication

## Automotive Service Technology

## Program Options:

Basic Automotive Service Certificate (27)
Automotive Service Technician Diploma (64)
The Automotive Service Technology Program is accredited by the National Automotive Technicians Education Foundation (NATEF).

## Certificate <br> Basic Automotive Service Total Number of Credits: 27

Program Description: This program provides workplace safety training and prepares the student to perform automotive repairs in the following areas: tire service, lubrication, exhaust, body electrical, starting and charging systems, brakes, steering and suspension, wheel alignment and standard drive train. The student will receive training to take the (ASE) Certification Tests in the following areas: Electrical/Electronic Systems, Brakes, Suspension and Steering, and Manual Drive Train and Axles.

Application Requirements: Assessment score placement in RDNG 0950 or completion of RDNG 0900 with a grade of "C" or higher; and assessment score placement in ENGL 0090 or completion of ENGL 0080 with a grade of "C" or higher. NEW: Arithmetic assessment score of 64 or higher or elementary algebra assessment score of 76 or higher OR completion of MATH 0010 (previously) or MATH 0015 or MATH 0030 with a grade of C or higher. We strongly encourage students who score below 64 to meet with an advisor or counselor to discuss their review and course options PRIOR to Math assessment retesting or registering for a Math course. Contact the Advising, Counseling, and Career Center at 651.779.3285, West 2410. An Automotive Service Technology program
application must be completed and submitted to admissions before entering the program.

| AST | 1005 | Automotive Workplace Safety |  |
| :---: | :---: | :---: | :---: |
| AST | 1015 | Automotive Brakes | 4 |
| AST | 1025 | Steering and Suspension Systems | 3 |
| AST | 1035 | Four Wheel Alignment. | 4 |
| AST | 1045 | Standard Drive Train | 4 |
| AST | 1055 | Automotive Service | 2 |
| AST | 1065 | Electrical Principles. |  |
| AST | 1075 | Body Electrical Systems | 2 |
| AST | 1085 | Starting and Charging Systems. | 4 |

## Diploma <br> Automotive Service Technician Total Number of Credits: 64

Program Description: This program provides workplace safety training and prepares the student to perform automotive repairs in the following areas: tire service, lubrication, exhaust, body electrical, starting and charging systems, brakes, steering and suspension, wheel alignment, standard drive train, automatic transmission, engine repair and diagnosis, cooling system, emission control, computer systems, fuel injection, engine performance maintenance, supplemental restraint systems, and air conditioning. The student will also be prepared to take the (ASE) Certification Tests in the following areas: Electrical/Electronic Systems, Brakes, Suspension and Steering, Manual Drive Train and Axles, Automatic Trans/Transaxle, Engine Repair, Engine Performance, and Heating and Air Conditioning.

Application Requirements: Assessment score placement in RDNG 0950 or completion of RDNG 0900 with a grade of "C" or higher; assessment score placement in ENGL 0090 or completion of ENGL 0080 with a grade of "C" or higher; NEW: Arithmetic assessment score of 64 or higher or elementary algebra assessment score of 76 or higher OR completion of MATH 0010 (previously) or MATH 0015 or MATH 0030 with a grade of C or higher. We strongly encourage students who score below 64 to meet with an advisor or counselor to discuss their review and course options PRIOR to Math assessment retesting or registering for a Math course. Contact the Advising, Counseling, and Career Center at 651.779.3285, West 2410.

An Automotive Service Technology program application must be completed and submitted to admissions before entering the program.

## Career/Occupational Requirements: 61 credits

AST 1005 Automotive Workplace Safety .............. . . 1

AST 1015 Automotive Brakes .......................... . . . . 4
AST 1025 Steering and Suspension Systems . . . . . . . . . . 3
AST 1035 Four Wheel Alignment. . . . . . . . . . . . . . . . . . . . 4
AST 1045 Standard Drive Train . . . . . . . . . . . . . . . . . . . . . 4
AST 1055 Automotive Service . . . . . . . . . . . . . . . . . . . . . . . 2
AST 1065 Electrical Principles . . . . . . . . . . . . . . . . . . . . . . 3

AST 1075 Body Electrical Systems . . . . . . . . . . . . . . . . . 2
AST 1085 Starting and Charging Systems. . . . . . . . . . . . . 4
AST 1095 Automatic Transmissions ...................... . 4
AST 2005 Automotive Engines. . . . . . . . . . . . . . . . . . . . . . 4
AST 2015 Engine Diagnosis . . . . . . . . . . . . . . . . . . . . . . . . 3
AST 2025 Cooling System Service. . . . . . . . . . . . . . . . . . . 2
AST 2035 Emission Control ................................. . . . 3
AST 2045 Computerized Engine Control . . . . . . . . . . . . . . 4
AST 2055 Electronic Fuel Injection ..................... . . 2
AST 2065 Engine Performance Maintenance . . . . . . . . . . 4
AST 2075 Supplemental Computer Systems . . . . . . . . . . . 2
AST 2085 Air Conditioning. . . . . . . . . . . . . . . . . . . . . . . . . 3
AST 2095 New Automotive Technology . . . . . . . . . . . . . . 3
Additional Requirements: 3 credits
WLDG 1001 Introduction to Oxyacetylene Welding ....... . 2
WLDG 1011 Introduction to Metal Inert Gas Welding ..... 1 OR
General Education/MnTC

## Business Administration

## Program Options:

Business Administration AS Degree (60)

## Associate in Science Degree Business Administration Total Number of Credits: 60

Program Description: The Business Administration program is designed to provide students with pre-professional preparation in business through career courses, as well as a strong foundation in general education courses for transfer purposes. Students interested in securing or maintaining employment in a business-related occupation and those interested in furthering their education to a Baccalaureate Degree may consider completing this AS Degree. Specific transfer arrangements with the college of choice should be made as early in the degree as possible to ensure an appropriate program is planned for enrollment at Century and at the four-year school.

## Career Requirements: 29 credits

ACCT 2020 Financial Accounting . . . . . . . . . . . . . . . . . . . . . 4
ACCT 2025 Managerial Accounting. . . . . . . . . . . . . . . . . . . 4
BMGT 1020 Introduction to Business . . . . . . . . . . . . . . . . . . 3
BMGT 2030 Management Fundamentals . . . . . . . . . . . . . . . 3
BMGT 2051 Legal Environment of Business .............. 3
BMGT 2060 Business Communications..................... . . 3
CSCI 1020 Introduction to Personal Computers and Information Systems.

## 6 Programs of Study

| ECON 2021 | Statistics for Business and Economics . . . . . . 3 |
| :---: | :---: |
| MKTG 2050 | Principles of Marketing |
| Additional Requirements: 1 credit |  |
| Select from ACCT, BMGT, CAPL, CSCI, ENGL 1025 or MKTG |  |
| General Education/MnTC Requirements: 30 credits |  |
| Goal 1 - Communication: 7 credits |  |
| ENGL 1021 | Composition |
| Select one of the following COMM courses: . . . . . . . . . 3 |  |
| COMM 1021 | Fundamentals of Public Speaking |
| COMM 1031 | Interpersonal Communication |
| COMM 1041 | Small Group Communication |
| COMM 1051 | Intercultural Communication |
| Goal 2 - Critical Thinking is fulfilled when all MnTC goals are complete |  |
| Goal 3 and/or Goal 4: Sciences/Math/Logical Reasoning: 6 credits |  |
| College Algebra I (MATH 1061) or higher required |  |
| Goal 5 - History/Social and Behavioral Sciences: 9 credits |  |
| Two disciplines required |  |
| ECON 1021 | Macroeconomics . . . . . . . . . . . . . . . . . . . . . . 3 |
| ECON 1023 | Microeconomics . . . . . . . . . . . . . . . . . . . . . . 3 |
| Goal 6: Humanities and Fine Arts: 6 credits |  |
| Two courses from two disciplines |  |
| Goals 7-10 - | ree credits in each of two goals |

## Business Management

Program Options:
Business Management AAS Degree (60)

## Associate in Applied Science Degree

Business Management
Total Number of Credits: 60
Program Description: The two-year Business Management program provides an introduction to basic management. The program is designed to equip the student with skills that are appropriate for people who seek a position in management. The program is designed primarily for the student who wishes to seek employment after completing an Associate in Applied Science Degree.

| Career/Occupational Requirements: 42 credits |  |  |  |
| :---: | :---: | :---: | :---: |
| ACCT | 2020 | Financial Accounting | 4 |
| ACCT | 2025 | Managerial Accounting . | 4 |
| BMGT | 1020 | Introduction to Business | 3 |
| BMGT | 1030 | Survey of Business Economics OR |  |

ECON 1021 Macroeconomics ..... 3
BMGT 2030 Management Fundamentals ..... 3
BMGT 2035 Human Relations in Business ..... 3
BMGT 2040 Human Resource Management ..... 3
BMGT 2051 Legal Environment of Business ..... 3
BMGT 2060 Business Communications ..... 3
BMGT 2090 Business Finance ..... 3
BMGT 2095 International Business ..... 3
CAPL 1010 Introduction to Software Applications ..... 3
MKTG 2050 Principles of Marketing ..... 3
OFFT 1001 Document Formatting Essentials. ..... 1
Additional Requirements: 1 credit
Select from ACCT, BMGT, CAPL, CSCI, MKTG, OFFT or ENGL 1025
General Education/MnTC Requirements: 17 credits
Goal 1 - Communication: 7 credits
ENGL 1021 Composition I. ..... 4
Select one of the following COMM courses: ..... 3
COMM 1021 Fundamentals of Public SpeakingCOMM 1031 Interpersonal Communication
COMM 1041 Small Group Communication
COMM 105 Intercultural Communication
Goal 2 - Critical Thinking is fulfilled when all MnTC goalsare complete
Goal 3 and/or Goal 4 - Sciences/Math/Logical Reasoning: 4 credits
MATH 1025 Statistics ..... 4
Goal 5 - History/Social and Behavioral Sciences: 3 credits(ECON 1021 may be used as a career course)
Goal 6 - Humanities and Fine Arts: 3 credits
Goals $7-10$ : Three credits in one of the four goals

## Chemical Dependency

## Program Options:

Chemical Dependency Certificate (26)
Chemical Dependency AS Degree (60)

## Certificate <br> Chemical Dependency

## Total Number of Credits: 26

Program Description: This certificate is designed for students with a Bachelor degree interested in the field of Chemical Dependency Counseling. The program prepares graduates for the written test and oral examination, which is required for state license.

CDEP 2030 Group Counseling .....  3
CDEP 2050 Case Management for Chemical Dependency Treatment .....  3
CDEP 2781 Addiction Counseling Internship I ..... 4
CDEP 2782 Addiction Counseling Internship II ..... 4
General Education/MnTC Requirements: 30 credits
Goal 1 - Communication: 7 credits
ENGL 1021 Composition I ..... 4
Select one of the following COMM courses: ..... 3
COMM 1021 Fundamentals of Public Speaking
COMM 1031 Interpersonal Communication
COMM 1041 Small Group Communication
COMM 1051 Intercultural Communication
Goal 2 - Critical Thinking is fulfilled when all MnTCgoals are complete
Goal 3 and/or Goal 4 - Sciences/Math/Logical Reasoning:6 credits
MATH 1025 Statistics-recommended ..... 4
Goal 5 - History/Social and Behavioral Sciences: 10 credits
Two disciplines required
PSYC 1020 General Psychology ..... 4
Select one of the following PSYC courses: ..... 3
PSYC 2044 Adolescent Development
PSYC 2021 Abnormal Psychology
Goal 6 - Humanities and Fine Arts: 6 credits
Two courses from two disciplines
Goals 7-10: Three credits in each of two goals
Additional Recommendations:
CDEP 1040 Overview of Gambling .....  3
CDEP 1050 Substance Abuse Prevention ..... 3
CDEP 2055 Co-Occurring Disorders:Substance Abuse and Mental Health3
Communication
Program Options:
Communication Studies Certificate (16)

## Certificate

## Communication Studies

## Total Number of Credits: 16

Program Description: The Certificate in Communication is intended to prepare students for the demands of communication-rich workplaces. While there is no specific occupation that this certificate serves, employer surveys indicate that oral communication, teamwork,

## 6 Programs of Study

and leadership skills are crucial to success in the workplace.
Additionally, the Certificate in Communication can build a foundation for further studies in communication for students who plan to transfer to four-year institutions to complete a bachelors degree.

## Core Requirements: 7 credits

COMM 1021 Fundamentals of Public Speaking . ........... . 3
COMM 2011 Interviewing. .................................... . . . . 3
COMM 2099 Communication Certificate Capstone . . . . . . . . 1

## Additional Course Requirements: 9 credits

Select two of the following courses:
COMM 1031 Interpersonal Communication................. . 3
COMM 1041 Small Group Communication. . . . . . . . . . . . . . . 3
COMM 1051 Intercultural Communication. . . . . . . . . . . . . . . 3
Electives-Select any one of the following courses:
COMM 1061 Introduction to Mass Communication . . . . . . . . 3
COMM 2033 Nonverbal Communication ................... . . 3
COMM 2051 Minnesota's New Immigrants:
Communication, Culture, and Conflict. . . . . . . . 3
COMM 2071 Communication and Gender .................. . . 3
COMM 2081 Health Communication . . . . . . . . . . . . . . . . . . 3
COMM 2790 Special Topics .................................... . . 3
Additional Requirements: All coursework applied to the Certificate must have a grade of " $C$ " or higher.

## Computer Forensics

This Program Name has been changed to Cybersecurity, Virtualization, and Forensics. Please see Cybersecurity, Virtualization, and Forensics for these Program Options.

## Computer Science

## Program Options:

Computer Information Systems AS Degree (60)
Computer Science AS Degree (60)
Other computer-related courses are offered in the following disciplines: Computer Application Technology, Computer Forensics, Information and Telecommunications Technology, Microcomputer

## Associate in Science Degree <br> Computer Information Systems Total Number of Credits: 60

Program Description: This degree positions the student on the path to becoming an information systems professional. Coursework
is designed to develop the student's analytical and problem-solving skills, in conjunction with gaining broad-based, hands-on programming experience and proficiency. The program has been designed to equip students to transfer into a typical baccalaureate Information Systems degree program.

Program Prerequisites: Assessment score placement in MATH 1061 or above or completion of MATH 0070 with a grade of "C" or higher; assessment score placement in RDNG 1000 or completion of RDNG 0900 or RDNG 0950 with a grade of "C" or higher.

## Program Requirements <br> Career/Occupational Requirements: 30 credits

CSCI 1081 Programming Fundamentals . . . . . . . . . . . . . . 4
CSCI 1082 Object-Oriented Programming. . . . . . . . . . . . . . 3
CSCI 2005 Internet Programming: Client-Side Scripting and Applications . . . . . . . 4
CSCI 2014 Discrete Structures of Computer Science . . . . 4
Students must also complete an additional 15 credits from any CSCI or college-level MATH course or ECT 1001 or ECT 1030. Selection must be made in consultation with a counselor or CSCl faculty member to ensure that courses support the student's academic and transfer goals. For students with little or no prior programming experience CSCI 1060 is recommended. For Metropolitan State University's CIT degree the following courses transfer: MATH 1025, ECT 1001, \& ECT 1030. CSCI 1020 also fulfills general education lower division requirements if less than five years old.
General Education: MnTC Requirements: 30 credits
Goal 1: Communication: 10 credits
ENGL 1021 Composition I. ............................... . . 4
ENGL 1022 Composition II ............................... . . 3
COMM 1021 Fundamentals of Public Speaking............ 3
Goal 2: Critical Thinking is automatically fulfilled when all other MnTC goals are complete.
Goal 3 and/or Goal 4 -
Sciences/Math/Logical Reasoning: 8 credits
One Science Course with a Lab
MATH 1061 College Algebra I. .......................... . 4
Goal 5: History and the Social and Behavioral Sciences: 6 credits
Two courses from two different disciplines
Goal 6: Humanities and Fine Arts: 6 credits
Two courses from two different disciplines
Goals $7,8,9,10$ : Three credits in two of the four goals
(COMM course fulfills one of these requirements)

## Associate in Science Degree <br> Computer Science <br> Total Number of Credits: 60

Program Description: This degree introduces students to the skills related to the analysis, design and development of information
systems. Upon completion, the graduate will have acquired a solid mathematical background and a firm foundation in both the practical and theoretical aspects of contemporary computer science. The program has been designed to equip students to transfer into a typical 4 -year Computer Science degree program.

Application Requirements: Assessment score placement in MATH 1061 or completion of MATH 0070 with a grade of " $C$ " or higher; assessment score placement in RDNG 1000 or completion of RDNG 0900 or RDNG 0950 with a grade of "C" or higher.

## Career/Occupational Requirements: 30 credits

Students must complete the following 18 credits:

| CSCI | 1081 | Programming Fundamentals . . . . . . . . . . . . . . . . |
| :--- | :--- | :--- |
| CSCI | 1082 | Object-Oriented Programming. . . . . . . . . . |
| CSCI | 2014 | Discrete Structures of Computer Science . . . . |
| CSCI | 2016 | Introduction to the Organization of |
|  |  | Computer Systems. . . . . . . . . . . . . . . . . . |
| CSCI | 2082 | Data Structures and Algorithms . . . . . . . . . . |

Select 12 credits from the following or any CSCI course not listed above. Selection should be made in consultation with a counselor, advisor, or CSCI faculty member to ensure appropriateness to student's academic goals.

| ENGL | 1022 | $\left.\begin{array}{ll}\text { Composition II } \\ & \\ & \text { OR }\end{array}\right]$ |
| :--- | :--- | :--- |

ENGL 1025 Technical and Professional Writing. . . . . . . . . . 3
MATH 1025 Statistics . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4
MATH 1082 Single Variable Calculus II. . . . . . . . . . . . . . . . . 5
MATH 2025 Probability and Statistics. . . . . . . . . . . . . . . . . . 4
MATH 2082 Linear Algebra and Differential Equations .... 5
PHYS 1041 General Physics I
OR
PHYS 1081 Introductory Physics I. . . . . . . . . . . . . . . . . . . . . 5
PHYS 1042 General Physics II
OR
PHYS 1082 Introductory Physics II . . . . . . . . . . . . . . . . . . . . 5
General Education/MnTC Requirements: 30 credits
Goal 1 - Communication: 7 credits
ENGL 1021 Composition I................................... . . . 4
COMM 1021 Fundamentals of Public Speaking . . . . . . . . . . . 3
Goal 2 - Critical Thinking is fulfilled when all MnTC goals are complete
Goal 3 and/or Goal 4 - Sciences/Math/Logical Reasoning: 10 credits
MATH 1081 Single Variable Calculus I . . . . . . . . . . . . . . . . 5
and a minimum of 5 credits from the following:
MATH $1061 \quad$ College Algebra I. ......................... . . 4
MATH 1062 College Algebra II with Trigonometry . . . . . . . . 4
MATH 1082 Single Variable Calculus II. . . . . . . . . . . . . . . . . 5
PHYS 1041 General Physics I

PHYS 1081 Introductory Physics I. . . . . . . . . . . . . . . . . . . . . 5
PHYS 1042 General Physics II OR
PHYS 1082 Introductory Physics II 5
Goal 5 - History/Social and Behavioral Sciences: 6 credits
Two courses from two disciplines
Goal 6 - Humanities and Fine Arts: 6 credits
Two courses from two disciplines
Goals 7-10 - Three credits in each of two goals

## Cosmetology

## Program Options:

Nail Care Technician Certificate (16)
Cosmetology Diploma (52)
Cosmetology AAS Degree (68)

## Certificate

Nail Care Technician

## Total Number of Credits: 16

Program Description: This Nail Care Technician certificate includes instruction in theory and practical application techniques of cleansing, shaping, polishing, massage of hands and feet, and also the application of artificial nails. Completion of this certificate prepares students for state written exam and certification of skills as required by Minnesota cosmetology laws and rules for licensure.

Application Requirements: Assessment score placement in RDNG 0950 or above, or completion of RDNG 0900 with a grade of " $C$ " or higher.

## Career/ Technical Requirements: 16 credits

COS 1000 Preclinic Introduction. . . . . . . . . . . . . . . . . . . . . 3

COS 1010 Preclinic Nail Care . . . . . . . . . . . . . . . . . . . . . . . . 3
COS 1040 Salon Preparation . . . . . . . . . . . . . . . . . . . . . . . . 3
COS 1051 Clinic Introduction . . . . . . . . . . . . . . . . . . . . . . . . 3
COS 1070 Nail Clinic/License Preparation. . . . . . . . . . . . . 4

## Additional Requirements:

High School diploma or GED, Certification of Skills Practical Exam and State Licensing Exam are required for Licensure.

## Diploma <br> Cosmetology <br> Total Number of Credits: 52

Program Description: This Cosmetology diploma includes instruction in theory and practical application techniques of hair

## 6 Programs of Study


styling, cutting, coloring, permanent waving, chemical hair relaxing, and nail and skin care. Completion of this diploma prepares students for state written exam and certification of skills as required by the Minnesota cosmetology laws and rules for licensure.

Application Requirements: Assessment score placement in RDNG 0950 or above, or completion of RDNG 0900 with a grade of "C" or higher.

## Career/Occupational Requirements: 52 credits

| COS | 1000 | Preclinic Introduction. | 3 |
| :---: | :---: | :---: | :---: |
| cos | 1007 | Preclinic Hair Styling and Design | 3 |
| cos | 1010 | Preclinic Nail Care . | 3 |
| cos | 1015 | Preclinic Chemical Control. | 3 |
| cos | 1020 | Preclinic Skin Care. | 3 |
| cos | 1025 | Preclinic Hair Color | 3 |
| cos | 1035 | Preclinic Haircutting | 3 |
| cos | 1040 | Salon Preparation | 3 |
| cos | 1051 | Clinic Introduction | 3 |
| cos | 1053 | Clinic I | 3 |
| cos | 1055 | Clinic II | 3 |
| cos | 1057 | Clinic III | 3 |
| cos | 1059 | Clinic IV | 3 |
| cos | 1061 | Clinic V. | 3 |
| cos | 1063 | Clinic VI | 3 |
| cos | 1065 | Clinic VII. | 2 |
| cos | 1067 | Clinic VIII | 2 |
| COS | 1068 | Cosmetology Capstone . | 3 |

## Additional Requirements:

High School diploma or GED, Certification of Skills Practical Exam and State Licensing Exam are required for Licensure.

## Associate in Applied Science Cosmetology Total Number of Credits: 68

This Cosmetology degree includes instruction in theory and practical application techniques of hair styling, cutting, coloring, permanent waving, chemical hair relaxing, and nail and skin care. Completion of the AAS degree prepares students for the state written exam and certification of skills as required by the Minnesota cosmetology laws and rules for licensure. Students will also have general education requirements that will help individuals have the necessary oral, written, and critical thinking skills to help them with their professional and management responsibilities.

## Application Requirements/Program Prerequisites:

Assessment score placement in RDNG 0950 or above, or completion of RDNG 0900 with a grade of "C" or higher.

Career/Occupational Requirements: 52 Credits General Education/MnTC Requirements: 16 Credits
Goal 1 - Communication: 7 credits
ENGL 1021 Composition I............................... . 4
Select one of the following COMM courses: . . . . . . . . . 3
COMM 1021 Fundamentals of Public Speaking
COMM 1031 Interpersonal Communication
COMM 1041 Small Group Communication

COMM 1051 Intercultural Communication
Goal 2 - Critical Thinking is fulfilled when all MnTC goals are complete
Goal 3 and/or Goal 4 - Sciences/Math/Logical Reasoning: 3 credits

Goal 5 - History/Social and Behavioral Sciences: 3 credits
Goal 6 - Humanities and Fine Arts: 3 credits
Goals 7-10: Three credits in one of the four goals (Fulfilled by COMM course.)

## Additional Requirements:

High School diploma or GED, Certification of Skills Practical Exam, and State Licensing Exam are required for Licensure.

## Criminal Justice

Program Options:
Corrections Certificate (12)
Investigation Certificate (12)
Private Security Certificate (12)
Criminal Justice Science (CJS) Intelligence \& Crime
Analysis
Certificate (10)
Criminal Justice AS Degree (60)
See also Law Enforcement

## Certificate <br> Corrections <br> Total Number of Credits: 12

Program Description: The CJS Corrections Certificate is designed for Criminal Justice and Law Enforcement students and working professionals who have an interest in the field of corrections. This certificate program provides students with a comprehensive overview of the various federal, state, and county level correctional systems. Additionally, after completing this certificate program, students will have an in-depth understanding of the role of corrections as it relates to the overall criminal justice system.

## Career/Occupational Requirements: 12 credits

| CJS | 2083 | Introduction to Corrections . . . . . . . . . . . . . . . . . 3 |
| :--- | :--- | :--- | :--- |
| CJS | 2084 | Community Corrections . . . . . . . . . . . . . 3 |
| CJS | 2095 | Interview, Interrogation, and Investigation. . . 3 |
| HLTH | 1060 | Drug Education . . . . . . . . . . . . . . . . . . . . . 3 |

## Certificate <br> Investigation <br> Total Number of Credits: 12

Program Description: The CJS Investigation Certificate is designed for Criminal Justice and Law Enforcement students and working professionals who have an interest in criminal investigations. This certificate program provides students with a comprehensive overview of the methods and techniques used in criminal investigations. It also provides students an opportunity to explore the criminal investigation topics of interview and interrogation and crime scene investigations.

## Career/Occupational Requirements: 12 credits

CJS 2094 Fundamentals of Criminal Investigations . . . . . 3
CJS 2095 Interview, Interrogation, and Investigation. ... 3
CJS 2096 Crime Scene Investigations. . . . . . . . . . . . . . . . 3
Select one course from the following:
CJS 2070 Private Sector Security and Investigations . . . . 3
CJS 2089 Criminal Law .................................... . . . . 3
CJS 2093 Terrorist and Extremist Groups . . . . . . . . . . . . . 3
CJS 2097 Homeland Defense ............................. . . 3

## Certificate <br> Private Security Total Number of Credits: 12

Program Description: The CJS Private Security Certificate is designed for Criminal Justice and Law Enforcement students and working professionals who have an interest in the field of private security. This certificate program provides students with a comprehensive overview of the field of private security and its role in securing the country's critical infrastructure. Students will also examine the role of investigations in private security.
Career/Occupational Requirements: 12 credits

| CJS | 2070 | Private Sector Security and Investigations |
| :---: | :---: | :---: |
| CJS | 2094 | Fundamentals of Criminal Investigation |

CJS 2095 Interview, Interrogation, and Investigation. . . . 3
CJS 2097 Homeland Defense ........................... . . . 3

## Certificate <br> Criminal Justice Science (CJS) Intelligence \& Crime Analysis <br> Total Number of Credits: 10

Program Description: The Criminal Justice Science (CJS) Crime Analysis Certificate is designed for Criminal Justice and Law Enforcement students and working professionals who have an interest in the field of Intelligence and Crime Analysis. This certificate provides students with a comprehensive overview of the field of crime and intelligence analysis and demonstrates the methodologies utilized to be successful within a government agency.

## 6 Programs of Study

| Career/Occupational Requirements: 10 credits |  |  |  |
| :---: | :---: | :---: | :---: |
| CJS | 2010 | Foundations of Intelligence and Crim |  |
|  |  | Analysis | 3 |
| CJS | 2011 | Intelligence and Crime Analysis Methods I. | 3 |
| CJS | 2012 | Intelligence and Crime Analysis Methods II | 3 |
| Select one of the following courses: |  |  |  |
| CJS | 2013 | Portfolio Capstone of Intelligence And Crime Analysis I. |  |
| CJS | 2014 | Intelligence and Crime Analysis Internship I. | -6 |

## Associate in Science Degree <br> Criminal Justice <br> Total Number of Credits: 60

Program Description: The Criminal Justice AS degree is designed to provide students with a broad-based liberal arts education as well as comprehensive knowledge of the criminal justice system to help prepare them for the rigors of the criminal justice profession. Coursework illustrates the social, legal, and ethical issues relevant to the criminal justice professional today. Completion of the AS degree also provides a foundation allowing student to transfer to a four-year academic institution

## Career/Occupational Requirements: 28 credits

| CJS | 1020 | Careers in Criminal Justice |
| :---: | :---: | :---: |
| CJS | 2081 | Police in the Community |
| CJS | 2085 | Juvenile Justice and Delinquency. |
| CJS | 2089 | Criminal Law |
| CJS | 2099 | Criminal Justice Capstone. |
| Select 15 credits from the following: |  |  |
| CJS | 1070 | Introduction to Forensic Sci |
| CJS | 2010 | Foundations of Intelligence and Crime Analysis |
| CJS | 2070 | Private Sector Security and Investigati |
| CJS | 2083 | Introduction to Corrections |
| CJS | 2084 | Community Corrections |
| CJS | 2093 | Terrorist and Extremist Groups |
| CJS | 2094 | Fundamentals of Criminal Investigations. |
| CJS | 2095 | Interview, Interrogation and Investigation |
| CJS | 2096 | Crime Scene Investigations. |
| CJS | 2097 | Homeland Defense |
| EMS | 1015 | Emergency Medical Responder. (formerly First Responder) |
| HLTH | 1060 | Drug Education |
| SOC | 2087 | Criminology and |

CJS 2081 Police in the Community . . . . . . . . . . . . . . . . . 3
CJS 2085 Juvenile Justice and Delinquency. . . . . . . . . . . 3
CJS 2089 Criminal Law ................................. 3
CJS 2099 Criminal Justice Capstone. . . . . . . . . . . . . . . . 2
Select 15 credits from the following:
CJS $1070 \quad$ Introduction to Forensic Science ............. 3
CJS $2010 \quad \begin{aligned} & \text { Foundations of Intelligence and Crime } \\ & \text { Analysis . . . . . . . . . . . . . . . . . . . . . . . . } 3\end{aligned}$
CJS 2070 Private Sector Security and Investigations . . . . 3
CJS 2083 Introduction to Corrections . . . . . . . . . . . . . . . . 3
CJS 2084 Community Corrections ....................... . . 3
CJS 2093 Terrorist and Extremist Groups ............... 3
CJS 2094 Fundamentals of Criminal Investigations ..... 3
CJS 2095 Interview, Interrogation and Investigation .... 3
CJS 2096 Crime Scene Investigations. .................. 3
CJS 2097 Homeland Defense .......................... . . 3
EMS 1015 Emergency Medical Responder. . . . . . . . . . . . 3
HLTH 1060 Drug Education .............................. 3
SOC 2087 Criminology and Criminal Behavior........... 3
General Education/MnTC Requirements: 32 credits
Goal 1 - Communication: 7 credits
ENGL 1021 Composition I ..... 4
Select one of the following COMM courses: ..... 3
COMM 1021 Fundamentals of Public SpeakingCOMM 1031 Interpersonal CommunicationCOMM 1041 Small Group CommunicationCOMM 1051 Intercultural Communications
Goal 2 - Critical Thinking is fulfilled when all MnTC goals are complete
Goal 3 and/or Goal 4 - Sciences/Math/Logical Reasoning:6 credits
Goal 5 - History/Social and Behavioral Sciences: 13 credits
PSYC 1020 General Psychology ..... 4
SOC 1020 Introduction to Sociology. ..... 3
SOC 1080 Introduction to Criminal Justice System ..... 3
SOC 2051 Sociology of Race and Ethnicity ..... 3
Goal 6 - Humanities and Fine Arts: 6 credits
Select two courses from two different disciplines
PHIL 1031 Ethics ..... 3
Goals 7-10 - Three credits in one of the four goals

## Additional Requirements:

Students are required to complete 80 hours of criminal justice related service learning to complete this program. The service learning requirement will be met upon completion of CJS 2081 and CJS 2085 with a grade of "C" or higher in each course. Students are advised not to enroll in both classes during the same semester.

## Cybersecurity, Virtualization, and Forensics

## Formerly Computer Forensics

## Cybersecurity, Virtualization, and Forensics Program Options:

Cybersecurity Analysis and Techniques Certificate (17)
IT Security and Audit Control Certificate (17)
Digital Forensics Analysis and Techniques Certificate (18)
Reverse Engineering Malware Analysis and Techniques Certificate (18)
Intrusion Detection and Incident Handling Certificate (19) Cybersecurity, Virtualization, and Forensics AAS Degree (60)

## Cloud Computing and Virtualization Security Program Options:

Cloud Computing Architecture Certific ate (19) Virtualization and End User Computing Certificate (19) Cloud Security and Virtualization Forensics Certificate (21) Cloud Computing and Virtualization Security AAS Degree (60)

## Application Requirements/Program Prerequisites

Assessment score placement in MATH 0070 or higher, or completion of MATH 0030 or MATH 0060 with a grade of " C " or higher, assessment score placement in ENGL 1021, or completion of ENGL 0090 with a grade of " C " or higher and assessment score placement in RDNG 1000, or completion of RDNG 0900 or RDNG 0950 with a grade of " $C$ " or higher.

## Certificate <br> Cybersecurity Analysis and Techniques Total Number of Credits: 17

Program Description: Cybersecurity is the activity or process, ability or capability, or state whereby information and communications systems and the information contained therein are protected from and/or defended against damage, unauthorized use or modification, or exploitation. This program is designed to fill a critical and growing need for cybersecurity personnel in the public and private sector.

Students completing this curriculum will be capable of investigating and defending computer crimes/attacks, properly seize and recover computer evidence. To combat cybercrime, students in the Cyber Security, Virtualization and Forensics program will study counter measures against hacking, spam, and computer viruses through Reverse Engineering Malware and evidence gathering. Graduates may work in a variety of computer security related fields including Cybersecurity, Network security, information assurance, computer incident investigation and digital forensics analysis.

This certificate program provides student with the knowledge and skills necessary to obtain an employment in the cybersecurity field.
Additional Program Requirements/Program Prerequisites: Completion of CVF 2065, CVF 2083 with a grade of " C " or higher or instructor consent

## Program Requirements:

Career/Occupational Requirements: 17 credits

| CVF | 2065 | Introduction to Cybersecurity, Virtualization and Forensics. |
| :---: | :---: | :---: |
| CVF | 2085 | Network Traffic Analysis: Tools and Techniques. |
| CVF | 2086 | Network Pen Testing and Ethical Hacking |
| CVF | 2088 | Advanced Network Pen Testing and Ethical Hacking |
| CVF | 2205 | Scripting and Python for Cyber Security Professionals |

## Certificate IT Security and Audit Control Total Number of Credits: 17

Program Description: This certificate is designed for students, graduates and professionals interested in IT security \& auditing fields. This program provides more in-depth skills and knowledge for IT professionals and students seeking a career in security field.
Students who complete this award may work in the computer technology fields supporting companies and performing operational audits, including system development audits, to ensure that internal controls are in place, that policies and procedures are effective, and that employees operate in compliance with approved policies. Graduates will also assist law enforcement to fight against cyber terrorism and crimes.
Additional Program Requirements/Program Prerequisites: Completion of CVF 2065, CVF 2083 with a grade of " C " or higher or instructor consent.

## Career/Occupational Requirements: 17

CVF 2083 System and Network Security and Auditing . . . 3
CVF 2085 Network Traffic Analysis: Tools, and Techniques 3
CVF 2086 Network Pen Testing and Ethical Hacking ..... 4

CVF
2099
CVF
2092



Installing and Configuring Windows Server 2012 3
Computer Forensics Capstone. . . . . . . . . . . . . . 1
Cyber Storage Management and Forensics ... 3

## 6 Programs of Study

## Certificate <br> Digital Forensics Analysis and Techniques Total Number of Credits: 18

Program Description: Computer forensics is the process of methodically examining computer media for evidence, which includes the collection, preservation, analysis and presentation of computer-related evidence. This degree prepares students for employment in computer science, information assurance, computer incident investigation, cyberspace ethics and computer law. Graduates may work in a variety of computer technology fields to support organizations that must protect their proprietary interests or investigate computer activities. They may also assist their employers with civil litigations. Graduates may also assist law enforcement agencies to combat cyber-terrorism and other crimes. Computer evidence may be relevant in the areas of human resources, employment proceedings, civil disputes and criminal cases as well.
Digital evidence collection and processing has changed dramatically from when an analyst could always rely on a working physical drive. The cloud being used in the U.S. might actually be housed outside the jurisdiction of the investigating law enforcement agency. This degree provides students with skills needed by today's analyst in order to face the new challenges in the cyber security field.

## Additional Program Requirements/Program Prerequisites:

 Completion of CVF 2065, CVF 2083 with a grade of "C" or higher or instructor consent
## Program Requirements:

Career/Occupational Requirements: 18 credits

| CVF | 2065 | Introduction to Cybersecurity, Virtualization and Forensics. |
| :---: | :---: | :---: |
| CVF | 2081 | Advanced Windows Forensics . . . . . . . . . . . . 3 |
| CVF | 2082 | Encase Forensics .......................... 3 |
| CVF | 2084 | Drive \& Data Recovery Forensics . . . . . . . . . . 3 |
| CVF | 2090 | Mobile Device Forensic Analysis . . . . . . . . . . 3 |
| CVF | 2092 | Cyber Storage Management and Forensics . . . 3 |

## Certificate

## Reverse Engineering Malware Analysis and Techniques Total Number of Credits: 18

Program Description: Malware represents one of the greatest threats that organizations face today and IT departments are coming to understand that their AV tools can only do so much to protect them. Reverse engineering malware is the process of taking a captured executable (a stand-alone executable or a library file, such as a DLL) and doing the computer equivalent of an MRI. This program is designed to fill a critical and growing need for cybersecurity personnel in the public and private sector.

Students completing this curriculum will be capable of investigating and defending computer crimes/attacks, properly seize and recover computer evidence. To combat cybercrime, students in the Cyber Security, Virtualization and Forensics program will study counter measures against hacking, spam, and computer viruses through

Reverse Engineering Malware and evidence gathering. Graduates may work in a variety of computer security related fields including Cybersecurity, Network security, information assurance, computer incident investigation and digital forensics analysis.

This certificate program provides student with the knowledge and skills necessary to obtain an employment in the incident handling, network forensics, reverse engineering and cybersecurity related field.

## Additional Program Requirements/Program Prerequisites:

 Completion of CVF 2065, CVF 2083 with a grade of "C" or higher or instructor consent
## Program Requirements:

Career/Occupational Requirements: 18 credits

| CVF | 2065 | Introduction to Cybersecurity, Virtualization and Forensics. |
| :---: | :---: | :---: |
| CVF | 2085 | Network Traffic Analysis: Tools and Techniques 3 |
| CVF | 2203 | Network Forensics, Analysis and Incident Handling |
| CVF | 2201 | Malware Analysis Fundamentals \& Malicious Code Analysis |
| CVF | 2202 | Malicious Documents and Memory Forensics . 3 |
| CVF | 2205 | Scripting and Python for Cyber Security Professionals |

## Certificate <br> Intrusion Detection and Incident Handling Total Number of Credits: 19

Program Description: Intrusion detection and incident handling was created to respond to threats to the nation's cyber infrastructure systems which include both government and private sector. Students completing this curriculum will be capable of investigating and defending computer crimes/attacks, properly seize and recover computer evidence.

To combat cybercrime, students in the Cyber Security, Virtualization and Forensics program will study counter measures against hacking, spam, and computer viruses through Reverse Engineering Malware and evidence gathering. Graduates may work in a variety of computer security related fields including Cybersecurity, Network security, information assurance, computer incident investigation and digital forensics analysis.
This certificate program provides student with the knowledge and skills necessary to obtain an employment in the Incident handling, cybersecurity and related field.

This certificate program provides student with the knowledge and skills necessary to obtain an employment in the Intrusion detection field.

Additional Program Requirements/Program Prerequisites: Completion of CVF 2065, CVF 2083 with a grade of "C" or higher or instructor consent
Program Requirements:
Career/Occupational Requirements: 19 credits

| CVF | 2065 | Introduction to Cybersecurity, Virtualization and Forensics. |
| :---: | :---: | :---: |
| CVF | 2083 | System and Network Security and Audid |
| CVF | 2085 | Network Traffic Analysis: Tools and Techniques |
| CVF | 2203 | Network Forensics, Analysis and Incident Handling |
| CVF | 2205 | Scripting and Python for Cyber Security Professionals |
| CVF | 2200 | Advanced IDS Techniques Using SAMPA ( Snort, Apache, MySOL, PHP, and ACID) |

## Associate in Applied Science Degree Cybersecurity, Virtualization, and Forensics Total Number of Credits: 60

Program Description: Cybersecurity is the activity or process, ability or capability, or state whereby information and communications systems and the information contained therein are protected from and/or defended against damage, unauthorized use or modification, or exploitation. This program is designed to fill a critical and growing need for cybersecurity personnel in the public and private sector. Students completing this curriculum will be capable of investigating and defending computer crimes/attacks, properly seize and recover computer evidence. To combat cybercrime, students in the Cyber Security, Virtualization and Forensics program will study counter measures against hacking, spam, and computer viruses through Reverse Engineering Malware and evidence gathering. Graduates may work in a variety of computer security related fields including Cybersecurity, Network security, information assurance, computer incident investigation and digital forensics analysis.

## Program Requirements

Core Requirements: 27 credits

| CVF | 2065 | Introduction to Cybersecurity, Virtualization and Forensics. . . . . . . . . . . . . . . . . . . . . . . . . . . 3 |
| :---: | :---: | :---: |
| CVF | 2075 | Computer Investigative Law for Forensic Analysts. $.3$ |
| CVF | 2080 | Advanced Cyber Forensics. . . . . . . . . . . . . . . . 3 |
| CVF | 2085 | Network Traffic Analysis: Tools and Techniques $\qquad$ |
| ECT | 1011 | Supporting Microsoft Windows 7 Professional 3 |
| ECT | 1013 | Supporting Microsoft Windows Server 2008 . . 3 |
| ECT | 1030 | Linux Operating System. . . . . . . . . . . . . . . . . . 3 |
| CVF | 2083 | System and Network Security and Auditing . . . 3 |
| CVF | 2092 | Cyber Storage Management and Forensics ... 3 |

Career/Occupational Requirements: Select one of the Specialty Track Options
Cyber Security \& Network Forensics: 14 credits
CVF 2086 Network Pen Testing and Ethical Hacking . . . . 4CVF 2205 Scripting and Python for CybersecurityProfessionals3
CVF 2088 Advanced Network Pen Testing and Ethical Hacking ..... 4
CVF ..... 2203
Network Forensics, Analysis and Incident handling ..... 3
Digital Forensics: $\mathbf{1 2}$ credits
CVF 2081 Advanced Windows Forensics .....  3
CVF 2090 Mobile Device Forensic Analysis ..... 3
CVF 2084 Drive \& Data Recovery Forensics ..... 3
CVF 2082 Encase Forensics ..... 3
Reverse Engineering Malware Analysis and Techniques: 12 credits

| CVF | 2203 | Network Forensics, Analysis and Incident Handling |
| :---: | :---: | :---: |
| CVF | 2201 |  |
|  |  | Malicious Code Analysis. |
| CVF | 2202 | Malicious Documents and Memory Forensics . 3 |
| CVF | 2205 | Scripting and Python for Cybersecurity |
|  |  | Professionals |

Intrusion Detection and Incident Handling: 13 credits
CVF 2200 Advanced IDS Techniques Using SAMPA (Snort, Apache, MySOL, PHP, and ACID) . . . . . . 4CVF 2205 Scripting and Python for CybersecurityProfessionals3
CVF 2203 Network Forensics, Analysis and Incident handling ..... 3
CVF 2201 Malware Analysis Fundamentals \& Malicious Code Analysis ..... 3
Additional Requirements:
Select $3-5$ credits, depending upon the area of concentration, fromcareer-related electives or other courses with instructor consent byacademic petition:
General Education/MnTC Requirements: 16 CreditsGoal 1 - Communication: 7 creditsENGL 1021 Composition I4
Select one of the following COMM courses: ..... 3
COMM 1021 Fundamentals of Public SpeakingCOMM 1031 Interpersonal CommunicationCOMM 1041 Small Group CommunicationCOMM 1051 Intercultural Communication

## 6 Programs of Study



Goal 2 - Critical Thinking is fulfilled when all MnTC goals are complete

Goal 3 and/or Goal 4 - Sciences/Math/Logical Reasoning: 3 credits

Goal 5 - History/Social and Behavioral Sciences: 3 credits
POLS 1035 Constitutional Law. .............................. . . 3
Goal 6 - Humanities and Fine Arts: 3 credits
Goals 7 - 10: Three credits in one of the four goals

## Certificate <br> Cloud Computing Architecture <br> Total Number of Credits: 19

Program Description: Cloud computing is a model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services). Cloud computing has simultaneously transformed business and government, and created new security challenges at an unprecedented pace. The development of the cloud service model delivers business-supporting technology more efficiently than ever before.

## Additional Program Requirements/Program Prerequisites:

Completion of CVF 2065, CVF 2083 with a grade of "C" or higher or instructor consent

## Program Requirements:

| CVF | 2092 | Cyber Storage Management and Forensics . . . 3 |
| :---: | :---: | :---: |
| CVF | 2093 | VMware vSphere: ICM (Install, Configure, Manage). |
| CVF | 2120 | Cloud Infrastructure: Deployment and Management |
| CVF | 2121 | Cloud Infrastructure: Design Best Practices . . . 3 |
| CVF | 2122 | Cloud Infrastructure Networking and Security . 3 |
| CVF | 2123 | Cloud Automation Center (ICM) . . . . . . . . . . . 3 |

## Certificate <br> Virtualization \& End User Computing Total Number of Credits: 19

Program Description: Virtualization and End user Computing is a virtual desktop infrastructure solution that simplifies desktop management and provides users with what they need, when they need it, similar to cloud computing, it is a model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services). The development of the cloud service model delivers business-supporting technology more efficiently than ever before.

This degree prepares students with the expertise, knowledge, and skills required in today's evolving cloud computing, virtualization, and security industry. In fact, IDC recently reported that "In 2012, more than 1.7 million jobs related to cloud computing remained unfilled worldwide. The reason for this is lack of training and certification.1" Both of these issues are addressed by this degree program in Cloud Computing and Virtualization Security.

Additional Program Requirements/Program Prerequisites: Completion of CVF 2065, CVF 2083 with a grade of "C" or higher or instructor consent

## Program Requirements:

Career/Occupational Requirements: 19 credits

| CVF | 2092 | Cyber Storage Management and Forensics |
| :---: | :---: | :---: |
| CVF | 2093 | VMware vSphere: ICM (Install, Configure, Manage). |
| CVF | 2116 | Virtual End User Computing and Application Virtualization (VMware View: ICM). |
| CVF | 2117 | Virtualized Application Implementation (XenApp) |
| CVF | 2118 | Virtualized Desktop Implementation (XenDesktop) |
| CVF | 2119 | Cloud Enterprise Site Recovery Manager |

## Certificate <br> Cloud Security and Virtualization Forensics Total Number of Credits: 21

Program Description: One of the fastest growing fields of the IT sector is Cloud computing and virtualization. Cloud computing is a model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services). Cloud computing has simultaneously transformed business and government, and created new security challenges at an unprecedented pace. The development of the cloud service model delivers business-supporting technology more efficiently than ever before.

Additional Program Requirements/Program Prerequisites: Completion of CVF 2065, CVF 2083 with a grade of " $C$ " or higher or instructor consent

## Program Requirements:

Career/Occupational Requirements: 21 credits

| CVF | 2092 | Cyber Storage Management and Forensics |
| :---: | :---: | :---: |
| CVF | 2093 | VMware vSphere: ICM (Install, Configure, Manage) |
| CVF | 2085 | Network Traffic Analysis: Tools and Techniques |
| CVF | 2086 | Network Pen Testing and Ethical Hacking |
| CVF | 2122 | Cloud Infrastructure Networking and Security . |
| CVF | 2200 | Advanced IDS Techniques Using SAMPA (Snort, Apache, MySQL, PHP, and ACID). |

## Associate in Applied Science Degree Cloud Computing and Virtualization Security Total Number of Credits: 60

Program Description: Cloud computing is a model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services). Cloud computing has simultaneously transformed business and government, and created new security challenges at an unprecedented pace. The development of the cloud service model delivers business-supporting technology more efficiently than ever before.

This degree educates students for the expertise, knowledge, and skills required in today's evolving cloud computing, virtualization, and security industry. In fact, International Data Corporation (IDC) recently reported that "In 2012, more than 1.7 million jobs related to cloud computing remained unfilled worldwide. The reason for this is lack of training and certification." Both of these issues are addressed by this degree program in Cloud Computing and Virtualization Security.

Program Requirements:
Career/Occupational Requirements: 32 credits

| CVF | 2065 | Introduction to Cybersecurity, Virtualization \& Forensics |
| :---: | :---: | :---: |
| CVF | 2080 | Advanced Cyber Forensics |
| CVF | 2085 | Network Traffic Analysis: Tools, and Techniques |
| CVF | 2092 | Cyber Storage Management and Forensics |
| CVF | 2093 | VMware vSphere: ICM (Install, Configure, Manage). |
| CVF | 2091 | Cloud Computing \& Virtualization Forensics |
| CVF | 2115 | Virtualized Data Center and Cloud Infrastructure Planning, Design, Optimize, and Scale . . . . . . . 4 |
| ECT | 1013 | Installing and Configuring Windows Server 2012 |


| ITT | 1032 | Routing Protocols \& Concepts (CCNA-2) $\ldots \ldots .3$ |
| :--- | :--- | :--- |
| ITT | 2031 | LAN Switching and Wireless (CCNA-3) $\ldots \ldots .3$ |

Select 1 of the Specialty Track Options:
Network and System Virtualization: 12 credits

| CVF | 2116 | Virtual End User Computing and Application Virtualization (VMware View: ICM). |
| :---: | :---: | :---: |
| CVF | 2117 | Virtualized Application Implementation (XenApp CXA-206 ) |
| CVF | 2118 | Virtualized Desktop Implementation (XenDesktop CXD-202) |
| CV | 2119 | Cloud Enterrrise Site Recover |

## Cloud Computing Architecture: 12 credits

| CVF | 2120 | Cloud Infrastructure: Deployment and <br> Management......................... 3 |
| :--- | :--- | :--- |
| CVF | 2121 | Cloud Infrastructure: Design Best Practices ... 3 |
| CVF | 2122 | Cloud Infrastructure Networking and Security. 3 |
| CVF | 2123 | Cloud Automation Center (ICM) ............ 3 |

Cloud Security and Virtualization Forensics: $\mathbf{1 2}$ credits
CVF 2086 Network Pen Testing and Ethical Hacking .... 4
CVF 2119 Cloud Enterprise Site Recovery. . . . . . . . . . . . 2
CVF 2122 Cloud Infrastructure Networking and Security . 3
CVF 2200 Advanced IDS Techniques Using SAMPA
(Snort, Apache, MySQL, PHP, and ACID). . 3

General Education/MnTC Requirements: 16 Credits
Goal 1 - Communication: 7 credits
ENGL 1021 Composition I. . . . . . . . . . . . . . . . . . . . . . . . . . . 4
Select one of the following COMM courses . . . . . . . . . 3
COMM 1021 Fundamentals of Public Speaking
COMM 1031 Interpersonal Communication
COMM 1041 Small Group Communication
COMM 1051 Intercultural Communication
Goal 2 - Critical Thinking is fulfilled when all MnTC goals are complete
Goal 3 and/or Goal 4 - Sciences/Math/Logical Reasoning: 3 credits
Goal 5 - History/Social and Behavioral Sciences: 3 credits POLS 1035 Constitutional Law
Goal 6 - Humanities and Fine Arts: 3 credits
Goals 7-10: Three credits in ONE of the four goals (fulfilled by COMM course)

## 6 Programs of Study

## Dental Assistant

Program Options:<br>Dental Assistant Diploma (48)<br>Dental Assistant AAS (64)<br>Advanced Specialty Certificate: Dental Practice<br>Management (16)

## Diploma <br> Dental Assistant <br> Total Number of Credits: 48

Program Description: The Dental Assistant program is designed for career opportunities as a dental assistant in private dental offices, HMO clinics, public health institutions, dental supply and insurance companies, military dental services, and dental school clinics. The program is accredited by the American Dental Association, Commission of Accreditation. Graduates of the Dental Assistant Program are eligible to write the Dental Assisting National Board Certification Exam and the Minnesota State Board of Dentistry Licensure Exam. Dental Assistant graduates, upon successful completion of the exams, are certified and licensed dental assistants.

Application Requirements: High School graduate or GED; current certification in CPR; assessment score placement in RDNG 1000, or completion of RDNG 0900 or RDNG 0950 with a grade of "C" or higher; assessment score placement in ENGL 1021, or completion of ENGL 0090 with a grade of "C" or higher. For additional application requirements, refer to the program brochure available online, in Admissions or Counseling.

## Career/Occupational Requirement: 41 credits

| DENA | 1000 | Introduction to Dental Assisting |
| :---: | :---: | :---: |
| DENA | 1011 | Dental Assisting Pre-Clinic I |
| DENA | 1012 | Dental Assisting Pre-Clinic II |
| DENA | 1020 | Dental Materials |
| DENA | 1031 | Dental Radiology I |
| DENA | 1032 | Dental Radiology II |
| DENA | 1041 | Chairside Dental Assisting |
| DENA | 1042 | Chairside Dental Assisting I |
| DENA | 1050 | Dental Specialties |
| DENA | 1061 | Dental Assisting Advanced Functi |
| DENA | 1062 | Dental Assisting Advanced Func |
| DENA | 1063 | Nitrous Oxide Inhalation Sedation |
| DENA | 1780 | Introduction of Dental Assisting |
| DENA | 1781 | Dental Assisting Internship |
| DENA | 1782 | Dental Assisting General Office |
| General Education/MnTC Requirements: 7 credits Goal 1 - Communication: 7 credits |  |  |
| ENGL | 1021 | Composition I. |

Select one of the following COMM courses: ..... 3
COMM 1021 Fundamentals of Public SpeakingCOMM 1031 Interpersonal CommunicationCOMM 1041 Small Group CommunicationCOMM 1051 Intercultural Communication
Associate in Applied Science Degree Dental Assistant

Total Number of Credits: 64

Application Requirements: High School graduate or GED; current certification in CPR; assessment score placement in RDNG 1000 or above, or completion of RDNG 0900 or RDNG 0950 with a grade of " C " or higher; assessment score placement in ENGL 1021, or completion of ENGL 0090 with a grade of " C " or higher. For additional application requirements, refer to the program brochure available in online, in Admissions and Advising, Counseling, \& Career Center.

## Career/Occupational Requirements: 41 credits

DENA 1000 Introduction to Dental Assisting ............. . . 3
DENA 1011 Dental Assisting Pre-Clinic I . . . . . . . . . . . . . . 3
DENA 1012 Dental Assisting Pre-Clinic II. ................. . . 3
DENA 1020 Dental Materials ............................. 3
DENA 1031 Dental Radiology I............................ . . 2
DENA 1032 Dental Radiology II ........................... . 3
DENA 1041 Chairside Dental Assisting I . . . . . . . . . . . . . . . 2
DENA 1042 Chairside Dental Assisting II.................. 3
DENA 1050 Dental Specialties ............................ 3
DENA 1061 Dental Assisting Advanced Functions I. ....... 3
DENA 1062 Dental Assisting Advanced Functions II ...... 2
DENA 1063 Nitrous Oxide Inhalation Sedation ........... 1
DENA 1780 Introduction of Dental Assisting Internships. . . 3
DENA 1781 Dental Assisting Internship . . . . . . . . . . . . . . . 3
DENA 1782 Dental Assisting General Office Internship. . . . 4
General Education/MnTC Requirements: 20 credits
Goal 1 - Communication: 7 credits
ENGL 1021 Composition I................................ . . 4
Select one of the following COMM courses: . . . . . . . . . 3
COMM 1021 Fundamentals of Public Speaking
COMM 1031 Interpersonal Communication
COMM 1041 Small Group Communication
COMM 1051 Intercultural Communication
Goal 2 - Critical Thinking is fulfilled when all MnTC goals are complete

Goal 3 and/or Goal 4 - Sciences/Math/Logical Reasoning: 3 credits

CHEM 1020 Chemistry Concepts-recommended*. . . . . . . . . 4
BIOL 2035 Microbiology-recommended* ................. . . 3

Goal 5 - History/Social and Behavioral Sciences: 3 credits
Psychology elective recommended* . . . . . . . . . . . . . . . . . . . . . . . . 3
Sociology elective recommended* . . . . . . . . . . . . . . . . . . . . . . . . 3
Goal 6 - Humanities and Fine Arts: 3 credits
Goals 7-10: Three credits in one of the four goals

## Additional Requirements:

Sufficient credits to total 64
*Required courses to graduate Century College Dental Hygiene program. See a counselor if pursuing a degree in hygiene or dentistry.

## Advanced Specialty Certificate Dental Practice Management Total Number of Credits: 16

Program Description: This certificate specializes in management, supervision, and human relations in a dental setting. Responsibilities would include the efficient operation of a dental office. Graduates are employed in dental offices in a dental practice management position.

Application Requirements: A graduate of an accredited dental assistant program and 1500 hours of dental assisting experience.

Career/Occupational Requirements: 15 credits

| CAPL | 1010 | Introduction to Software Applications . . . . . . . . 3 |
| :--- | :--- | :--- | :--- |
| ENGL | 1025 | Technical Writing. . . . . . . . . . . . . . . . . . . . . 3 |
| MKTG | 1025 | Professional Development. . . . . . . . . . . . . . . 3 |
| MKTG | 2010 | Workplace Leadership. . . . . . . . . . . . . . . . 3 |
| OFFT | 2055 | Administrative Office Procedures . . . . . . . . . 3 |

## Additional Requirements:

Sufficient credits to total 16

## Dental Hygiene

## Program Options:

Dental Hygiene AAS Degree (79)

## Associate in Applied Science Degree Dental Hygiene <br> Total Number of Credits: 79

Program Description: The Dental Hygiene Program prepares students with the entry-level competencies, knowledge, skills and attitudes required for licensure to practice as dental hygienists in the state of Minnesota. The DENH program courses are offered over five semesters (four full-time semesters and one part-time summer session); the program is accredited by the American Dental Association sponsored Commission on Dental Accreditation.


Application Requirements: All applicants must be Minnesota licensed dental assistants (LDA) or hold an equivalent credential from another state, with 6 months or more of dental assisting work experience ( 1040 hours) in the past 3 years and have an overall college GPA of 2.5. Students must earn the grade of " $C$ " or higher and an overall GPA of 2.75 or higher in the four science courses listed in the next section. All science courses must have a lab component. Other general education application pre-requisites are ENGL 1021 and a 3 credit COMM course (1021, 1031, 1041, or 1051). See Admissions or Advising, Counseling, \& Career Center for additional application information.
BIOL 2031 Anatomy and Physiology I. . . . . . . . . . . . . . . . . 4
BIOL 2032 Anatomy and Physiology II ................... . . 4
BIOL 2035 Microbiology ..................................... . . . 3
CHEM 1020 Chemistry Concepts. . . . . . . . . . . . . . . . . . . . . . 4
OR
CHEM 1041 Principles of Chemistry I..................... . . . 5
Additional Program Requirements: Students must earn a grade of "C" or higher in all required Career/Occupational and MNTC courses. Enrolled dental hygiene students must pass a Minnesota Human Services background study with no restrictions and pass a health exam before treating patients in the student clinic; they must also maintain their credential as a Registered Dental Assistant with the state of Minnesota (i.e., pay annual fees, maintain CPR certification and continuing education documentation) while they are enrolled in the program. NOTE: The MN Board of Dentistry accepts all DENH program courses for RDA continuing education credit.

## Career/Occupational Requirements: 48 credits

DENH 1021 Head and Neck Anatomy. . . . . . . . . . . . . . . . . . 2
DENH 1024 Dental Embryology, Histology, and
Anatomy.

## 6 Programs of Study

| DENH | 1030 | Radiology for the Dental Hygienist . . . . . . . . . . 2 |
| :---: | :---: | :---: |
| DENH | 1040 | Dental Hygiene Principles I |
| DENH | 1045 | Dental Hygiene Practice I . . . . . . . . . . . . . . . . 2 |
| DENH | 1050 | Periodontology |
| DENH | 1060 | Pharmacology for the Dental Hygienist. . |
| DENH | 1070 | Applied Biochemical Nutrition for the Dental Hygienist |
| DENH | 1080 | Dental Hygiene Principles II |
| DENH | 1085 | Dental Hygiene Practice II. . . . . . . . . . . . . . . . 3 |
| DENH | 2005 | Pain Management . |
| DENH | 2010 | Dental Hygiene Principles III |
| DENH | 2015 | Dental Hygiene Practice III . . . . . . . . . . . . . . . 5 |
| DENH | 2020 | General and Oral Pathology. . . . . . . . . . . . . . . 3 |
| DENH | 2030 | Community Dental Health and Epidemiology |
| DENH | 2035 | Community Dental Health Lab. |
| DENH | 2040 | Legal Aspects of Dental Practice . . . . . . . . . 2 |
| DENH | 2060 | Dental Hygiene Seminar . . . . . . . . . . . . . . . . . 1 |
| DENH | 2065 | Dental Hygiene Practice IV . . . . . . . . . . . . . . . 5 |

## General Education/MnTC Requirements: 31 credits

Goal 1 - Communication: 7 credits
This requirement has been met by the Program Application Requirements
ENGL 1021 Composition I. . . . . . . . . . . . . . . . . . . . . . . . . . . 4
Select one of the following COMM courses: . . . . . . . . . 3
COMM 1021 Fundamentals of Public Speaking
COMM 1031 Interpersonal Communication
COMM 1041 Small Group Communication
COMM 1051 Intercultural Communication
Goal 2 - Critical Thinking is fulfilled when all MnTC goals are complete

Goal 3 and/or Goal 4 - Sciences/Math/Logical Reasoning: 15 credits
This requirement has been met by the Program Application Requirements
BIOL 2031 Human Anatomy and Physiology I ..... 4
BIOL 2032 Human Anatomy and Physiology I .....  4
BIOL 2035 Microbiology ..... 3
CHEM 1020 Chemistry Concepts ..... 4
OR
CHEM 1041 Principles of Chemistry I ..... 5
Goal 5 - History/Social and Behavioral Sciences: 6 creditsPsychology elective 3
Sociology elective .....  3
Goal 6 - Humanities and Fine Arts: 3 credits
Goals 7-10 - Three credits in one of the four goals
Optional Courses:
DENH 2790 Independent Study. ..... 1-3
TRIN 1051 Working With Interpreters .....  2

## Education

## Program Options:

Paraeducation Certificate (16)
Paraeducator AAS Degree (60)
Education AS Degree (60)

## Certificate

Paraeducation
Total Number of Credits: 16
Program Description: The Paraeducation Certificate combines paraeducation courses in key areas with experience working with children in educational settings. The Paraeducation Certificate is designed to prepare paraeducators to meet the "highly qualified" definition of the No Child Left Behind Act.

Additional Program Requirements: Structured, educationrelated practicums, service learning and field experiences are important components of quality education programs. Students in the Paraeducation Certificate Program are required to complete a minimum of 30 hours of approved practicums, field experiences or service learning. Students are required to appropriately document their learning experiences using the portfolio skills taught in EDUC 1020, which is recommended as a first semester course for all education majors.

Core Requirements: 10 credits
EDUC 1020 Portfolios for Educators I. . . . . . . . . . . . . . . . . . 1
EDUC 1050 Reading and Study Skills Education Strategies 3

| EDUC | 1070 | Mathematics Education Strategies. . . . . . . . . . . 3 |
| :--- | :--- | :--- |
| EDUC | 2055 | Strategies for Teaching Writing . . . . . . . . . . 3 |

## Career/Occupational Requirements: 6 credits

Select a minimum of 6 credits from any education courses.
Students may substitute other approved courses for the above Career/Occupational Requirement upon the recommendation of faculty and administrative approval by academic petition.

## Associate in Applied Science Degree Paraeducator Total Number of Credits: 60

Program Description: The Associate in Applied Science Paraeducator is a preprofessional program providing an essential core of education courses and experiences. It prepares individuals for work as educational paraprofessionals. The curriculum provides specific training, general education and experience working with children or youth in educational settings. This degree will fulfill the education requirements for paraprofessionals as described in the No Child Left Behind legislation (Title I schools).

Additional Program Requirements: Structured, educationrelated practicums, service learning and field experiences are important components of quality education programs. Students in the Paraeducator Associate in Applied Science program are required to complete a minimum of 100 hours of approved practicums, field experiences or service learning. Students are required to appropriately document their education-related practicums, service learning and field experiences using the portfolio skills taught in EDUC 1020 (which is recommended as a first semester course for all education majors) and EDUC 1021 (which is recommended at the end of the first year or beginning of the second year). Be advised that transfer institutions and/or employers may also ask for this documentation.

## Core Requirements: 38 credits

EDUC 1000 Field Experience. . . . . . . . . . . . . . . . . . . . . . . . . . 2

EDUC 1020 Portfolios for Educators I. . . . . . . . . . . . . . . . . . . 1
EDUC 1021 Portfolios for Educators II . . . . . . . . . . . . . . . . . 2
EDUC 1025 Education Standards . . . . . . . . . . . . . . . . . . . . . . 3
EDUC 1045 Orientation to Education . . . . . . . . . . . . . . . . . . 3
EDUC $1050 \quad \begin{array}{ll}\text { Reading and Study Skills Education } \\ & \text { Strategies . . . . . . . . . . . . . . . . . . . . . . . . . } 3\end{array}$
EDUC 1060 Teaching English Language Learners ......... 3
EDUC 1070 Mathematics Education Strategies. .......... . 3
EDUC 2025 Creating Culturally Responsive Classrooms . . . 3
EDUC 2040 Classroom Management . . . . . . . . . . . . . . . . . . 3
EDUC 2050 Legal Issues in Education . . . . . . . . . . . . . . . . . . 3
EDUC 2055 Strategies for Teaching Writing . . . . . . . . . . . . 3
EDUC 2070 Special Education Issues for Educators . . . . . . 3
HLTH 1060 Drug Education ................................. 3

| General Education/MnTC Requirements: 22 credits Goal 1 - Communication: 7 credits |  |
| :---: | :---: |
| ENGL 1021 | Composition I |
| Select one of the following COMM courses: |  |
| COMM 1021 | Fundamentals of Public Speaking |
| COMM 1031 | Interpersonal Communication |
| COMM 1041 | Small Group Communication |
| COMM 1051 | Intercultural Communication |

Goal 2 - Critical Thinking is Fulfilled when all MnTC goals are completed.

Goal 3 and/or Goal 4 - Sciences/Math/Logical Reasoning: 3 credits

## Choose a science or mathematics course

Goal 5 - History/Social and Behavioral Sciences: 3 credits
Goal 6 - Humanities and Fine Arts: 3 credits
Goals 7-10: Three credits in one of the four goals.

## Associate in Science Degree Education <br> Total Number of Credits: 60

Program Description: The Associate in Science Education is a transfer-oriented program providing a comprehensive core of education courses and experiences. It prepares individuals to transfer into a four-year teacher education program (or to work as educational paraprofessionals). The curriculum provides specific training, general education and experience working with children or youth in educational settings. Students interested in transferring to a four-year program need to check the specific transfer arrangements with the college of their choice and a Century College counselor. These discussions should take place early and often to ensure an appropriate program is planned for enrollment at Century and at the four-year school. This degree will fulfill the education requirements for paraprofessionals as described in the No Child Left Behind Act (Title I schools). Students completing the Associate of Science Degree in Education will be prepared to take the PRAXIS I Exam. Most four-year colleges and universities require that students wishing to be accepted into specific teacher education programs take the PRAXIS I exams as part of the application into the four-year teacher education programs.

## Additional Program Requirements:

Structured, education-related practicums and field experience are important components of quality education programs. Students in the Associate in Science Education program are required to complete a minimum of 40 to 100 hours of approved practicums or field experiences.

## Core Requirements: 12 credits

EDUC 1020 Portfolios for Educators I. . . . . . . . . . . . . . . . . . 1
EDUC 1021 Portfolios for Educators II . . . . . . . . . . . . . . . . . 2

## 6 Programs of Study

| EDUC | 1045 | Orientation to Education . . . . . . . . . . . . . . . . . 3 |
| :--- | :--- | :--- | :--- |
| EDUC | 2025 | Creating Culturally Responsive Classrooms . . 3 |
| HLTH | 1060 | Drug Education . . . . . . . . . . . . . . . . . . . . . . 3 |

Elective Career/Occupational Credit Courses: 8 credits
Students must take sufficient elective credit courses, as identified on their approved degree completion plan developed in EDUC 1020 and EDUC 1045 to make a total of 8 or more earned credits in this area. Students wishing to transfer into a four-year teacher education program should check carefully with their transfer institution for recommended courses before selecting courses for elective credit.
EDUC 1000 Field Experience. . . . . . . . . . . . . . . . . . . . . . . . . 2

EDUC 1025 Education Standards . . . . . . . . . . . . . . . . . . . . . . 3
EDUC 1060 Teaching English Language Learners . . . . . . . . 3
EDUC 1070 Mathematics Education Strategies. . . . . . . . . . 3
EDUC 2040 Classroom Management . . . . . . . . . . . . . . . . . . 3
EDUC 2050 Legal Issues in Education . . . . . . . . . . . . . . . . . 3
EDUC 2055 Strategies for Teaching Writing . . . . . . . . . . . . 3
EDUC 2070 Special Education Issues for Educators . . . . . . 3
Students may substitute other approved courses for the above electives upon the recommendation of faculty and administrative approval by academic petition.

## General Education/MnTC Requirements: 40 credits

Goal 1 - Communication: 10 credits
ENGL 1021 Composition I. . . . . . . . . . . . . . . . . . . . . . . . . . . 4
ENGL 1022 Composition II . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Select one of the following COMM courses: . . . . . . . . . 3
COMM 1021 Fundamentals of Public Speaking
COMM 1031 Interpersonal Communication
COMM 1041 Small Group Communication
COMM 1051 Intercultural Communication
Goal 2 - Critical Thinking is fulfilled when all MnTC goals are complete
Goal 3 - Sciences: 7 credits
Two courses from two different disciplines, with at least one traditional lab course
Goal 4 - Math/Logical Reasoning: 3 credits
MATH 1020-1082 or PHIL 1041
Goal 5 - History/Social and Behavioral Sciences: 9 credits
Three courses from three different disciplines
Goal 6 - Humanities and Fine Arts: 9 credits
Three courses from three disciplines, one of which must be a literature course
Goals 7 - 10 - Three credits in each of four goals 7 - 10

## Emergency Medical Services

## Program Options:

Emergency Medical Technician (EMSB) Certificate (9)
Community Paramedic Certificate (12)
Emergency Medical Services Certificate (19)
Emergency Medical Services-Paramedic Diploma (56)
Emergency Medical Services-Paramedic Science AAS Degree (69)
Paramedic for the Experienced EMT Diploma (47)
Paramedic for the Experienced EMT AAS Degree (60)

## Certificate <br> Emergency Medical Technician Total Number of Credits: 9

This certificate delivers the new National EMS Educational Standards adopted by the state of Minnesota for Emergency Medical Technician education requirements. This certificate will prepare the entry-level Emergency Medical Technician for direct employment in an emergency ambulance service, basic transport service, an emergency room, police department, security department or fire department. Completion of the EMT course prepares the student for the National Registry of EMT examination. Successful completion of the National Registry exam is recognized by the state of Minnesota to generate the state certification required to work as an EMT in Minnesota.

## Program Requirements:

1. Assessment score placement into RDNG 1000 or completion of RDNG 0900 or RDNG 0950 with a grade of " $C$ " or higher.
2. The National Registry of EMT examination testing requires a minimum age of 18.
3. Proof of current/unexpired American Heart Association (AHA) Healthcare Provider CPR card required prior to the end of EMT course. The AHA Healthcare Provider CPR course may be taken concurrently with EMT course.
4. Students must successfully pass the MN Human Services Department and Emergency Medical Services Regulatory Board (EMSRB) background studies with no restrictions to be approved to participate in required clinicals.
5. Students must be able to perform physical tasks to complete course requirements.

## Career/Occupational Requirements:

EMSB 1020 Emergency Medical Technician . 9

## Additional Requirements:

Completion of EMSB 1020 with a grade of "C" or higher

## Certificate <br> Community Paramedic <br> Total Number of Credits: 12

This course is designed to meet an increasing demand for Community Paramedics, locally, regionally, and nationally. Candidates are experienced field paramedics that have chosen to expand their knowledge and skill base. This course prepares the experienced paramedic to continue working in the out of hospital setting and to recognize, treat, and refer patients to community health resources. Community Paramedics will also be referred to a patient's residence by their primary care provider to follow up on such problems as wound care, cardiac issues, diabetes, medication management, and provide seasonal immunizations. Patients generally do not qualify for home care nursing. This replaces the "house call" from years past. This is a logical progression of this career path, as paramedics encounter these patients every day and have little if any training in the area of community health. Demand is rapidly increasing in Minnesota, and around the country. The curriculum is prescribed by the North Central EMS Institute and has been adopted by the Minnesota Emergency Medical Services Regulatory Board. This is a joint venture with Century College and Inver Hills Community College.

## Application Requirements:

1. State Paramedic certification with 2 years full-time experience or equivalent
2. A valid driver's license and signed MnSCU Vehicle Use Agreement
3. A current AHA BLS for the Healthcare Provider (CPR) certification (EMS 1010, 1 credit)
4. MN Department of Human Services background study with no restrictions
5. Current healthcare insurance
6. Required immunizations
7. Students must be able to perform physical tasks to complete course requirements

## Career/Occupational Requirements: 12 credits <br> EMSC 2900 Role of the Community Paramedic .......... . 2 <br> EMSC 2910 Community Assessment . . . . . . . . . . . . . . . . . . 3 <br> EMSC 2920 Pathophysiology and Disease Management for the Community Paramedic . 2 <br> EMSC 2930 Community Paramedic Clinical Experience . . . . 5

## Certificate <br> Emergency Medical Services <br> Total Number of Credits: 19

Program Description: This certificate provides a perfect exit point for the student who is not intending to continue through all stages of the Emergency Medical Services (EMS) Program to the paramedic level, or for currently certified paramedics desiring a credential. It formalizes successful completion of basic life support (BLS) coursework. Additionally, should the student elect to proceed with the Associate in Applied Science in Public Safety Degree, this certificate completes one of the specialty tracks.

## Career/Occupational Requirements: 16 credits

EMSB 1020 Emergency Medical Technician. .............. . 9
EMS 1025 EMS Interventions I ..... 5
EMS 1026 EMS Interventions II ..... 2

## Electives: 3 credits

## Select at least 3 credits from the following:

One of the listed courses is a prerequisite to the Paramedic Program.
COMM 1021 Fundamentals of Public Speaking* ..... 3
COMM 1031 Interpersonal Communication .....  3
COMM 1041 Small Group Communication. .....  3
COMM 1051 Intercultural Communication ..... 3
ENGL 1021 Composition I. ..... 4
(or electives as approved by the EMS Program Director)
*Not accepted as Goal 1 in Nursing-Paramedic Mobility Track

## Diploma <br> Emergency Medical Services-Paramedic Total Number of Credits: 56

This program is for EMT's looking to advance their education to the paramedic level. Upon completion of the program, students may find career opportunities with ambulance services, police departments, fire departments, rescue departments, and hospitals. The program not only meets, but also exceeds the criteria for education of Paramedics as recommended by the U.S. Department of Transportation. The St. Paul/Minneapolis metropolitan area is home to a large number of ambulance services and hospitals who utilize a wide array of differing protocols and equipment that students need to be conversant in. Additionally, these agencies participate in many innovative research initiatives for which there is a need to prepare students for understanding and participation. These factors create a need to exceed minimum standards to produce top notch graduates who are prepared to work in diverse environments. The Century College Paramedic Program has been accredited by the Committee on Accreditation of Allied Health Education Programs (CAAHEP) since 1987. Students are eligible to complete the National Registry exam for Paramedics upon successful completion of the program.

## Application Requirements for Paramedic AAS Degree and Paramedic Diploma:

1. A completed Century College application
2. An official high school transcript verifying graduation or an official GED certificate
3. Minimum assessment score placement in MATH 0070 or above, or completion of MATH 0030 or MATH 0060 with a grade of C or higher, or completion of MATH 1000 with a grade of B or higher
4. Minimum assessment score placement into RDNG 1000 or completion of RDNG 0900 or 0950 with a grade of C or higher
5. Assessment score placement in ENGL 1021, or completion of ENGL 0090 with a grade of C or higher

## 6 Programs of Study

6 Completion of one of the following: ENGL 1021, COMM 1021*, COMM 1031, COMM 1041, or COMM 1051 with a grade of $C$ or higher
7. Verification of current state EMT certification

8 Successful completion of both EMS 1025 \& EMS 1026 with a grade of $C$ or better in each course. (EMS 1025 and EMS 1026 are usually taken in the same semester.); $O R$
Successful completion of EMS 1201 with a grade of $C$ or better. Note: This course may or may not be offered depending upon demand; OR
Experienced EMTs (working two years) that have reregistered at least once or have documentation of 100 patient contacts. These must be completed after EMT certification. The run log must include the date, nature of the run, and involvement. Each page must also include the supervisor's signature and phone number. OR
If the applicant is an emergency department technician (EDT), registered nurse (RN), or has military medical experience (MOS 68 W or equivalent), a minimum of 100 patient contacts while certified as an EMT are required. These patient contacts must be within the past 24 months. An RN, unlike the other means of experience, may be in their first EMT certification period. Military medical experience must be in the last five years
9. Current AHA BLS for the Healthcare Provider certification.

Career/Occupational Requirements: 53 credits

| EMSP | 1205 | ics |
| :---: | :---: | :---: |
| EMSP | 1207 | Advanced Pathophysiology and Medical Terminology |
| EMSP | 1210 | Advanced Assessment, Communication, and Documentation |
| EMSP | 1215 | Advanced EMS Pharmacology. . . . . . . . . . . . . 3 |
| EMSP | 1220 | Advanced Intravenous Cannulation and Intervention $\qquad$ |
| EMSP | 1225 | Advanced Prehospital Cardiac Care I |
| EMSP | 1226 | Advanced Prehospital Cardiac Care II |
| EMSP | 1227 | Advanced Prehospital Cardiac Care III |
| EMSP | 1230 | Special Populations |
| EMSP | 1235 | Advanced EMS Operations |
| EMSP | 1240 | Advanced Airway and Respiratory Emergencies 2 |
| EMSP | 1245 | Advanced Endocrine Emergencies . . . . . . . . . 2 |
| EMSP | 1250 | Advanced Environmental and Neurological Emergencies |
| EMSP | 1255 | Advanced Behavioral Emergencies . . . . . . . . . 2 |
| EMSP | 1260 | Trauma Systems |
| EMSP | 1265 | Neurological Trauma |
| EMSP | 1270 | Practicum Theory and Application. . . . . . . . . . 2 |
| EMSP | 1271 | Advanced Hospital Practicum I . . . . . . . . . . . . 2 |
| EMSP | 1272 | Advanced Hospital Practicum II. . . . . . . . . . . . 1 |


| EMSP | 1273 | Advanced Hospital Practicum |
| :---: | :---: | :---: |
| EMSP | 1274 | Advanced Hospital Practicum IV |
| EMSP | 1275 | Advanced Life Support Practicum I |
| EMSP | 1276 | Advanced Life Support Practicum II |
| EMSP | 1277 | Advanced Life Support Practicum III . |
| EMSP | 1280 | Integration and Transition to the Paramedic Role |

## General Education/MnTC Requirements: 3 credits

Goal I - Communication: 3 credits
Select one of the following communication courses: (Fulfilled by application requirements)
COMM 1021 Fundamentals of Public Speaking* ........... 3
COMM 1031 Interpersonal Communication ................. . . 3
COMM 1041 Small Group Communication. . . . . . . . . . . . . . . 3
COMM 1051 Intercultural Communication................... . . 3
ENGL 1021 Composition I. . . . . . . . . . . . . . . . . . . . . . . . . . . 4
*Not accepted as Goal 1 in Nursing-Paramedic Mobility Track

## Associate in Applied Science Emergency Medical Services-Paramedic Science Total Number of Credits: 69

Program Description: See above
Application Requirements: See above
Program Requirements
Career/Occupational Requirements: 53 credits
EMSP 1205 Introduction to Paramedics . . . . . . . . . . . . . . . . 1
EMSP 1207 Advanced Pathophysiology and Medical Terminology 4
EMSP 1210 Advanced Assessment, Communication, and
Documentation ................................ . . . 3
EMSP 1215 Advanced EMS Pharmacology. ................ . . 3
EMSP 1220 Advanced Intravenous Cannulation and Intervention . 1
EMSP 1225 Advanced Prehospital Cardiac Care I ........ . 2
EMSP 1226 Advanced Prehospital Cardiac Care II. . . . . . . . 2
EMSP 1227 Advanced Prehospital Cardiac Care III ....... . 2
EMSP 1230 Special Populations . . . . . . . . . . . . . . . . . . . . . . 3
EMSP 1235 Advanced EMS Operations . . . . . . . . . . . . . . . . 1
EMSP 1240 Advanced Airway and Respiratory Emergencies 2
EMSP 1245 Advanced Endocrine Emergencies . . . . . . . . . . 3
EMSP 1250 Advanced Environmental and Neurological Emergencies
EMSP 1255 Advanced Behavioral Emergencies........... . 2
EMSP 1260 Trauma Systems . . . . . . . . . . . . . . . . . . . . . . . . . 1
EMSP 1265 Neurological Trauma. . . . . . . . . . . . . . . . . . . . . . 1
EMSP 1270 Practicum Theory and Application. . . . . . . . . . . 2
EMSP 1271 Advanced Hospital Practicum I . . . . . . . . . . . . . 2

| EMSP | 1272 | Advanced Hospital Practicum |
| :---: | :---: | :---: |
| EMSP | 1273 | Advanced Hospital Practicum III |
| EMSP | 1274 | Advanced Hospital Practicum IV |
| EMSP | 1275 | Advanced Life Support Practicum I |
| EMSP | 1276 | Advanced Life Support Practicum II |
| EMSP | 1277 | Advanced Life Support Practicum III . |
| EMSP | 1280 | Integration and Transition to the Paramedic Role |

General Education/MnTC Requirements: 16 Credits
Goal 1 - Communication: 7 credits
(Completion of one of the following courses with a "C" or higher meets the pre-req for the Paramedic Program)
ENGL 1021 Composition I ..... 4
Select one of the following COMM courses ..... 3COMM 1021 Fundamentals of Public Speaking*COMM 1031 Interpersonal CommunicationCOMM 1041 Small Group CommunicationCOMM 1051 Intercultural Communication
Goal 2 - Critical Thinking is fulfilled when all MnTC goals arecomplete
Goal 3 and/or Goal 4 - Sciences/Math/Logical Reasoning: 3credits
Goal 5 - History/Social and Behavioral Sciences: 3 credits
Goal 6 - Humanities and Fine Arts: 3 credits
Goals 7 - 10: Three credits in ONE of the four goals(fulfilled by COMM course)* not accepted as Goal I in the Associate Degree Nursing Program -Paramedic Mobility
Diploma
Paramedic for the Experienced EMT Total Number of Credits: 47

Program Description: This program is designed to advance the experienced EMT to the paramedic level. Candidates may include experienced EMTs, registered nurses with experience in an emergency or critical care role, and military medics. Upon completion of the program, students may find career opportunities with ambulance services, police departments, fire departments, rescue departments, hospitals and clinics. The program meets the criteria for education of Paramedics as recommended by the U.S. Department of Transportation. The Century College Paramedic Program has been accredited by the Committee on Accreditation of Educational Programs for the EMS-Professions (CoAEMSP) since 1987. Students are eligible to complete the National Registry exam for Paramedics upon successful completion of the program.

## Application Requirements:

1. A completed Century College application
2. An official high school transcript verifying graduation or an official GED certificate

3. Assessment score placement in MATH 0070 or above, or completion of MATH 0030 or 0060 with a grade of "C" or higher, or completion of MATH 1000 with a grade of " B " or higher
4. Assessment score placement into RDNG 1000 or completion of RDNG 0900 or RDNG 0950 with a grade of " $C$ " or higher
5. Assessment score placement in ENGL 1021, or completion of ENGL 0090 with a grade of " $C$ " or higher
6. Completion of one of the following: COMM 1021*, COMM 1031, COMM 1041, COMM 1051, or ENGL 1021 with a grade of " $C$ " or higher
7. Verification of current state EMT certification
8. Meets experienced EMT requirements
9. A valid driver's license
10. A current AHA BLS for the Healthcare Provider certification.
*Not accepted as Goal 1 in Nursing-Paramedic Mobility Track

## Career/Occupational Requirements: 44 credits

EMSE 1140 Paramedic Orientation. . . . . . . . . . . . . . . . . . . . 1
EMSE 1141 Introduction to Paramedics . . . . . . . . . . . . . . . . 3
EMSE 1146 Advanced Assessment,
Communication, and Documentation . ........ . 2
EMSE 1148 Advanced EMS Operations . . . . . . . . . . . . . . . . 1
EMSE 1149 Advanced EMS Pharmacology. . . . . . . . . . . . . . 3
EMSE 1153 Advanced Medical Emergencies I. . . . . . . . . . . 4
EMSE 1154 Advanced Medical Emergencies II . . . . . . . . . . 4
EMSE 1160 Advanced Prehospital Cardiac Care I ......... 4
EMSE 1161 Advanced Prehospital Cardiac Care II . . . . . . . . 4
EMSE 1164 Advanced Prehospital Trauma Care . . . . . . . . . 1
EMSE 1166 Prehospital Special Populations .............. . . 5
EMSE 1170 Paramedic Preparation and Assessment. . . . . . 2
EMSE 1175 Advanced Life Support Practicum I . . . . . . . . . . 3
EMSE 1176 Advanced Life Support Practicum II . . . . . . . . . 3
EMSE 1177 Advanced Life Support Practicum III . . . . . . . . . 3
EMSE 1180 Integration and Transition to the
Paramedic Role

## 6 Programs of Study



General Education/MnTC Requirements: 3 credits
Goal I - Communication: 3 credits
Select one of the following communication courses: (Fulfilled by application requirements)
COMM 1021 Fundamentals of Public Speaking* .......... 3
COMM 1031 Interpersonal Communication................ 3
COMM 1041 Small Group Communication. ................. . 3
COMM 1051 Intercultural Communication.................. . 3
ENGL 1021 Composition I............................... . 4

* Not accepted as Goal 1 in Nursing-Paramedic Mobility Track


## Associate in Applied Science Degree Paramedic for the Experienced EMT Total Number of Credits: 60

Program Description: See above
Application Requirements: See above
Career/Occupational Requirements: 44 credits

| EMSE | 1140 | Paramedic Orientation. |
| :---: | :---: | :---: |
| EMSE | 1141 | Introduction to Paramedics . . . . . . . . . . . . . . . 3 |
| EMSE | 1146 | Advanced Assessment, <br> Communication, and Documentation . . . . . . . . 2 |
| EMSE | 1148 | Advanced EMS Operations . . . . . . . . . . . . . . . 1 |
| EMSE | 1149 | Advanced EMS Pharmacology. . . . . . . . . . . . . 3 |
| EMSE | 1153 | Advanced Medical Emergencies I. . . . . . . . . . 4 |
| EMSE | 1154 | Advanced Medical Emergencies II . . . . . . . . . 4 |
| EMSE | 1160 | Advanced Prehospital Cardiac Care I . . . . . . . 4 |
| EMSE | 1161 | Advanced Prehospital Cardiac Care II. . . . . . . . 4 |
| EMSE | 1164 | Advanced Prehospital Trauma Care . . . . . . . . 1 |

EMSE 1166 Prehospital Special Populations ..... 5
EMSE 1170 Paramedic Preparation and Assessment. ..... 2
EMSE 1175 Advanced Life Support Practicum I. ..... 3
EMSE ..... 1176
Advanced Life Support Practicum II ..... 3
EMSE 1177 Advanced Life Support Practicum III ..... 3
EMSE 1180 Integration and Transition to theParamedic Role1
General Education/MnTC Requirements: 16 creditsGoal 1 - Communication: 7 credits
ENGL 1021 Composition I. ..... 4
Select one of the following COMM courses: ..... 3
COMM 1021 Fundamentals of Public Speaking*
COMM 1031 Interpersonal Communication
COMM 1041 Small Group Communication
COMM 1051 Intercultural CommunicationGoal 2 - Critical Thinking is fulfilled when all MnTC goalsare complete
Goal 3 and/or Goal 4 - Sciences/Math/Logical Reasoning: 3 credits
Goal 5 - History/Social and Behavioral Sciences: 3 credits
Goal 6 - Humanities and Fine Arts: 3 credits
Goals 7-10 - Three credits in one of the four goals

* Not accepted as Goal 1 in Nursing-Paramedic Mobility Track


## Engineering

## Program Options:

Associate in Science Degree (60)

## Associate in Science Degree Engineering Total Number of Credits: 60

Program Description: The Associate in Science Degree in Engineering is designed for students who plan to transfer to a fouryear college or university to complete a baccalaureate degree program in one of the following engineering fields: aerospace, biomedical, bioproducts \& biosystems, chemical, civil, computer, electrical, geological, material, mechanical and general engineering. This program includes the courses usually required in the first two years of a baccalaureate engineering curriculum. Students are urged to acquaint themselves with the requirements of the major department in the college or university where they plan to transfer, and to consult with the Century Counseling office for assistance in planning their program and selecting electives. Guide sheets are available in the Advising, Counseling, \& Career Center for many engineering fields and transfer institutions.

## Program Requirements:

## Core Requirements: 10 credits <br> (see MnTC Goals $3 / 4$ for more Math and Science requirements) <br> MATH 2081 Multivariable Calculus. ...................... . 5 <br> MATH 2082 Linear Algebra and Differential Equations .... 5 <br> Career/Occupational Requirements: Select 1 of the 10 Specialty Track Options:

Aerospace Engineering: Select 20 credits from the following:
CHEM 1041 Principles of Chemistry I . . . ............... 5
CSCI 1081 Programming Fundamentals ................. 4
ENGR 1080 Statics .......................................... 3
ENGR 2080 Dynamics.................................... 3
ENGR 2085 Deformable Body mechanics. .................. 3
ENGR 2091 Circuits I...................................... 4
ENGR 2094 Digital Fundamentals. ........................ . . 2
PHYS 2081 Modern Physics .............................. . 4
Biomedical Engineering: Select 20 credits from the following:
CSCl 1081 Programming Fundamentals ................. 4
MATH 2025 Probability and Statistics. . . . . . . . . . . . . . . . . . 4
CHEM 1041 Principles of Chemistry I . . . . . . . . . . . . . . . . . . 5
CHEM 1042 Principles of Chemistry II. .................... . . 5
CHEM 2041 Organic Chemistry I.......................... . 5
Bioproducts \& Biosystems Engineering: Select 20 credits from the following:
BIOL 1041 Principles of Biology I . . . . . . . . . . . . . . . . . . . . 5
CHEM 1041 Principles of Chemistry I ...................... 5
CHEM 1042 Principles of Chemistry II. .................... . . 5
ENGR 2080 Dynamics..................................... 3
ENGR 2085 Deformable Body Mechanics ................ 3
Emphasis (choose one):

## Bioproducts

CHEM 2041 Organic Chemistry I ..... 5
CHEM 2042 Organic Chemistry II ..... 5
Bioprocessing \& Food
CHEM 2041 Organic Chemistry I ..... 5
CHEM 2042 Organic Chemistry II ..... 5
ENGR 2091 Circuits I ..... 4
ENGR 2094 Digital Fundamentals. ..... 2
MATH 2025 Probability and Statistics ..... 4
Environmental \& Ecological
ENGR 2091 Circuits I ..... 4
ENGR 2094 Digital Fundamentals. ..... 2
MATH 2025 Probability and Statistics. ..... 4
Chemical Engineering: Select 20 credits from the following:
CHEM 1041 Principles of Chemistry I ..... 5
CHEM 1042 Principles of Chemistry II. ..... 5
CHEM 2041 Organic Chemistry I ..... 5
CHEM 2042 Organic Chemistry II ..... 5
Civil Engineering: Select 20 credits from the following:
CHEM 1041 Principles of Chemistry I .....  5
CHEM 1042 Principles of Chemistry II. .....  5
ENGR 1020 Introduction to Engineering .....  4
ENGR 1080 Statics ..... 3
ENGR 2080 Dynamics ..... 3
ENGR 2085 Deformable Body Mechanics ..... 3
MATH 2025 Probability and Statistics ..... 4
Computer Engineering: Select 20 credits from the following:
CSCI 1081 Programming Fundamentals ..... 4
CSCI 1082 Object-Oriented Programming .....  3
CSCI 2014 Discrete Structures of Computer Science ..... 4
CSCI 2060 Operating Systems .....  3
CSCI 2082 Data Structures and Algorithms ..... 3
CSCI 2090 Introduction to Functional Programming. ..... 1
ENGR 2091 Circuits I .....  4
ENGR 2092 Circuits II .....  4
ENGR 2095 Introduction to Digital Design ..... 4
Electrical Engineering: Select 20 credits from the following:
CHEM 1041 Principles of Chemistry I ..... 5
CSCI 1081 Programming Fundamentals .....  4
ENGR 2091 Circuits 1 ..... 4
ENGR 2092 Circuits II .....  4
ENGR 2095 Introduction to Digital Design .....  4
PHYS 2081 Modern Physics OR ..... 4
CHEM 1042 Principles of Chemistry II .....  5
General Engineering: Select 20 credits from the following:
ENGR 1020 Introduction to Engineering OR ..... 4
CSCI 1081 Programming Fundamentals ..... 4
ENGR 1080 Statics .....  3
ENGR 2080 Dynamics ..... 3
ENGR 2091 Circuits I ..... 4
CHEM 1041 Principles of Chemistry I .....  5
CHEM 1042 Principles of Chemistry II OR .....  5
BIOL 1041 Principles of Biology I ..... 5
Geological Engineering: Select 20 credits from the following:
CHEM 1041 Principles of Chemistry I ..... 5
CHEM 1042 Principles of Chemistry II. ..... 5
ENGR 1080 Statics .....  3
ENGR 2080 Dynamics .....  3
ENGR 2085 Deformable Body Mechanics ..... 3
MATH 2025 Probability and Statistics ..... 4
ESCI 1030 Physical Geology .....  4

## 6 Programs of Study

| Material Science Engineering: Select 20 credits from the following: |  |  |  |
| :---: | :---: | :---: | :---: |
| CHEM | 1041 | Principles of Chemistry I | 5 |
| CHEM | 1042 | Principles of Chemistry | 5 |
| CHEM | 2041 | Organic Chemistry | 5 |
| ENGR | 1080 | Statics | 3 |
| ENGR | 2085 | Deformable Body Mechanics | 3 |
| PHYS | 2081 | Modern Physic | 4 |
| Mechanical Engineering: Select 20 credits from the following: |  |  |  |
| CHEM | 1041 | Principles of Chemistry | . 5 |
| CSCl | 1081 | Programming Fundamentals | 4 |
| ENGR | 1020 | Introduction to Engineering | 4 |
| ENGR | 1080 | Statics | 3 |
| ENGR | 2070 | Thermodynamics | 3 |
| ENGR | 2080 | Dynamics | 3 |
| ENGR | 2085 | Deformable Body Me | 3 |
| ENGR | 2091 | Circuits I | 4 |
| ENGR | 2094 | Digital Fundamen | 2 |
| General Education/MnTC Requirements . . . . . . . . . . . . . . . . . 30 <br> See MnTC course list for options. |  |  |  |
| Goal 1 - Communication: 4 credits |  |  |  |
| ENGL |  | Compositio | 4 |
| Goal 2 - Critical Thinking is fulfilled when all MnTC goals are complete. |  |  |  |
| Goal 3 and/or Goal 4 - Sciences/Math/Logical Reasoning: 20 credits |  |  |  |
| MATH | 1081 | Single Variable Calculus | 5 |
| MATH | 1082 | Single Variable Calculus II. | 5 |
| PHYS | 1081 | Introductory Physics I. |  |
| PHYS | 1082 | Introductory Physics | . 5 |
| Goal 5 - History/Social and Behavioral Sciences: 3 credits (Select one courses common to both the MnTC course list and the U of M Lib. Ed. transfer guide or other transfer college of choice) |  |  |  |
| Goal 6 - Humanities and Fine Arts: 3 credits (Select one courses common to both the MnTC course list and the U of M Lib. Ed. transfer guide or other transfer college of choice) |  |  |  |
| Goals 7, 8, 9 and 10 - Three credits in each of two goals (may be fulfilled with courses from Goals 5 and 6) |  |  |  |

## Engineering CAD Technology

## Program Options:

Digital Fabrication Technology Certificate (16)
Engineering CAD Technology AAS Degree (60)

## Certificate

## Digital Fabrication Technology

## Total Number of Credits: 16

Program Description: This certificate is designed for individuals interested in learning more about automation and manufacturing technologies and systems. Students enrolled in ECAD, engineering, math and science programs/disciplines may benefit from a technical set of courses designed to prepare graduates for entry-level employment or continuing education in technical/engineering fields. Additionally, this certificate serves as the entrance into the ECAD program. Graduates may gain employment in firms' R\&D, Model shops, or prototype departments.

Application Requirements: Assessment score placement in RDNG 1000, or completion of RDNG 0090 with a grade of " $C$ " or higher; assessment score placement in MATH 0070, or completion of MATH 0030 with a grade of "C" or higher.

## Career/Occupational Requirements: 16 credits

| ECAD | 1025 | How to Make Almost Anything . . . . . . . . . . . . . 3 |
| :--- | :--- | :--- |
| ENGR | 1020 | Introduction to Engineering . . . . . . . . . . . . <br> OR |
| ECAD | 1020 | Interpreting Engineering Drawing . . . . . . . . . . 2 |
| AND |  |  |

Select from above courses not already taken, from the list below or other courses with instructor consent to total 16 credits.
ECAD 1060 Materials and Manufacturing Processes . . . . . 3
ECAD 2050 Introduction to Inventor .....  3
ECAD 2053 Introduction to SolidWorks ..... 3
ECAD 2055 Introduction to CREO Elements/Pro .....  3
ENGR 2020 Robotics ..... 4
ENGR 2094 Digital Fundamentals. .....  2
ENGR 2095 Introduction to Digital Design .....  4
MATH 1015 Applied Mathematics .....  5
MATH 1081 Single Variable Calculus I .....  5
PHYS 1041 General Physics I. .....  5
PHYS 1081 Introductory Physics. .....  5

## Associate in Applied Science Degree Engineering CAD Technology Total Number of Credits: 60

Program Description: Students will use Computer Aided Drafting and Design (CAD) systems to create engineering drawings. Emphasis is placed on mechanical drafting standards, components and design for manufacturing. Graduates of the program find employment as mechanical drafters, engineering assistants, technicians, and technical sales people.

Application Requirements: Assessment score placement in RDNG 1000 , or completion of RDNG 0900 or RDNG 0950 with a grade of "C" or higher; assessment score placement in MATH 0070 or MATH 1015 or higher, or completion of MATH 0030 with a grade of "C" or higher.

## Career/Occupational Requirements: 39 credits

| ECAD | 1020 | Interpreting Engineering Drawings |
| :---: | :---: | :---: |
| ECAD | 1040 | Engineering Drafting I |
| ECAD | 1060 | Materials and Manufacturing Processes |
| ECAD | 1070 | Introduction to AutoCAD |
| ECAD | 2020 | Geometric Dimensioning and Tolerancing |
| ECAD | 2030 | Descriptive Geometry and Applications |
| ECAD | 2040 | Engineering Drafting II |
| ECAD | 2050 | Introduction to Inventor |
| ECAD | 2053 | Introduction to SolidWorks |
| ECAD | 2055 | Introduction to CREO Elements/Pro. |
| ECAD | 2070 | Power Transmission Devices. |
| MATH | 1015 | Applied Mathematics |

## Career/Occupational Electives: 4 credits

Select 4 credits from the following courses:
ECAD 1025 How to Make Almost Anything . . . . . . . . . . . . . 3

ECAD 1790 Independent Study. . . . . . . . . . . . . . . . . . . . . . 1-3
ECAD 2060 Basic Tooling Fixtures ........................... . . 3
ECAD 2075 Advanced CAD Software. . . . . . . . . . . . . . . . . . 3
ECAD 2080 Design Project . . . . . . . . . . . . . . . . . . . . . . . . . . . 2
ECAD 2780 Internship. . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1-3
ECAD 2790 Special Topics in Engineering CAD . . . . . . . . . 1-3
ENGR 1020 Introduction to Engineering . . . . . . . . . . . . . . . . 4
Other electives may be selected with instructor consent
General Education/MnTC Requirements: 17 credits
Goal 1 - Communication: 7 credits
ENGL 1021 Composition I. . . . . . . . . . . . . . . . . . . . . . . . . . . . 4
Select one of the following COMM courses: . . . . . . . . . 3
COMM 1021 Fundamentals of Public Speaking
COMM 1031 Interpersonal Communication
COMM 1041 Small Group Communication
COMM 1051 Intercultural Communication
Goal 2 - Critical Thinking is fulfilled when all MnTC goals are complete

Goal 3 and/or Goal 4 - Sciences/Math/Logical Reasoning: 4 credits
PHYS 1020 Physics Concepts............................... . . . 4
Goal 5 - History/Social and Behavioral Sciences: 3 credits
Goal 6 - Humanities and Fine Arts: 3 credits
Goals 7-10: Three credits in one of the four goals

## English

## Program Options:

Creative Writing Certificate: (15)

## Certificate English-Creative Writing <br> Total Number of Credits: 16

Program Description: The Creative Writing Certificate offers a concentrated course of study in the area of creative writing. In Creative Writing courses, students read and write in a range of genres, which may include poetry, fiction, creative nonfiction, drama/screenwriting, and media writing. While improving their knowledge and skill in creative writing, students will work collaboratively with instructors and classmates in a workshop environment to build their body of creative work. Employer surveys indicate that the ability to write and communicate effectively are key for success in the workplace; the Creative Writing Certificate complements any career which benefits from knowledge and skill in creative writing, critical thinking, and cooperation. The Creative Writing Certificate also serves as an excellent preparation for transfer students wishing to major or minor in Creative Writing at a four-year institution. Notes: The Minnesota Transfer Curriculum goal for each course is listed in parenthesis. A maximum of two courses transferred from other institutions can be used to help fulfill the 15-credit Creative Writing Certificate.

## Application Requirements/Program Prerequisites

Assessment score placement in ENGL 1021 or completion of ENGL 0090 with a grade of "C" or higher. Assessment score placement in RDNG 1000 or completion of RDNG 0900 or RDNG 0950 with a grade of " $C$ " or higher. Recommendation: ENGL 1021 or equivalent with a grade of "C" or higher

## Core Requirement: 3 credits

The following course is required for certificate completion. Although recommended, this course does not need to be completed prior to taking other creative writing courses.

ENGL $1027 \quad$| Creative Writing: Introduction to |  |
| :--- | :--- |
|  | Creative Writing ............................ . . . 3 |

## Creative Writing Courses: 9 credits

Select a minimum of 9 credits from the following: . . . . . . 9
ENGL 2024 Creative Writing: Fiction . . . . . . . . . . . . . . . . . . 3
ENGL 2025 Creative Writing: Media Writing. . . . . . . . . . . . 3

## 6 Programs of Study

| ENGL | 2026 | Creative Writing: Creative Nonfiction |
| :---: | :---: | :---: |
| ENGL | 2028 | Creative Writing: Poetry |
| Literature Requirement: 3 credits |  |  |
| Select a minimum of ONE course in literature (MnTC Goal 6) for 3 credits |  |  |
| Additional Requirements: <br> All coursework applied to the certificate must have a grade of " C " or higher. |  |  |
| English for Speakers of Other Languages |  |  |
| Program Options: <br> Academic English Proficiency Certificate (16) |  |  |
|  |  |  |
| Certificate Academic English Proficiency Total Number of Credits: 16 |  |  |
|  |  |  |
|  |  |  |
| Program Description: The Academic English Proficiency Certificate recognizes students for proficiency in academic English, which will assist them in succeeding in personal, educational and professional goals. Coursework helps students develop English language and communication skills as well as knowledge of terminology for a specific field of study. |  |  |
| Core Requirements: 10 credits |  |  |
| ENGL | 1021 | Composition |
| Select one course from the following: |  |  |
| ESOL | 1033 | Advanced Listening and Speaking |
| ESOL | 1035 | ESOL for College |
| Select one course from the following: |  |  |
| COMM | 1021 | Fundamentals of Public Speaking |
| COMM | 1031 | Interpersonal Communication |
| COMM |  | Small Group Communication. |
| COMM |  | Intercultural Communication |
| Career/Occupational Requirements: 6 credits Select six credits from the following courses. |  |  |
|  |  |  |
| Business |  |  |
| ACCT | 1010 | Introduction to Accounting |
| BMGT | 1020 | Introduction to Business |
| CAPL | 1000 | Computer Literacy |
| OFFT | 1001 | College Keyboarding |
| Health Care |  |  |
| HLTH | 1001 | Medical Terminology |
| HSCl | 1000 | Introduction to Healthcare Careers . |
| HSER | 1030 | Helping Skills. |

## English and Linguistics

ENGL 1022 Composition II ..... 3
ENGL 1025 Technical and Professional Writing. .....  3
ESOL 1033 Advanced Listening and Speaking in additionto Core Class). 3
ESOL 1035 ESOL for College (in addition to Core Class). .....  3
LING 1030 Introduction to English Language Analysis ..... 3
Communications
COMM 1021 Fundamentals of Public Speaking (in addition to Core Class). ..... 3
COMM 1031 Interpersonal Communication (in addition to Core Class) .....  3
COMM 1041 Small Group Communication (in addition to Core Class). ..... 3
COMM 1051 Intercultural Communication (in addition to Core Class) .....  3
COMM 1053 Communication, Travel, and Tourism .....  1
Education
EDUC 1050 Reading and Study Skills Education Strategies 3
EDUC 1060 Teaching English Language Learners .....  3
Reading and Student Success
RDNG 1000 Critical Reading and Thinking for College .....  3
INFS 1020 Research Skills and Information Literacy ..... 2
STSC 1006 The Effective Learner. .....  2
Science
BIOL 1020 Biology Concepts .....  4
ESCI 1020 Earth Science. .....  4
Social Sciences
PSYC 1020 General Psychology ..... 4
SOC 1020 Introduction to Sociology .....  3
Translating and Interpreting
TRIN 1021 Introduction to Translation .....  3
TRIN 1031 Standards of Practice and Skills of Interpreting 3
Other
ENGR 1020 Introduction to Engineering ..... 4
ITT 1020 Introduction to Information andTelecommunications Technology 3
Additional Requirements: Grade of "C" or higher in each corecourse applied to the certificate.

## Enterprise Computing Technology

## Formerly Microcomputer Support Technology

## Progam Options:

Advanced Enterprise Computing Certificate (16)
Cisco Networking Support Certificate (16)
Enterprise Virtualization Support (16)
Linux System Administrator Certificate (16)
Enterprise Technical Support Specialist Certificate (30)
Enterprise Computing Technician Certificate (48)
Enterprise Computing Technology AAS Degree (60)

## Certificate <br> Advanced Enterprise Computing <br> Total Number of Credits: 16

Program Description: Through this program students will study the management and maintenance of complex enterprise computing environments of companies utilizing Microsoft network and operating system technologies. Additionally, students will prepare for the Microsoft Certified Information Technology Professional (MCITP) examinations.

## Application Requirements/Program Prerequisites

Proficiency in the knowledge and skills related to configuring and maintaining Microsoft Windows 7 Professional and Microsoft Server 2012 OR Microsoft Certified Professional certification for both 70-680 and 70-410 OR Appropriate coursework OR Instructor consent

## Career/Occupational Requirements: 16 Credits

| ECT | 2015 | Administering Windows Server 2012 |
| :---: | :---: | :---: |
| ECT | 2017 | Configuring Advanced Windows Server 2012 Services. |
| ECT | 2018 | Administering Microsoft Exchange Server |
| ECT | 2780 | Internship. |
| Select two courses from the following: |  |  |
| CVF | 2065 | Introduction to Cybersecurity, Virtualization \& Forensics |
| CVF | 2083 | System Security and Network Auditing |
| ECT | 1003 | Virtual Computing Technology and Mobile Device Support |
| ECT | 1030 | Linux Operating System. |
| ECT | 1070 | Introduction to PowerShell Scripting |
| ECT | 2031 | Linux/UNIX Shells and Scripting. |
| ECT | 2032 | Linux/UNIX System Administration. |
| ECT | 2033 | Linux/UNIX Network Administration, Security, and Troubleshooting. |
| ITT | 1020 | Introduction to Information and Telecommunications Technology. |



| ITT | 1021 | Principles of Information Security . . . . . . . . . . 3 |
| :--- | :--- | :--- | :--- |
| ITT | 2031 | LAN Switching and Wireless (CCNA-3) . . . . 3 |
| ITT | 2080 | Technology Planning and Architecture . . . . . . 3 |

## Certificate

Cisco Networking Support Total Number of Credits: 16

Program Description: Through this program students will study the skills needed to select, connect, configure, and troubleshoot various networking devices for enterprise networks. Additionally, the students will prepare for Cisco Certified Network Associate (CCNA) examination.

## Application Requirements/Program Prerequisites

Enrollment in the Enterprise Computing Technology AAS degree program and demonstrated proficiency in the knowledge and skills related to configuring and maintaining routers and switches OR instructor consent.

## Career/Occupational Requirements: 16 Credits

ITT 1032 Routing Protocols and Concepts (CCNA-2) . . . 3

ITT 2031 LAN Switching and Wireless (CCNA-3) . . . . . . 3
ITT 2032 Accessing the WAN (CCNA-4) . . . . . . . . . . . . . 3
ECT 2780 Internship. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1
Select two courses from the following:
CVF 2065 Introduction to Cybersecurity, Virtualization
\& Forensics ................................... . . . . 3
ECT 1070 Introduction to PowerShell Scripting . . . . . . . . 3
ECT 2015 Administering Windows Server 2012 . . . . . . . . 3
ECT 2017 Configuring Advanced Windows Server 2012 Services3

ECT 2018 Administering Microsoft Exchange Server . . . . 3
ITT 1020 Introduction to Information and
Telecommunications Technology. . . . . . . . . . . . 3
Principles of Information Security. . . . . . . . . . . 3

## 6 Programs of Study



## Certificate <br> Enterprise Virtualization Support Total Number of Credits: 16

Program Description: This degree prepares students with the expertise, knowledge, and skills required in today's evolving cloud computing, virtualization, and security industry.

## Application Requirements/Program Prerequisites

Enrollment in the Enterprise Computing Technology AAS degree program and demonstrated proficiency in the knowledge and skills related to configuring and maintaining virtual machines OR instructor consent.

## Career/Occupational Requirements: 16 Credits

| CVF | 2092 | Cyber Storage Management and Forensics . . . 3 <br> CVF |
| :---: | :---: | :--- |
| 2093 |  | VMware vSpehere: ICM (Install, <br> Configure, Manage). ....................... 4 |
| CVF | 2116 | Virtual End User Computing and Application <br> Virtualization (VMware View: ICM). ......... 4 |
| CVF | 2119 | Cloud Enterprise Site Recovery . . . . . . . . . . . 2 |



ECT 2018 Administering Microsoft Exchange Server . . . . 3
ITT 1021 Principles of Information Security. ............ 3
ITT 1033 Network Infrastructures and Data Center Design (BICSI)3

ITT 2080 Technology Planning and Architecture ....... 3

## Certificate

## Linux System Administrator <br> Total Number of Credits: 16

Program Description: Through this program students will study the management and maintenance of complex computing environments of companies utilizing Linux/UNIX network and operating system technologies. Additionally, students will prepare for the CompTIA

Linux+ industry examination.

## Application Requirements/Program Prerequisites

Proficiency in the basic knowledge and skills related to configuring and maintaining a Linux Operating System environment OR Appropriate coursework OR Instructor consent

| Career/Occupational Requirements: 16 Credits |  |  |
| :---: | :---: | :---: |
| ECT | 2031 | Linux/UNIX Shells and Scripting |
| ECT | 2032 | Linux/UNIX System Administration. |
| ECT | 2033 | Linux/UNIX Network Administration, Security, and Troubleshooting |
| ECT | 2780 | Internship |

Select two courses from the following:

| CVF | 2065 |  |
| :---: | :---: | :---: |
|  |  | Forensics |
| ECT | 1070 | Introduction to PowerShell Scripting |

ECT 2015 Administering Windows Server 2012......... 3
ECT 2017 Configuring Advanced Windows Server 2012 Services 3
ECT 2018 Administering Microsoft Exchange Server ..... 3
ITT 1020 Introduction to Information and
Telecommunications Technology .....  3
ITT 1021 Principles of Information Security ..... 3
ITT 2020 Network Security Fundamentals .....  3
ITT 2031 LAN Switching and Wireless (CCNA-3) .....  3
ITT 2080 Technology Planning and Architecture ..... 3

## Certificate <br> Enterprise Technical Support Specialist <br> Total Number of Credits: 30

Program Description: The Enterprise Technical Support Specialist Certificate program is designed to prepare the student for a career as an Enterprise Support Specialist or hardware/software configuration specialist. Enterprise Support Specialists answer questions and provide technical assistance to those who have either hardware or software problems. Hardware/software configuration specialists upgrade old computers and prepare/install new computers on a local area network. The coursework will help prepare the student for Comptia's A+ Certification and Microsoft Windows 7 Professional (70680) exams.

## Application Requirements/Program Prerequisites

Assessment score placement in MATH 0070 or higher, or completion of MATH 0030 or MATH 0060 with a grade of " C " or higher, assessment score placement in ENGL 1021, or completion of ENGL 0090 with a grade of " C " or higher and assessment score placement in RDNG 1000, or completion of RDNG 0900 or RDNG 0950 with a grade of " $C$ " or higher.

## Career/Occupational Requirements: 27 Credits

CAPL 1010 Introduction to Software Applications 3

| ECT | 1001 | PC |
| :---: | :---: | :---: |
| ECT | 1003 | Virtual Computing Technology and Mobile Device Support |
| ECT | 1011 | Supporting Microsoft Windows 7 Professional 3 |
| ECT | 2021 | User Support Ser |
| ITT | 1031 | Networking Fundam |
| OFFT | 1001 | Document Formatting Essentials |
| Electives selected with instructor consent . . . . . . . . . . . . . . . . . 6 |  |  |
| General Education/MnTC Requirements: 3 Credits Goal 1 - Communication: 3 credits |  |  |
| Select one of the following courses: |  |  |
| COMM | 1021 | Fundamentals of Public Speaking . . . . . . . . . . 3 |
| COMM | 1031 | Interpersonal Communication |
| COMM | 1041 | Small Group Communication |
| COMM | 1051 | Intercultural Communication |
| ENGL | 1021 | Composition |
| Diploma <br> Enterprise Computing Technician Total Number of Credits: 48 |  |  |
| The Enterprise Computing Technician program prepares the student to be able to analyze organizational information needs, to recommend appropriate hardware and software systems, and to implement or to train others to implement such systems. Specific job titles the graduate would be qualified for include network support specialist, network analyst, network engineer, technical support specialist, and Enterprise Support Desk. The coursework will help prepare the student for COMPTIA A+ and Microsoft Certified Technical Specialist (MCTS) certification exams. |  |  |

## Application Requirements/Program Prerequisites

Assessment score placement in MATH 0070 or higher, or completion of MATH 0030 or MATH 0060 with a grade of "C" or higher, assessment score placement in ENGL 1021, or completion of ENGL 0090 with a grade of " $C$ " or higher and assessment score placement in RDNG 1000, or completion of RDNG 0900 or RDNG 0950 with a grade of "C" or higher, and successful completion of ECT 1001 with a grade of " $C$ " or higher or high school equivalent or proof of current A+ certification or instructor consent.

## Career/Occupational Requirements: 42 Credits

| CAPL | 1010 | Introduction to Software Applications . . . . . . . 3 |
| :---: | :---: | :---: |
| CVF | 2083 | System Security and Network Auditing . . . . . 3 |
| ECT | 1003 | Virtual Computing Technology and Mobile Device Support $\qquad$ |
| ECT | 1011 | Supporting Microsoft Windows 7 Professional 3 |
| ECT | 1013 | Installing and Configuring Windows <br> Server 2012 |
| ECT | 1030 | Linux Operating System. . . . . . . . . . . . . . . . . . 3 |
| ECT | 1070 | Introduction to PowerShell Scripting . . . . . . . 3 |

ECT 2015 Administering Windows Server 2012 ..... 3
ECT 2017 Configuring Advanced Windows Server2012 Services3
ECT 2018 Administering Microsoft Exchange Server ..... 3
ECT 2021 User Support Services ..... 3
ECT 2780 Internship ..... 1
ITT 1031 Networking Fundamentals (CCNA-1) ..... 3
OFFT 1001 Document Formatting Essentials. ..... 1
Electives selected with instructor consent ..... 3
General Education/MnTC Requirements: 6 Credits
Goal 1 - Communication: 3-4 credits
Select one of the following communication courses:
COMM 1021 Fundamentals of Public Speaking ..... 3
COMM 1031 Interpersonal Communication ..... 3
COMM 1041 Small Group Communication. ..... 3
COMM 1051 Intercultural Communication. ..... 3
ENGL 1021 Composition I. ..... 4
General Education/MnTC electives . ..... 2-3

## Associate in Applied Science Degree Enterprise Computing Technology Total Number of Credits: 60

Program Description: The Enterprise Computing Technology program prepares the student to be able to analyze enterprise organizational information needs, to recommend appropriate hardware and software systems, and to implement or to train others to implement such systems. Specific job titles that the graduate would be qualified for include network support specialist, network analyst, network engineer, PC support specialist, and PC help desk. The coursework will help prepare the student for Microsoft Windows 2012 Certifications. General education courses required will help ensure individuals have the necessary oral, written and critical thinking skills to help them with their professional responsibilities.

## Application Requirements/Program Prerequisites:

Assessment score placement in MATH 0070 or higher, or completion of MATH 0030 or MATH 0060 with a grade of "C" or higher, assessment score placement in ENGL 1021, or completion of ENGL 0090 with a grade of "C" or higher, assessment score placement in RDNG 1000, or completion of RDNG 0900 or RDNG 0950 with a grade of "C" or higher, and successful completion of ECT 1001 with a grade of "C" or higher or high school equivalent or proof of current A+ certification, or instructor consent.

## Program Requirements:

Core Requirements: 28 credits
CAPL 1010 Introduction to Software Applications ..... 3
CVF 2083 System Security and Network Auditing ..... 3
ITT 1031 Networking Fundamentals (CCNA-1) ..... 3
ECT 1003 Virtual Computing Technology and Mobile Device Support ..... 4

## 6 Programs of Study

| ECT | 1011 | Supporting Microsoft Windows 7 Professional 3 |
| :---: | :---: | :---: |
| ECT | 1013 | Installing and Configuring Windows Server 2012 |
| ECT | 1030 | Linux Operating System. . . . . . . . . . . . . . . . . . 3 |
| ECT | 1070 | Introduction to PowerShell Scripting . . . . . . . 3 |
| ECT | 2021 | User Support Services . . . . . . . . . . . . . . . . . . 3 |
| Select 1 of the Specialty Track Options: |  |  |
| Advanced Enterprise Computing: 13 credits |  |  |
| ECT | 2015 | Administering Windows Server 2012 . . . . . . . 3 |
| ECT | 2017 | Configuring Advanced Windows Server 2012 Services $\qquad$ |
| ECT | 2018 | Administering Microsoft Exchange Server . . . . 3 |
| ECT | 2780 | Internship. . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 |
| Select one course from the following: |  |  |
| CVF | 2065 | Introduction to Cybersecurity, Virtualization \& Forensics |
| ECT | 2031 | Linux/UNIX Shells and Scripting . . . . . . . . . . . 3 |
| ECT | 2032 | Linux/UNIX System Administration. . . . . . . . . 3 |
| ECT | 2033 | Linux/UNIX Network Administration, Security, and Troubleshooting . . . . . . . . . . . . . . . . . . . . . 3 |
| ITT | 1020 | Introduction to Information and Telecommunications Technology. |
| ITT | 1021 | Principles of Information Security . . . . . . . . . . 3 |
| ITT | 2031 | LAN Switching and Wireless (CCNA-3) ..... . 3 |
| ITT | 2080 | Technology Planning and Architecture . . . . . . 3 |
| Linux System Administrator: 13 credits |  |  |
| ECT | 2031 | Linux/UNIX Shells and Scripting . . . . . . . . . . . 3 |
| ECT | 2032 | Linux/UNIX System Administration. . . . . . . . . 3 |
| ECT | 2033 | Linux/UNIX Network Administration, Security, and Troubleshooting .......................... . 3 |
| ECT | 2780 | Internship. . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 |
| Select one course from the following: |  |  |
| CVF | 2065 | Introduction to Cybersecurity, Virtualization \& Forensics .................................... . . 3 |
| ECT | 2015 | Administering Windows Server 2012 . . . . . . . 3 |
| ECT | 2017 | Configuring Advanced Windows Server 2012 Services $\qquad$ |
| ECT | 2018 | Administering Microsoft Exchange Server . . . 3 |
| ITT | 1020 | Introduction to Information and Telecommunications Technology. . . . . . . . . . . . 3 |
| ITT | 1021 | Principles of Information Security . . . . . . . . . . 3 |
| ITT | 2020 | Network Security Fundamentals . . . . . . . . . . . 3 |
| ITT | 2031 | LAN Switching and Wireless (CCNA-3) ..... . 3 |
| ITT | 2080 | Technology Planning and Architecture . . . . . . 3 |

## System Virtualization and Cloud Computing: 13 credits <br> CVF 2092 Cyber Storage Management and Forensics . . . 3

CVF 2093 VMware vSphere ICM (Install, Configure, Manage). ..... 4
Virtual End User Computing and Application Virtualization (VMware View: ICM) . . . . . . . . . . 4
Cloud Enterprise Site Recovery . . . . . . . . . . . . . 2 ..... 2
Cisco Networking Support: 13 credits
ITT 1032 Routing Protocols and Concepts (CCNA-2) . . . . 3
ITT 2031 LAN Switching and Wireless (CCNA-3) . . . . . . 3
ITT 2032 Accessing the WAN (CCNA-4) ..... 3
ECT 2780 Internship. ..... 1
Select one course from the following:
CVF 2065 Introduction to Cybersecurity, Virtualization \&
Forensics3
ECT 2015 Administering Windows Server 2012 ..... 3
ECT 2017 Configuring Advanced Windows Server 20123
ECT 2018 Administering Microsoft Exchange Server ..... 3
ITT 1020 Introduction to Information and
Telecommunications Technology. ..... 3
ITT 1021 Principles of Information Security ..... 3
ITT 1033 Network Infrastructures and Data Center Design (BICSI) ..... 3
ITT 2042 Implementing Secure Converged WANs (CCNP-2). ..... 3
ITT 2043 Building Converged Cisco Multilayer SwitchedNetworks (CCNP-3)3
ITT 2044 Optimizing Converged Networks (CCNP-4) . . . . 3
ITT 2080 Technology Planning and Architecture ..... 3
General Education/MnTC Requirements: 16 Credits
Goal 1 - Communication: 7 credits
ENGL 1021 Composition I ..... 4
Select one of the following COMM courses ..... 3
COMM 1021 Fundamentals of Public Speaking
COMM 1031 Interpersonal Communication
COMM 1041 Small Group Communication
COMM 1051 Intercultural Communication
Goal 2 - Critical Thinking is fulfilled when all MnTCgoals are complete
Goal 3 and/or Goal 4 - Sciences/Math/Logical Reasoning:3 credits
Goal 5 - History/Social and Behavioral Sciences: 3 creditsGoal 6 - Humanities and Fine Arts: 3 credits

## Additional Requirements:

3 credits from the following electives or other courses with instructor consent by academic petition:
ACCT 2020 Financial Accounting . . . . . . . . . . . . . . . . . . . . . 4
CVF 2065 Introduction to Cybersecurity, Virtualization \& Forensics3
CSCI 1081 Programming Fundamentals ..... 4
COMM 1051Intercultural Communication3
Facility Systems Technology
Program Options:
Commercial Certificate (30)Facility Systems Technician Diploma (48)Facility Systems Technology AAS Degree (64)
Certificate
Commercial
Total Number of Credits: 30Program Description: This certificate prepares students foremployment in multi-unit housing, commercial buildings (entry level),office buildings, restaurants and community centers.
Program Requirements: Students must be able to perform physical tasks to complete course requirements

## Career/Occupational Requirements: 27 credits

| FST | 1000 | Construction Technology |
| :---: | :---: | :---: |
| FST | 1001 | Facility Workplace Safety . . . . . . . . . . . . . . . . 2 |
| FST | 1020 | Plumbing Basics. . . . . . . . . . . . . . . . . . . . . . . 3 |
| FST | 1030 | Basic Electricity . . . . . . . . . . . . . . . . . . . . . . . 3 |
| FST | 1033 | Electric Motors and Electric Controls . . . . . . . 3 |
| FST | 2020 | Commercial Electric Controls and Wiring Methods. |
| HVAC | 1041 | Basic Refrigeration I . . . . . . . . . . . . . . . . . . . . 3 |
| HVAC | 1060 | Fundamentals of Heating . . . . . . . . . . . . . . . 2 |
| HVAC | 1073 | Hydronic and Low-Pressure Steam Boilers. . . . 3 |
| WLDG | 1011 | Introduction to Metal Inert Gas Welding ..... . 1 |

## General Education/MnTC Requirements: 3 credits

Goal 1 - Communication: 3 credits
Select one of the following communication courses:
ENGL 1021 Composition I
COMM 1021 Fundamentals of Public Speaking
COMM 1031 Interpersonal Communication
COMM 1041 Small Group Communication
COMM 1051 Intercultural Communication

## Diploma <br> Facility Systems Technician <br> Total Number of Credits: 48

Program Description: This diploma prepares students for employment in residential office buildings, restaurants, hotels,
hospitals, community centers and commercial facilities with emphasis given to advanced facility systems and computerized maintenance management systems.

Program Requirements: Students must be able to perform physical tasks to complete course requirements

## Career/Occupational Requirements: 42 credits

FST 1000 Construction Technology ..... 4
FST 1001 Facility Workplace Safety ..... 2
FST 1020 Plumbing Basics .....  3
FST 1030 Basic Electricity ..... 3
FST 1033 Electric Motors and Electric Controls .....  3
FST 1060 Locks, Keys, and Security ..... 2
FST 2020 Commercial Electric Controls and Wiring Methods ..... 3
FST 2050 Computerized Maintenance and Energy Management Systems .....  3
HVAC 1073 Hydronic and Low-Pressure Steam Boilers. ..... 3
HVAC 1041 Basic Refrigeration I ..... 3
HVAC 1042 Basic Refrigeration II .....  3
HVAC 1060 Fundamentals of Heating ..... 2
HVAC 1067 Gas Heat ..... 4
HVAC 1069 Heat Pumps, Chillers, and Electric Heat .....  2
WLDG 1001 Introduction to Oxyacetylene Welding ..... 2
General Education/MnTC Requirements: 6 credits
Goal 1 - Communication: 3 credits
Select one of the following communication courses:
ENGL 1021 Composition I
COMM 1021COMM 1031 Interpersonal Communication
COMM 1041 Small Group Communication
COMM 1051 Intercultural Communication2-3

## Associate in Applied Science Degree Facility Systems Technology Total Number of Credits: 60

Program Description: This AAS Degree prepares students for employment in residential office buildings, restaurants, hotels, hospitals, community centers and commercial facilities with emphasis given to advanced facility systems and computerized maintenance management systems. The general education required courses would help insure individuals have the necessary oral, written, and critical thinking skills to help with their professional responsibilities. Program Requirements: Students must be able to perform physical tasks to complete course requirements

## Career/Occupational Requirements: 44 credits

CAPL 1000 Computer Literacy 1

## 6 Programs of Study

| FST | 1000 | Construction Technology . . . . . . . . . . . . . . . . . 4 |
| :---: | :---: | :---: |
| FST | 1001 | Facility Workplace Safety . . . . . . . . . . . . . . . . 2 |
| FST | 1020 | Plumbing Basics. . . . . . . . . . . . . . . . . . . . . . . 3 |
| FST | 1030 | Basic Electricity . . . . . . . . . . . . . . . . . . . . . . . 3 |
| FST | 1033 | Electric Motors and Electric Controls . . . . . . . 3 |
| FST | 1060 | Locks, Keys and Security . . . . . . . . . . . . . . . . 2 |
| FST | 2020 | Commercial Electric Controls and Wiring Methods. |
| FST | 2050 | Computerized Maintenance Systems and Energy Management Systems. |
| HVAC | 1020 | Load Calculating . . . . . . . . . . . . . . . . . . . . . . 2 |
| HVAC | 1041 | Basic Refrigeration I . . . . . . . . . . . . . . . . . . . 3 |
| HVAC | 1042 | Basic Refrigeration II. . . . . . . . . . . . . . . . . . . . 3 |
| HVAC | 1060 | Fundamentals of Heating .................. 2 |
| HVAC | 1067 | Gas Heat . . . . . . . . . . . . . . . . . . . . . . . . . . . 4 |
| HVAC | 1069 | Heat Pumps, Chillers, and Electric Heat . . . . . 2 |
| HVAC | 1073 | Hydronic and Low-Pressure Steam Boilers. . . . 3 |
| WLDG | 1011 | Introduction to Metal Inert Gas Welding ..... 1 |
| General Education/MnTC Requirements: 16 credits Goal 1 - Communication: 7 credits |  |  |
| ENGL | 1021 | Composition I. . . . . . . . . . . . . . . . . . . . . . . . 4 |
| Select one of the following COMM courses: . . . . . . . . . 3 |  |  |
| COMM | 1021 | Fundamentals of Public Speaking |
| COMM | 1031 | Interpersonal Communication |
| COMM | 1041 | Small Group Communication |
| COMM | 1051 | Intercultural Communication |
| Goal 2 - Critical Thinking is fulfilled when all MnTC goals are complete |  |  |
| Goal 3 and/or Goal 4 - Sciences/Math/Logical Reasoning: 3 credits |  |  |
| Goal 5 - History/Social and Behavioral Sciences: 3 credits |  |  |
| Goal 6 - Humanities and Fine Arts: 3 credits |  |  |
| Goals 7-10 -Three credits in one of the four goals (fulfilled by COMM Course) |  |  |

## Gender Studies

## Formerly Women and Gender Studies.

## Academic Certificate Total Number of Credits: 16

Program Description: The Gender Studies Certificate program offers an interdisciplinary field of study focused on the rich diversity of women's experiences across time, cultures, and social/ economic classes. In Gender Studies courses, you will reexamine and reevaluate assumptions about the role of women and gender in
society, uncovering their central role in the human experience. The program is a valuable addition to any academic field and provides a career advantage in many areas. The Gender Studies Certificate is an excellent preparation for transferring to a major or minor in Gender Studies or Women's Studies at other institutions.

## Program Requirements

## Career/Occupational Requirements: 4 credits

GNDR 1061 Foundations of Women's Studies . . . . . . . . . . . 3
GNDR 2099 Gender Studies Certificate Capstone ......... 1

## Additional Requirement: 12 credits

Select 12 credits from the following courses with no more than 6 credits from a single discipline (except GNDR)
GNDR 1071 Introduction to GLBT Studies. . . . . . . . . . . . . . . 3

GNDR 2061 Gender in Global Perspective . . . . . . . . . . . . . . 3
GNDR 2081 Gender and Public Power . . . . . . . . . . . . . . . . . 3
GNDR 2790 Special Topics in Gender Studies . . . . . . . . . . 1-3
ANTH 2031 Sex and Gender . . . . . . . . . . . . . . . . . . . . . . . . . 3
BIOL 1021 Biology of Women . . . . . . . . . . . . . . . . . . . . . . . 3
COMM 2071 Communication and Gender .................. . . . 3
$\begin{array}{ll}\text { ENGL } 2061 \quad \text { Women in Literature: British and Colonial } \\ & \text { Tradition. . . . . . . . . . . . . . . . . . . . . . . . . . } 3\end{array}$
ENGL 2062 Women in Literature: American . . . . . . . . . . . . 3
ENGL 2063 Women in Literature: World Voices . . . . . . . . . 3
ENGL 2065 GLBTQ Literature . . . . . . . . . . . . . . . . . . . . . . . . . 3
HIST 2063 Gender, Health, and Medicine. . . . . . . . . . . . . . . 3
HIST 2065 Women in America to 1890. . . . . . . . . . . . . . . . . 3
HIST 2066 Women in America since 1890 . . . . . . . . . . . . . 3
HUM 2061 Women in the Arts . . . . . . . . . . . . . . . . . . . . . . 3
SOC 2031 Sociology of the Family . . . . . . . . . . . . . . . . . . . 3
SOC 2061 Sociology of Gender and Work . . . . . . . . . . . . . 3

## Global Studies

## Academic Certificate Total Number of Credits: 15

Program Description: The Global Studies Certificate provides a multi-disciplinary approach to understanding the interdependence and interconnectedness of peoples and nations around the globe. By taking a variety of courses with a common focus, students gain knowledge and analytical skills to discuss political, economic and cultural elements of contemporary societies from several perspectives. They also gain knowledge and understanding in order to interact and communicate well with people from a variety of backgrounds and cultures. The intention is to enhance these abilities in order to become community leaders and active world citizens. This Certificate complements many academic fields and any career which benefits from a global/international perspective.
Core Requirements: 3 credits
GST 2010 Introduction to Global Studies3
Global Courses: Select 6 credits
Introduction to Cultural Anthropology ..... 3
ENGL 2051 Modern World Literature ..... 3
ENGL 2052 Contemporary World Literature. ..... 3
ENGL 2063 Women in Literature-World Voices ..... 3
GEOG 1023 Human Geography ..... 3
GEOG 1031 World Geography ..... 3
HIST 1061 World History Since 1400 ..... 3
HIST 2051 20th Century Global Conflicts and Crisis ..... 3
HUM 1025 Introduction to Humanities: A World View . . . . 4
MUSC 2051 World Music ..... 3
PHIL 1051 World Religions ..... 3
GNDR 2061 Women in Global Perspective ..... 3
International/Area Studies: Select 5 credits
ART 1021 History of Western World Art I ..... 3
ART 1022 History of Western World Art II ..... 3
CHIN 2021 Intermediate Chinese I ..... 5
CHIN 2022 Intermediate Chinese II. ..... 5
COMM 1051 Intercultural Communication ..... 3
COMM 1053 Communication, Travel and Tourism ..... 1
ENGL 2057 An Introduction to African Literature ..... 3
ENGL 2058 Middle Eastern Literature ..... 3
ENGL 2061 Women in Literature: British and Colonial . ..... 3
ENGL 2083 Latin American Literature ..... 3
HIST 1021 Western Civilization: From Antiquity to the 18th Century ..... 3
HIST 1022 Western Civilization: From the 18th Century to the Present. ..... 3
HIST 1051 East Asia Since 1600 ..... 3
HIST 2053 Southeast Asia and the Vietnam War. ..... 3
HUM 1021 Introduction to the Humanities: Europe and the United States ..... 4
HUM 1030 Culture and Civilization of Spanish Speaking Peoples ..... 3
HUM 1040 Culture and Civilization of Chinese Speaking Peoples ..... 3
HUM 1043 International Film. ..... 3
PHIL 1025 Introduction to Eastern Philosophy ..... 3
SPAN 2021 Intermediate Spanish I ..... 5
SPAN 2022 Intermediate Spanish II ..... 5

## Health Sciences Broad Field

Program Options:<br>Health Sciences Broad Field AS Degree (60)

## Associate in Science Degree <br> Health Science Broad Field <br> Total Number of Credits: 60

Program Description: This program provides students a broad base of general education coursework relevant to the field of health sciences, in preparation to transfer to a broad array of health sciences majors at a college or university. This degree program is designed to fulfill health science baccalaureate requirements at all MnSCU system universities offering related degrees.

## Career/Occupational Requirements: Please check individual programs for specific degree requirements.

Note: Students should make a specific course plan based on their particular field of study/major and the college or university to which they plan on transferring. See a counselor to develop an appropriate general education and pre-major course plan for your individual goals as soon as possible. Also consult with representatives from your transfer college for detailed transfer admissions and college major requirements information.

## General Education/MnTC Requirements: 49 credits <br> Goal 1 - Communication: 7 credits <br> ENGL 1021 Composition I............................... . 4

Select one of the following COMM courses
COMM 1021 Fundamentals of Public Speaking ............ 3
COMM 1031 Interpersonal Communication................. 3
COMM 1041 Small Group Communication. . . . . . . . . . . . . . . 3
COMM 1051 Intercultural Communication. ................ 3
Goal 2 - Critical Thinking is fulfilled when all MnTC goals are complete
Goal 3 and/or Goal 4 - Sciences/Math/Logical Reasoning: 29 credits
MATH 1025 Statistics ..................................... . 4
MATH 1061 College Algebra I............................. . 4
BIOL 1041 Principles of Biology I ........................ . 5
BIOL 2031 Human Anatomy and Physiology I. . . . . . . . . . . 4
BIOL 2032 Human Anatomy and Physiology II ........... . 4
BIOL 2035 Microbiology ................................. 3
CHEM 1041 Principles of Chemistry I . . . . . . . . . . . . . . . . . 5
Goal 5 - History/Social and Behavioral Sciences: 10 credits
PSYC 1020 General Psychology......................... 4
PSYC 1041 Developmental Psychology: Lifespan ........ . 4
SOC 1020 Introduction to Sociology. .................... . 3

## 6 Programs of Study

| Goal 6 - Humanities and Fine Arts: 3 credits |  |  |
| :--- | :--- | :--- |
| PHIL | 1031 | Ethics ........................................ 3 |
|  |  | OR |
| PHIL | 1035 | Biomedical Ethics |

PHIL 1035 Biomedical Ethics ..... 3
Goals 7-10: Three credits in each of two goalsAdditional Requirements: 11 credits
HLTH 1070 Nutrition. ..... 38 additional credits (Choose electives based on intended major andtransfer college)
Heating, Ventilation, and
Air Conditioning Technology
Program Options:Cooling Certificate (30)Heating Certificate (30)HVAC Technician Diploma (48)HVAC Technology AAS Degree (60)
Certificate

Cooling

## Total Number of Credits: 30

Program Description: This certificate prepares students for service and installation of residential and light commercial refrigeration and air conditioning equipment. The student must pass the EPA Section 608 Clean Air Act Certification upon completion.

Program Requirements: Students must be able to perform physical tasks to complete course requirements.

| Career/Occupational Requirements: 27 credits |  |  |  |
| :---: | :---: | :---: | :---: |
| CAPL | 1000 | Computer Literacy | 1 |
| FST | 1001 | Facility Workplace Safety | 2 |
| FST | 1030 | Basic Electricity | 3 |
| FST | 1033 | Electric Motors and Electric Controls | 3 |
| HVAC | 1000 | Sheet Metal and Metal Brazing Practices | 2 |
| HVAC | 1041 | Basic Refrigeration I | 3 |
| HVAC | 1042 | Basic Refrigeration II. | 3 |
| HVAC | 1069 | Heat Pumps, Chillers and Electric Heat. | 2 |
| HVAC | 2051 | Advanced Refrigeration I. | 4 |
| HVAC | 2052 | Advanced Refrigeration II | 4 |

## General Education/MnTC Requirements: 3 credits

Goal 1 - Communication: 3 credits
Select one of the following communication courses:
ENGL 1021 Composition I
COMM 1021 Fundamentals of Public Speaking

| COMM | 1031 | Interpersonal Communication |
| :--- | :--- | :--- |
| COMM | 1041 | Small Group Communication |
| COMM | 1051 | Intercultural Communication |

## Certificate

Heating
Total Number of Credits: $\mathbf{3 0}$
Program Description: This certificate prepares students for service and installation processes of residential and light commercial gas, oil and hydronic heating systems.

Program Requirements: Students must be able to perform physical tasks to complete course requirements.

## Career/Occupational Requirements: 27 credits

CAPL 1000 Computer Literacy . . . . . . . . . . . . . . . . . . . . . . 1
FST 1001 Facility Workplace Safety .....  2
FST 1030 Basic Electricity ..... 3
FST 1033 Electric Motors and Electric Controls ..... 3
HVAC 1000 Sheet Metal and Metal Brazing Practices .....  2
HVAC 1020 Load Calculating .....  2
HVAC 1060 Fundamentals of Heating .....  2
HVAC 1065 Oil Heating Service and Troubleshooting .....  3
HVAC 1067 Gas Heat .....  4
HVAC 1070 Electronic Ignition and Condensing Furnaces .....  2
HVAC 1073 Hydronic and Low-Pressure Steam Boilers. ..... 3

## General Education/MnTC Requirements: 3 credits

Goal 1 - Communication: 3 credits
Select one of the following communication courses:
ENGL 1021 Composition I
COMM 1021 Fundamentals of Public Speaking
COMM 1031 Interpersonal Communication
COMM 1041 Small Group Communication
COMM 1051 Intercultural Communication

## Diploma Heating, Ventilation and Air Conditioning Technician Total Number of Credits: 48

Program Description: This diploma prepares students for service and installation of residential and light commercial heating and cooling equipment. The student must pass the EPA Section 608 Clean Air Act Certification.

Program Requirements: Students must be able to perform physical tasks to complete course requirements.

## Career/Occupational Requirements: 42 credits

FST 1001 Facility Workplace Safety ................... . . 2
FST 1030 Basic Electricity . . . . . . . . . . . . . . . . . . . . . . . 3

| FST | 1033 | Electric Motors and Electric Controls | 3 |
| :---: | :---: | :---: | :---: |
| HVAC | 1000 | Sheet Metal and Metal Brazing Practices | 2 |
| HVAC | 1020 | Load Calculating | 2 |
| HVAC | 1041 | Basic Refrigeration I | 3 |
| HVAC | 1042 | Basic Refrigeration II | 3 |
| HVAC | 1060 | Fundamentals of Heating | 2 |
| HVAC | 1065 | Oil Heating Service And Troubleshooti | 3 |
| HVAC | 1067 | Gas | 4 |
| HVAC | 1069 | Heat Pumps, Chillers and Electric Heat. | 2 |
| HVAC | 1070 | Electronic Ignition and Condensing Furnaces . | 2 |
| HVAC | 1073 | Hydronic and low-Pressure Steam Boilers | 3 |
| HVAC | 2051 | Advanced Refrigeration | 4 |
| HVAC | 2052 | Advanced Refrigeration II | 4 |
| General Education/MnTC Requirements: 6 credits Goal 1 - Communication: 3 credits |  |  |  |
| Select one of the following communication courses: |  |  |  |
| ENGL | 1021 | Composition I |  |
| COMM | 1021 | Fundamentals of Public Speaking |  |
| COMM | 1031 | Interpersonal Communication |  |
| COMM | 1041 | Small Group Communication |  |
| COMM | 1051 | Intercultural Communication |  |
| General Education/MnTC electives . . . . . . . . . . . . . . . . . . . . . . 2-3 |  |  |  |

## Associate in Applied Science Degree HVAC Technology Total Number of Credits: 60

Program Description: This AAS Degree prepares students for service and installation of residential and light commercial heating and cooling equipment. The student must pass the EPA Section 608 Clean Air Act Certification. In addition to these core concepts, the General Education help ensure individuals have the necessary oral, written and critical thinking skills to help them with their professional responsibilities.

Program Requirements: Students must be able to perform physical tasks to complete course requirements.

| Career/Occupational Requirements: 44 credits |  |  |  |
| :---: | :---: | :---: | :---: |
| FST | 1001 | Facility Workplace Safety | 2 |
| FST | 1030 | Basic Electricity | 3 |
| FST | 1033 | Basic Electric Motors and Electric Controls | 3 |
| HVAC | 1000 | Sheet Metal and Metal Brazing Practices | 2 |
| HVAC | 1020 | Load Calculating | 2 |
| HVAC | 1041 | Basic Refrigeration I | 3 |
| HVAC | 1042 | Basic Refrigeration II. | 3 |
| HVAC | 1060 | Fundamentals of Heating | 2 |
| HVAC | 1065 | Oil Heating Service and Troubleshooting | 3 |
| HVAC | 1067 | Gas Heat | 4 |
| HVAC | 1069 | Heat Pumps, Chillers and Electric Heat. | 2 |

HVAC 1070 Electronic Ignition and Condensing Furnaces .....  2
HVAC ..... 1073
Hydronic and Low-Pressure Steam Boilers .....  3
HVAC 2051 Advanced Refrigeration I .....  4
HVAC 2052 Advanced Refrigeration II ..... 4
WLDG 1001 Introduction to Oxyacetylene Welding .....  2
General Education/MnTC Requirements: 16 credits
Goal 1 - Communication: 7 credits
ENGL 1021 Composition I. ..... 4
Select one of the following COMM courses: ..... 3
COMM 1021 Fundamentals of Public Speaking
COMM 1031 Interpersonal Communication
COMM 1041 Small Group Communication
COMM 1051 Intercultural Communication
Goal 2 - Critical Thinking is fulfilled when all MnTCgoals are complete
Goal 3 and/or Goal 4 - Sciences/Math/Logical Reasoning: 3 credits
Goal 5 - History/Social and Behavioral Sciences: 3 credits
Goal 6 - Humanities and Fine Arts: 3 credits
Goals 7 - 10 Three credits in one of the four goals

## Horticulture

## Program Options:

Horticulture Assistant Certificate (16)
Horticulture - Greenhouse Certificate (30)
Horticulture - Landscape Certificate (30)
Horticulture Technician Greenhouse Diploma (48)
Horticulture Technician Landscape Diploma (48)
Horticulture Technology Greenhouse AAS Degree (60)
Horticulture Technology Landscape AAS Degree (60)
Horticulture Science AS Degree (60)

## Certificate

## Horticulture Assistant

Total Number of Credits: 16
Program Description: The field of horticulture offers many exciting and challenging careers. Nationally, horticulture is a major employer and includes jobs in garden centers, greenhouses, grounds maintenance firms, park systems, sports complexes, and private grounds. Persons working in horticulture may also be self-employed. The Horticulture Assistant Certificate will acquaint students with the field of horticulture. Students will learn basic horticultural procedures. Some graduates may choose to enter the work force upon completion of this certificate, while others may continue on for a diploma or AAS degree.

## 6 Programs of Study


Career/Occupational Requirements: 16 credits
HORT 1000 Introduction to Horticulture ..... 3Select 13 credits from the following courses:
HORT 1021 Horticulture Plant Biology ..... 3
HORT 1023 Soil Science ..... 3
HORT 1024 Plant Propagation ..... 3
HORT 1025 Pest Management ..... 3
HORT 1027 Organic and Environmentally Friendly Horticulture ..... 3
HORT 1032 Greenhouse Crops I. ..... 3
HORT 1041 Woody Plants. ..... 3
HORT 1049 Landscape Installation I. ..... 3
HORT 1051 Herbaceous Plants. ..... 3
Certificate
Horticulture - Greenhouse
Total Number of Credits: 30

Program Description: The Horticulture Technology- Greenhouse certificate provides students with the general education and technical skills to meet the demand for well-trained personnel in the greenhouse industry. Graduates of this program will be well versed in greenhouse practices, including physical equipment and production of a wide assortment of plants. Graduates may choose to continue in horticulture to achieve a diploma, or an AAS degree.
Career/Occupational Requirements: 27 credits
HORT 1000 Introduction to Horticulture . ..... 3
HORT 1021 Horticulture Plant Biology ..... 3
HORT 1023 Soil Science ..... 3
HORT 1024 Plant Propagation ..... 3
HORT 1025 Pest Management ..... 3
HORT 1032 Greenhouse Crops I ..... 3
HORT 1051 Herbaceous Plants. ..... 3
HORT 2031 Greenhouse Operations. .....  3
HORT 2033 Tropical Indoor Plants and Interiorscaping ..... 3
General Education/MnTC Requirements: 3 credits
Goal 1 - Communication: 3 credits
Select one of the following communication courses:
ENGL 1021 Composition I. .....  4
COMM 1021 Fundamentals of Public Speaking .....  3
COMM 1031 Interpersonal Communication ..... 3
COMM 1041 Small Group Communication ..... 3
COMM 1051 Intercultural Communication .....  3
Certificate
Horticulture - Landscape Total Number of Credits: 30

Program Description: The Horticulture - Landscape certificate provides students with the general education and technical skills to meet the demand for well-trained personnel in the landscape industry. Graduates will be well versed in woody and herbaceous plants that grow in this climate. They will be knowledgeable about plant pests, nursery operations, landscape design, landscape installation, and grounds maintenance. Graduates of this program may choose to continue in horticulture to achieve a diploma or an AAS degree.
Career/Occupational Requirements: 27 credits HORT 1000 Introduction to Horticulture. .....  3
HORT 1021 Horticulture Plant Biology. .....  3
HORT 1025 Pest Management .....  3
HORT 1041 Woody Plants. .....  3
HORT 1049 Landscape Installation I. ..... 3
HORT 1051 Herbaceous Plants .....  3
HORT 2044 Landscape Maintenance and Management ..... 3
HORT 2047 Landscape Design .....  3
HORT 2049 Landscape Installation II. ..... 3
General Education/MnTC Requirements: 3 credits
Goal 1 - Communication: 3 credits
Select one of the following communication courses:
ENGL 1021 Composition I. ..... 4
COMM 1021 Fundamentals of Public Speaking .....  3
COMM 1031 Interpersonal Communication ..... 3
COMM 1041 Small Group Communication .....  3
COMM 1051 Intercultural Communication .....  3
Diploma
Greenhouse Technician Total Number of Credits: 48

Program Description: The Horticulture Technology - Greenhouse diploma provides students with the general education and technical
skills to meet the demand for well-trained personnel in the greenhouse industry. Graduates of this program will be well versed in greenhouse practices, including physical equipment and production of a wide assortment of plants. Graduates may choose to continue in horticulture to achieve an AAS degree.

## Core Requirements: 30 credits

| HORT | 1000 | Introduction to Horticulture. |
| :---: | :---: | :---: |
| HORT | 1021 | Horticulture Plant Biology |
| HORT | 1023 | Soil Science |
| HORT | 1024 | Plant Propagation |
| HORT | 1025 | Pest Management |
| HORT | 1032 | Greenhouse Crops I . |
| HORT | 1051 | Herbaceous Plants. |
| HORT | 2031 | Greenhouse Operations. |
| HORT | 2032 | Greenhouse Crops II |
| HORT | 2033 | Tropical Indoor Plants and Interiorscaping |

## Career/Occupational Requirements: 11 credits

Select 11 credits from the following courses:

HORT $1027 \quad$| Organic and Environmentally Friendly |
| :--- |
| Horticulture . . . . . . . . . . . . . . . . . . . . . . . . . . 3 |

HORT 1041 Woody Plants. . . . . . . . . . . . . . . . . . . . . . . . . . . 3
HORT 1049 Landscape Installation I. . . . . . . . . . . . . . . . . . . . . 3
HORT 1781 Horticulture Internship I ..................... . 1-3
HORT 2041 Nursery Operations . . . . . . . . . . . . . . . . . . . . . . . . 3
HORT 2044 Landscape Maintenance and Management . . . . 3
HORT 2045 Turfgrass Science and Management. . . . . . . . . . 3
HORT 2046 Horticulture Equipment and Technology . . . . . . . 3
HORT 2047 Landscape Design . . . . . . . . . . . . . . . . . . . . . . . . . 3
HORT 2049 Landscape Installation II . . . . . . . . . . . . . . . . . . . 3
HORT 2051 Urban and Local Food Systems . . . . . . . . . . . . . . 3
HORT 2052 Creating Native Landscapes . . . . . . . . . . . . . . . . 3
HORT 2057 Computer Assisted Landscape Design . . . . . . . . 3
General Education/MnTC Requirements: 7 credits
Goal 1 - Communication: 7 credits
ENGL 1021 Composition I. . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4
Select one of the following COMM courses .................. . . 3
COMM 1021 Fundamentals of Public Speaking
COMM 1031 Interpersonal Communication
COMM 1041 Small Group Communication
COMM 1051 Intercultural Communication
skills to meet the demand for well-trained personnel in the landscape industry. Graduates will be well versed in woody and herbaceous plants that grow in this climate. They will be knowledgeable about plant pests, nursery operations, landscape design, landscape installation, and grounds maintenance. Graduates of this program may choose to continue in horticulture to achieve an AAS or AS degree.

## Core Requirements: 27 credits

HORT 1000 Introduction to Horticulture . . . . . . . . . . . . . . . . . 3
HORT 1021 Horticulture Plant Biology . . . . . . . . . . . . . . . . . . 3
HORT 1024 Plant Propagation . . . . . . . . . . . . . . . . . . . . . . . . . 3
HORT 1025 Pest Management . . . . . . . . . . . . . . . . . . . . . . . . . 3
HORT 1041 Woody Plants. . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
HORT 1049 Landscape Instillation I . . . . . . . . . . . . . . . . . . . . . 3
HORT 1051 Herbaceous Plants. . . . . . . . . . . . . . . . . . . . . . . . 3
HORT 2047 Landscape Design . . . . . . . . . . . . . . . . . . . . . . . . . 3
HORT 2049 Landscape Installation II . . . . . . . . . . . . . . . . . . . . 3

## Career/Occupational Requirements: 14 credits

Select 14 credits from the following courses:
HORT 1023 Soil Science. . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
HORT 1027 Organic and Environmentally
Friendly Horticulture3
HORT 1032 Greenhouse Crops I. .....  3
HORT 1781 Horticulture Internship I. ..... 1-3
HORT 2031 Greenhouse Operations. .....  3
HORT 2032 Greenhouse Crops II .....  3
HORT 2033 Tropical Indoor Plants and Interiorscaping . . . . 3
HORT 2041 Nursery Operations .....  3
HORT 2044 Landscape Maintenance and Management .....  3
HORT 2045 Turfgrass Science and Management. .....  3
HORT 2046 Horticulture Equipment and Technology .....  3
HORT 2051 Urban and Local Food Systems .....  3
HORT 2052 Creating Native Landscapes .....  3
HORT 2057 Computer Assisted Landscape Design ..... 3
General Education/MnTC Requirements: 7 credits
Goal 1 - Communication: 7 credits
ENGL 1021 Composition I. ..... 4
Select one of the following COMM courses ..... 3
COMM 1021 Fundamentals of Public Speaking
COMM 1031 Interpersonal CommunicationCOMM 1041 Small Group Communication

## Diploma <br> Landscape Technician <br> Total Number of Credits: 48

Program Description: The Horticulture Technician - Landscape
diploma provides students with the general education and technical

## 6 Programs of Study

## Associate in Applied Science Horticulture Greenhouse Technology Total Number of Credits: 60

Program Description: Graduates of the Horticulture TechnologyGreenhouse AAS degree will have a strong knowledge of horticulture and greenhouse practices as well as general education skills. Many employment opportunities in horticulture allow for advancement to supervisory and management positions. This degree program gives students the needed training for these opportunities.

\section*{Application Requirements/Program Prerequisites High school diploma or GED <br> Core Requirements: 30 credits <br> | HORT | 1000 | Introduction to Horticulture. |
| :---: | :---: | :---: |
| HORT | 1021 | Horticulture Plant Biology . |
| HORT | 1023 | Soil Science. |
| HORT | 1024 | Plant Propagation |
| HORT | 1025 | Pest Management . . . . . . . . . . . . . . . . . . . . . 3 |
| HORT | 1032 | Greenhouse Crops I . |
| HORT | 1051 | Herbaceous Plants. |
| HORT | 2031 | Greenhouse Operations. |
| HORT | 2032 | Greenhouse Crops II . . . . . . . . . . . . . . . . . . . . 3 |
| HORT | 2033 | Tropical Indoor Plants and Interiorscaping .... 3 |

Career/Occupational Requirements: 14 credits
Select 14 credits from any other courses with HORT prefix.
General Education/MnTC Requirements: 16 Credits
Goal 1 - Communication: 7 credits
ENGL 1021 Composition I. . . . . . . . . . . . . . . . . . . . . . . . . . . . 4
Select one of the following COMM courses
COMM 1021 Fundamentals of Public Speaking
COMM 1031 Interpersonal Communication
COMM 1041 Small Group Communication
COMM 1051 Intercultural Communication
Goal 2 - Critical Thinking is fulfilled when all MnTC goals are complete

Goal 3 and/or Goal 4 - Sciences/Math/Logical Reasoning: 3 credits

Goal 5 - History/Social and Behavioral Sciences: 3 credits
Goal 6 - Humanities and Fine Arts: 3 credits
Goals 7 - 10: Three credits in ONE of the four goals (fulfilled by COMM course)

## Associate in Applied Science Degree Horticulture Landscape Technology Total Number of Credits: 60

Program Description: Graduates of the Horticulture TechnologyLandscape AAS degree will have a strong knowledge of horticulture and landscape practices as well as general education skills. Many
employment opportunities in the landscape industry allow for advancement to supervisory and management positions. This degree program gives students the needed training for these opportunities.
Application Requirements/Program Prerequisites:

High school diploma or GED

Core Requirements: 30 credits
HORT 1000 Introduction to Horticulture . ..... 3
HORT 1021 Horticulture Plant Biology ..... 3
HORT 1023 Soil Science ..... 3
HORT 1024 Plant Propagation ..... 3
HORT 1025 Pest Management ..... 3
HORT 1041 Woody Plants ..... 3
HORT 1049 Landscape Installation I. ..... 3
HORT 1051 Herbaceous Plants. ..... 3
HORT 2047 Landscape Design. ..... 3
HORT 2049 Landscape Installation II ..... 3
Career/Occupational Requirements: 14 credits
Select 14 credits from any other courses with HORT prefix
General Education/MnTC Requirements: 16 CreditsGoal 1 - Communication: 7 credits
ENGL 1021 Composition I ..... 4
Select one of the following COMM courses: ..... 3
COMM 1021 Fundamentals of Public Speaking
COMM 1031 Interpersonal Communication
COMM 1041 Small Group Communication
COMM 1051 Intercultural Communication
Goal 2 - Critical Thinking is fulfilled when all
MnTC goals are complete
Goal 3 and/or Goal 4 - Sciences/Math/Logical Reasoning:3 credits
Goal 5 - History/Social and Behavioral Sciences: 3 credits
Goal 6 - Humanities and Fine Arts: 3 credits
Goals 7 - 10: Three credits in ONE of the four goals (fulfilledby COMM course)

## Horticulture Science Associate in Science Degree <br> Total Number of Credits: 60

Program Description: The Horticulture AS Degree program is designed to provide students with pre-professional preparation in horticulture through introductory horticulture courses as well as a strong foundation in general education for transfer purposes. Students interested in securing or maintaining employment in a horticulture-related occupation and those interested in furthering their education to a baccalaureate degree may consider completing this AS degree. Specific transfer arrangements, with the college of
choice, should be made as early in the degree as possible to ensure an appropriate program is planned for enrollment at Century and at the four-year school.

| Core Requirements: 24 credits |  |  |
| :---: | :---: | :---: |
| HORT | 1000 | Introduction to Horticulture . . . . . . . . . . . . . . . 3 |
| HORT | 1021 | Horticulture Plant Biology . . . . . . . . . . . . . . . . 3 |
| HORT | 1024 | Plant Propagation . . . . . . . . . . . . . . . . . . . . . 3 |
| HORT | 1041 | Woody Plants. . . . . . . . . . . . . . . . . . . . . . . . 3 |
| HORT | 1051 | Herbaceous Plants. . . . . . . . . . . . . . . . . . . . . 3 |
| HORT | 2031 | Greenhouse Operations. . . . . . . . . . . . . . . . . . 3 |
| HORT | 2033 | Tropical Indoor Plants and Interiorscaping . . . 3 |
| HORT | 2047 | Landscape Design . . . . . . . . . . . . . . . . . . . . . 3 |
| Horticulture Electives: 6 credits |  |  |
| Select 6 credits from the following courses: |  |  |
| HORT | 1023 | Soil Science . . . . . . . . . . . . . . . . . . . . . . . . . . 3 |
| HORT | 1025 | Pest Management . . . . . . . . . . . . . . . . . . . . . . 3 |
| HORT | 1032 | Greenhouse Crops I . . . . . . . . . . . . . . . . . . . . 3 |
| HORT | 1049 | Landscape Installation I. . . . . . . . . . . . . . . . . . 3 |
| HORT | 1781 | Horticulture Internship I. . . . . . . . . . . . . . . . . 1-3 |
| HORT | 2041 | Nursery Operations . . . . . . . . . . . . . . . . . . . . . 3 |
| HORT | 2044 | Landscape Maintenance and Management . . . 3 |
| HORT | 2045 | Turfgrass Science and Management. . . . . . . . 3 |
| General Education/MnTC Requirements: 30 credits |  |  |
| Goal 1 - Communication: 7 credits |  |  |
| ENGL | 1021 | Composition I. . . . . . . . . . . . . . . . . . . . . . . . . 4 |
| Select one of the following COMM courses . . . . . . . . 3 |  |  |
| COMM 1021 Fundamentals of Public Speaking |  |  |
| COMM 1031 |  |  |
| COMM 1041 |  |  |
| COMM 1051 |  |  |
| Goal 2 - Critical Thinking is fulfilled when all MnTC goals are complete |  |  |
| Goal 3 and/or Goal 4 - Sciences/Math/Logical Reasoning: 9 credits |  |  |
| BIOL |  | Principles of Biology I . . . . . . . . . . . . . . . . . . . 5 |
| MATH | 1061 | College Algebra I or higher . . . . . . . . . . . . . . . 4 |
| Goal 5 - History/Social and Behavioral Sciences: 6 credits |  |  |
| Two courses from two disciplines |  |  |
| Goal 6 - Humanities and Fine Arts: 6 credits |  |  |
| Two courses from two disciplines |  |  |
| Goals 7-10 - Three credits in each of two goals |  |  |

## Human Services

## Program Options:

Human Services Technician Worker (16)
Human Services Volunteer Certific ate (16)
Human Services Technician Certificate (30)
Human Services AS Degree (60)

## Certificate Human Services Technician Worker Total Number of Credits: 16 <br> Program Description: This certificate prepares students for employment opportunities in the field of Human Services. The eligibility or financial worker roles are responsible for pivotal intake and processing to determine if an individual or family may receive assistance in one or more programs (ex: food, housing, and/or medical). The certificate will include courses to teach advocacy, assessment and resource, and referral practices needed for accurate determination of services and timely case management skills as well as basic math and keyboarding. <br> Career/Occupational Requirements: 16 credits <br> HSER 1001 The Role of the Human Services Technician. . . 3 <br> HSER 1020 Introduction to Human Services . . . . . . . . . . . . 3 <br> HSER 2060 Case Management . . . . . . . . . . . . . . . . . . . . . . 3 <br> HSER 1070 Working with Clients with Disabilities . . . . . . . 3 <br> OFFT 1001 Document Formatting Essentials. . . . . . . . . . . . 1

General Education/MnTC Requirements . . . . . . . . . . . . . . . . 3
MATH 1030 Mathematics for the Liberal Arts . . . . . . . . . . . 3

## Certificate <br> Human Services Volunteer Total Number of Credits: 16

Program Description: The Human Services Volunteer Certificate is designed for community members interested in volunteering within a changing metro and global environment. The student will acquire a basic understanding of the concepts, principles, skills, methods and techniques necessary for a volunteer position in communities and agencies.

## Additional Program Requirements:

1. Grade of " C " or higher in all Career/Occupational courses
2. Grade of "C" or higher in all specifically designated General Education course requirements

Career/Occupational Requirements: 7 credits
HSER 1030 Helping Skills . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
HSER 2780 Human Services Internship I . . . . . . . . . . . . . . . . 1
Select a minimum of 3 credits from the following:
HSER 1070 Helping Clients with Disabilities

## 6 Programs of Study

| HSER | 2000 | Techniques of Working with Groups . |
| :---: | :---: | :---: |
| HSER | 2040 | Crisis Assessment and Intervention |
| HSER | 2050 | Seminar: Current Issues and Topics |
| Electives: 6 credits |  |  |
| Select 6 credits from the following: |  |  |
| CAPL | 1000* | Computer Literacy |
| COMM | 1021 | Fundamentals of Public Speaking |
| ENGL | 1021 | Composition I. |
| EMS | 1010* | AHA BLS for the Healthcare Provider (CPR) OR |
| HLTH | 1005* | Basic CPR, Red Cross. |
| HLTH | 1010* | Standard First Aid and Safety |
| PSYC | 1020 | General Psychology |
| PSYC | 2043 | Child Development |
| PSYC | 2044 | Adolescent Development |
| PSYC | 2045 | Adult, Aging and Death. . . . . . . . . . . . . . . . . 3 |
| SOC | 1041 | Sociology of Social Problems |
| SOC | 1080 | Introduction to the Criminal Justice System. . . 3 |
| SOC | 2031 | Sociology of the Family |
| SOC | 2051 | Sociology of Race and Ethnicity |
| SPAN | 1011 | Beginning Spanish I. |
| GNDR | 1071 | Introduction to GLBT Studies. |
| GNDR | 2061 | Women in Global Perspectives . . . . . . . . . . . . 3 |
| GNDR | 2790 | Special Topics in Women and Gender Studies . 3 |
| * A maximum of 2 credits will be accepted towards the certificate requirements from these courses. |  |  |

## General Education/MnTC Requirements

Goal 1 - Communication: 3 credits
COMM 1051 Intercultural Communication................... . 3

## Certificate <br> Human Services Technician <br> Total Number of Credits: 30

Program Description: The Human Services Technician Certificate is designed for students seeking entry-level positions in the human services field. The student will acquire an understanding of the concepts, principles, skills, methods and techniques necessary for a paraprofessional position in social welfare agencies.

## Additional Program Requirements:

1. Grade of "C" or higher in all Career/Occupational courses
2. Grade of " C " or higher in all specifically designated General Education course requirements Prospective students should be aware that a MN Human Services background study may be required for the internships.
Career/Occupational Requirements: 23 credits

| HLTH | 1040 | Success Over Stress . . . . . . . . . . . . . . . . . . . . . . 2 |
| :--- | :--- | :--- |
| HSER | 1020 | Introduction to Human Services . . . . . . . . . . . 3 |
| HSER | 1030 | Helping Skills. . . . . . . . . . . . . . . . . . . . . . . |

HSER 2000 Techniques of Working with Groups ..... 3
HSER 2030 Working with the Mentally III in Human Service Settings ..... 3
HSER 2040 Crisis Assessment and Intervention ..... 3
HSER 2050 Seminar: Current Issues and Topics ..... 3
HSER 2780 Human Services Internship I ..... 3
General Education/MnTC Requirements: 7 credits
Goal 1 - Communications: 7 credits
ENGL 1021 Composition I ..... 4
COMM 1051 Intercultural Communication ..... 3

## Associate in Science Degree Human Services <br> Total Number of Credits: 60

Program Description: The Human Services program is designed for students interested in the helping professions. A graduate will acquire an understanding of the concepts, principles, skills, methods, and techniques necessary for paraprofessional positions in social welfare agencies. Students should see a Counselor or faculty member if planning to pursue a four-year degree.

## Additional Program Requirements:

1. Grade of "C" or higher in all Career/Occupational courses
2. Grade of " C " or higher in all specifically designated General Education course requirements
Prospective students should be aware that a MN Human Services background study with no restrictions may be required for the internships.

## Career/Occupational Requirements: 30 credits

HSER 1020 Introduction to Human Services ..... 3
HSER 1030 Helping Skills ..... 3
HSER 1070 Helping Clients with Disabilities. ..... 3
HSER 2000 Techniques of Working with Groups ..... 3
HSER 2030 Working with the Mentally III in Human Service Settings ..... 3
HSER 2040 Crisis Assessment and Intervention ..... 3
HSER 2050 Seminar: Current Issues and Topics .....  3
HSER 2060 Case Management .....  3
HSER 2780 Human Services Internship I ..... 3
HSER 2781 Human Services Internship II. ..... 3
General Education/MnTC Requirements: 30 credits
Goal 1 - Communication: 7 credits
ENGL 1021 Composition I ..... 4
COMM 1051 Intercultural Communication ..... 3
Goal 2 - Critical Thinking is fulfilled when all
MnTC goals complete
Goal 3 and/or Goal 4 - Sciences/Math/Logical Reasoning:6 credits

Goal 5 - History/Social and Behavioral Sciences: 6 credits
Two courses from two disciplines required
Goal 6 - Humanities and Fine Arts: 6 credits
Two courses from two disciplines required
Goals 7-10 - Three credits in each of two goals

## Individualized Studies

## Program Options:

Individualized Studies Diploma (45)
Individualized Studies AAS Degree (60)
Individualized Studies AS Degree (60)

Diploma
Individualized Studies
Total Number of Credits: 45
Program Description: This award is intended for students seeking a diploma which is not currently offered at Century College. Students will work with college staff, faculty, and industry experts to assist the student in designing the award, and the final version of the Individualized Diploma for each student will require approval from the college.

Application Requirements: See the College web site for information on Individualized Studies planning seminars.
General Requirements for Diploma in Individualized Studies:

1. At least 45 earned college-level credits (numbered 1000 or above). Of the credits applied toward the Individualized Studies Diploma, at least 20 credits must be earned at Century College.
2. A grade of "C" or higher in ENGL 1021 IF this is the Goal 1 course selected. It is recommended that this course is completed before beginning the degree approval process.
3. Century college-level GPA of 2.0 and MnTC GPA of 2.0.

## Career/Occupational Requirements: 42 credits

After participating in a series of planning seminars, students will select courses that form their individualized studies diploma plan. This can be done in three different ways:

- Multidisciplinary: coursework is from more than one discipline in unrelated areas
- Interdisciplinary: coursework is from more than one discipline but the coursework is tied together thematically
- Intradisciplinary: coursework is from within the same discipline


## General Education/MnTC Requirements:

Goal 1 - Communication: 3 credits
Select one of the following communication courses
ENGL 1021 Composition I

| COMM 1021 | Fundamentals of Public Speaking |
| :--- | :--- |
| COMM 1031 | Interpersonal Communication |
| COMM 1041 | Small Group Communication |
| COMM 1051 | Intercultural Communication |

## Associate in Applied Science Individualized Studies Total Number of Credits: 60

Program Description: This award is intended for students seeking an Associate degree, which is not currently offered at Century College. Students will work with college staff, faculty, and industry experts to assist the student in designing the award, and the final version of the Individualized AAS for each student will require approval from the college.

Application Requirements: See the College web site for information on Individualized Studies planning seminars.

## General Requirements for AAS Individualized Studies Degree Program:

1. At least 60 earned college-level credits (numbered 1000 or above). Of the credits applied toward the Associate in Applied Science Individualized Studies Degree, you must earn at least 20 credits at Century College.
2. A grade of " C " or better in ENGL 1021. It is recommended that this course is completed before beginning the degree approval process.
3. Century college-level GPA of 2.0 and MnTC GPA of 2.0.

## Career/Occupational Requirements: 40 credits

After participating in a series of planning seminars, students will select courses that form their individualized studies AAS degree plan. This can be done in three different ways:

- Multidisciplinary: coursework is from more than one discipline in unrelated areas
- Interdisciplinary: coursework is from more than one discipline but the coursework is tied together thematically
- Intradisciplinary: coursework is from within the same discipline

General Education/MnTC Requirements: 20 Credits
Goal 1 - Communication: 7 credits
ENGL 1021 Composition I .................................. . . . 4
Select one of the following COMM courses . . . . . . . . . . 3
COMM 1021 Fundamentals of Public Speaking
COMM 1031 Interpersonal Communication
COMM 1041 Small Group Communication
COMM 1051 Intercultural Communication
Goal 2 - Critical Thinking is fulfilled when all MnTC goals are complete
Goal 3 and/or Goal 4 - Sciences/Math/Logical Reasoning: 3 credits

## 6 Programs of Study



Goal 5 - History/Social and Behavioral Sciences: 3 credits Goal 6 - Humanities and Fine Arts: 3 credits Goals 7-10: Three credits in one of the four goals

## Associate in Science

## Individualized Studies

Total Number of Credits: 60
Program Description: This award is intended for students seeking an Associate degree, which is not currently offered at Century College and will transfer into a Bachelor degree program. Students will work with college staff and faculty to assist the student in designing the award, and the final version of the Individualized AS for each student will require approval from the college.
Application Requirements: See the College web site for information on Individualized Studies planning seminars.

## General Requirements for AS Individualized Studies Degree Program:

1. At least 60 earned college-level credits (numbered 1000 or above). Of the credits applied toward the Associate in Science Individualized Studies Degree, you must earn at least 20 credits at Century College.
2. A grade of " $C$ " or better in ENGL 1021. It is recommended that this course is completed before beginning the degree approval process.
3. Century college-level GPA of 2.0 and MnTC GPA of 2.0.

## Career/Occupational Requirements: 30 credits

After participating in a series of planning seminars, students will select courses that form their individualized studies AS degree plan. This can be done in three different ways:

- Multidisciplinary: coursework is from more than one discipline in unrelated areas
- Interdisciplinary: coursework is from more than one discipline but the coursework is tied together thematically
- Intradisciplinary: coursework is from within the same discipline

General Education/MnTC Requirements: 30 credits
Goal 1 - Communication: 7 credits
ENGL 1021 Composition I.................................. . . 4
Select one of the following COMM courses. . . . . . . . . . . . . . . 3
COMM 1021 Fundamentals of Public Speaking
COMM 1031 Interpersonal Communication
COMM 1041 Small Group Communication
COMM 1051 Intercultural Communication
Goal 2 - Critical Thinking is fulfilled when all MnTC goals are complete
Goal 3 and/or Goal 4 - Sciences/Math/Logical Reasoning: 6 credits

Two courses from Goal 3 and/or Goal 4
Goal 5 - History/Social and Behavioral Sciences: 6 credits
Two courses from two disciplines
Goal 6 - Humanities and Fine Arts: 6 credits
Two courses from two disciplines
Goals 7-10: Three credits in each of two goals

## Information and Telecommunications Technology

## Program Options:

Advanced Networking Certificate (16)
Information Assurance and Security Certificate (16) MCSA Certificate (16)
Networking Fundamentals Certificate (16)
Storage Area Networking Certificate (16)
VoIP Infrastructure and Management Certificate (16)
Green IT Certificate (19)
Information and Telecommunications Technology Certificate (30)
Information and Telecommunications Technology AAS
Degree (64)
Other computer-related courses are offered in the following disciplines: Enterprise Computing Technology, Computer Application Technology, Computer Science, Cybersecurity, Virtualization, and Forensics, Office Technology.

## Certificate <br> Networking Fundamentals <br> Total Number of Credits: 16 credits

Program Description: This certificate is designed to prepare students to select, connect, configure, and troubleshoot various networking devices for enterprise networks. This certificate covers topics including switched networks with VLANS, determining IP routes, managing IP traffic and access control. Establishing Point-toPoint and frame relay connections for WAN traffic is also covered. Additionally, this certificate will prepare students to take the Cisco Certified Network Associate (CCNA) examination.

Career/Occupational Requirements: 16 credits.


## Certificate <br> Advanced Networking <br> Total Number of Credits: 16 credits

Program Description: This certificate is designed to prepare students to install, configure and troubleshoot converged local and wide area networks with 100 to 500 or more nodes. Students will develop knowledge and skills required to manage the routers and switches that form the network core, as well as edge applications that integrate voice, wireless, and security into the network. Additionally, this certificate will prepare students to take the Cisco Certified Network Professionals (CCNP) examinations.

Application Requirements: Cisco Certified Network Associate (CCNA) certification or appropriate coursework or instructor consent

## Career/Occupational Requirements: 16 credits

| ITT | 2042 | Implementing Secure Converged Wide Area Networks (CCNP-2) . |
| :---: | :---: | :---: |
| ITT | 2043 | Building Converged Cisco Multilayer Switched Networks (CCNP-3) |
| ITT | 2044 | Optimizing Converged Networks (CCNP-4) |
| ITT | 2780 | Internship |
| Select two courses from the following: 6 cr . |  |  |
| ITT | 1021 | Principles of Information Security |
| ITT | 2020 | Network Security Fundamentals . |
| ITT | 2036 | Network Attached Storage |
| ITT | 2038 | Storage Area Network Management |
| ECT | 1013 | Installing and Configuring Windows Server 2012 |
| ECT | 2032 | Linux/UNIX System Administration. |

## Certificate Information Assurance and Security Total Number of Credits: 16 credits

Program Description: This certificate provides students with the professional competencies specified by the worlds two most prominent authorities in information assurance-the joint National Security Agency and Department of Homeland Security Committee on National Security Standards (CNSS), and the (ISC) organization's requirements for the Certified Information Systems Security Professional (CISSP) credential. Students that complete this certificate are prepared for careers as information systems security officers, information security analysts, administrators and consultants, risk managers and auditors.

Application Requirements: Proficiency in the knowledge and skills relating to configuring and maintaining routers and switches and a fundamental understanding of the principles of information security as demonstrated by: Cisco Certified Network Associate (CCNA) certification and a relevant industry certification in the IT security field (e.g. CompTIA Security +, CCSP, CISSP, etc.) or appropriate coursework or instructor consent.

## Career/Occupational Requirements: 16 credits

ITT 2020 Network Security Fundamentals . . . . . . . . . . . . 3
ITT 2025 Firewalls and Network Security3
ITT 2075 Wireless Network Security . ..... 3
ITT 2780 Internship. ..... 1
Select two courses from the following: 6 cr .
ITT 2042 Implementing Secure Converged Wide Area Networks (CCNP-2). ..... 3
ITT 043 Building Converged Cisco Multilayer Switched Networks (CCNP-3) .....  3
ITT 2044
Optimizing Converged Networks (CCNP-4) . . . . 3
Information Security Management ..... 3
Installing and ConfiguraingWindows Server 20123
ECT ..... 2032

## Certificate MCSA

Total Number of Credits: 16 credits
Program Description: This certificate is designed to prepare students to successfully manage and maintain the typically complex computing environment of medium-to-large-sized companies utilizing Microsoft technologies. Additionally, this certificate will prepare students to take the Microsoft Certified System Administrator (MCSA) examinations.

Application Requirements: Proficiency in the knowledge and skills related to understanding the fundamentals of networking and the configuration of routers as demonstrated by: Cisco Certified Entry networking Technician (CCENT) certification or CompTIA Network+ certification or appropriate coursework or instructor consent.

## 6 Programs of Study

| Career/Occupational Requirements: 16 credits |  |  |  |
| :---: | :---: | :---: | :---: |
| ITT | 2780 | Internship. | 1 |
| ECT | 1011 | Supporting Microsoft Windows 7 Professional. | 3 |
| ECT | 1013 | Installing and Configuring Windows Server 2012. | 3 |
| ECT | 2017 | Configuring Advanced Windows Server 2012 Services | 3 |
| Select two courses from the following: 6 cr . |  |  |  |
| ITT | 1021 | Principles of Information Security. | 3 |
| ITT | 2020 | Network Security Fundamentals. | 3 |
| ECT | 1001 | PC Hardware and Software. | 4 |
| ECT | 2015 | Administering Windows Server 2012 | 3 |

## Certificate <br> Storage Area Networking <br> Total Number of Credits: 16

Program Description: This certificate is designed to prepare students to enter or advance into the Storage Area Networking (SAN's) field. Students will develop knowledge, understanding and technical operational skills relating to SAN's best practices. This program is designed around developing Network Attached Storage (NAS) and Storage Area Networks (SAN). Focus on deployment of NAS and SANs and managing those networks in a data-centric enterprise environment. Students will gain valuable skills maintaining and managing SAN business requirements and standards. This certificate is designed to advance students/professionals into the SAN field by building on technical information technology, computing, networking and telecommunication knowledge. Additionally, this certificate will prepare students to take the Storage Networking Industry Association (SNIA) examination.

Application Requirements: Cisco Certified Network Associate (CCNA) certification or appropriate coursework or instructor consent.
Career/Occupational Requirements: 16 credits

| ITT | 2036 | Network Attached Storage |
| :---: | :---: | :---: |
| ITT | 2038 | Storage Area Network Management |
| ITT | 2051 | Enterprise Computing Virtualization |
| ITT | 2780 | Internship. |
| Select two courses from the following: 6 cr . |  |  |
| ITT | 2020 | Network Security Fundamentals. |
| ITT | 2042 | Implementing Secure Converged Wide Area Networks (CCNP-2). |
| ITT | 2043 | Building Converged Cisco Multilayer Switched Networks (CCNP-3) |
| ITT | 2044 | Optimizing Converged Networks (CCNP-4) |
| ECT | 1013 | Installing and Configuring Windows Server 2012 |
| ECT | 2032 | Linux/UNIX System Administration. |

## Certificate <br> VoIP Infrastructure and Management Total Number of Credits: 16

Program Description: This certificate is designed to prepare students to enter or advance into the IP Telephony field. Students will be provided the opportunity to develop knowledge, understanding and technical operational skills relating to VoIP best practices. This program is designed around developing VoIP networks, deployment of VoIP, and managing those networks. Students will gain valuable skills maintaining and managing VoIP business requirements and standards. This certificate is designed to advance students/professionals into the VoIP fields by building on technical information technology, computing, networking and telecommunication knowledge.
Career/Occupational Requirements: 16 credits


## Certificate <br> Green IT <br> Total Number of Credits: 19

Program Description: Going green is about more than saving the environment. It can have a huge impact on the bottom line of an organization. Green IT means not only reducing power and having appropriate recycling programs but also focusing on how new information technologies can contribute in reducing the carbon footprint and improving the Return On Investment (ROI) for the organization. This program will prepare individuals to design and implement green initiatives in order to deploy and manage responsible and efficient contemporary IT departments. This certification will prepare students to take the comprehensive CompTIA Strata - Green IT exam.

Application Requirements: Cisco Certification or IT experience or instructor consent.

[^0]| ITT |  | Energy Management Systems. . . . . . . . . . . 3 |
| :---: | :---: | :---: |
|  | 1033 | Network Infrastructure and Data <br> Center Design (BICSI) . . . . . . . . . . . . . . . . . . . 3 |
| ITT | 2036 | Network Attached Storage . . . . . . . . . . . . . 3 |
| ITT | 2044 | Optimizing Converged Networks (CCNP-4) . . . 3 |
| ITT | 2051 | Enterprise Computing Virtualization ......... 3 |
| ITT | 2080 | Technology Planning and Architecture ....... 3 |
| ITT | 2780 | Internship............................. . . 1 |

## Certificate <br> Information and Telecommunication Technology Total Number of Credits: $\mathbf{3 0}$

Program Description: The Information and Telecommunication Technology Specialist program prepares individuals with the essential technical and organizational skills necessary to maintain modern computer and telecommunication networks in today's business and industrial environments.

Application Requirements: Assessment score placement in MATH 0070, or completion of MATH 0030 or MATH 0060 with a grade of " C " or higher and assessment score placement in ENGL 1021, or completion of ENGL 0090 with a grade of " C " or higher.

## Career/Occupational Requirements: 27 credits

| ITT | 1020 | Introduction to Information and Telecommunications Technology |
| :---: | :---: | :---: |
| ITT | 1031 | Network Fundamentals (CCNA-1) |
| ITT | 1032 | Routing Protocols and Concepts (CCNA-2) |
| ITT | 1070 | Telephony Systems |
| ITT | 2031 | LAN Switching and Wireless (CCNA-3) |
| ITT | 2032 | Accessing the WAN (CCNA-4) |
| ITT | 2041 | Building Scalable Cisco Internetworks (CCNP-1). . |
| ITT | 2080 | Technology Planning and Architecture |
| Technical Electives approved by ITT faculty |  |  |

## General Education/MnTC Requirements: 3 credits

Goal 1 - Communication: 3 credits
Select one of the following communication courses:
ENGL 1021 Composition I
COMM 1021 Fundamentals of Public Speaking
COMM 1031 Interpersonal Communication
COMM 1041 Small Group Communication
COMM 1051 Intercultural Communication

## Associate in Applied Science Degree Information and Telecommunications Technology Total Number of Credits: 60

Program Description:The Information and Telecommunications Technology program is designed to prepare individuals to enter into technical occupations in the field of information and telecommunication technology. The program prepares individuals with the essential business, technical and organizational skills necessary to implement and maintain modern computer and telecommunication technologies for today's business and industrial environments. The curriculum is designed to help students develop a strong theory-based foundation combining "hands-on" knowledge in computer machinery, operation systems, and telecommunications, with a focus on convergence and system integration of communications technologies. Additionally students will work with diagnostic and management software used to maintain global baseband and broadband network infrastructures. General education courses required will help ensure individuals have the necessary oral, written and critical thinking skills to help them with their professional responsibilities.

## Career/Occupational Requirements: 31 credits

ITT $1020 \quad$| Introduction to Information and |
| :--- |
| Telecommunications Technology . ........... . . 3 |

ITT 1021 Principles if Information Security ..... 3
ITT 1031 Network Fundamentals (CCNA-1) .....  3
ITT 1032 Routing Protocols and Concepts (CCNA-2) ..... 3

Network Infrastructure and Data Center Design (BICSI)3
ITT 2031 LAN Switching and Wireless (CCNA-3) ..... 3
ITT 2032 Accessing the WAN (CCNA-4) ..... 3
ITT 2041 Building Scalable Cisco Internetworks (CCNP-1) ..... 3
ITT 2080 Technology Planning and Architecture .....  3
ITT 2780 Internship or technical elective .....  1
Technical elective ..... 3
Career/Occupational Requirements:
Choose 1 of the Specialty Track Options
Advanced Networking: 13 credits
ITT 2042 Implementing Secure Converged Wide Area Networks (CCNP-2). ..... 3
ITT 2043 Building Converged Cisco Multilayer Switched Networks (CCNP-3) .....  3
ITT 2044 ..... 3ITT
Internship
2780Select one course from the following: 3 cr .ITT 2020 Network Security Fundamentals3
ITT 2036 Network Attached Storage .....  3
ITT 2038 Storage Area Network Management ..... 3
MCST 1013 Supporting Microsoft WindowsServer 20083

## 6 Programs of Study

3
ITT 2025 Firewalls and Network Security3
ITT 2780 Internship ..... 1
Select one course from the following: 3 cr .
ITT 2042 Implementing Secure Converged Wide Area Networks (CCNP-2). ..... 3
ITT 2043 Building Converged Cisco Multilayer Switched Networks (CCNP-3) ..... 3
ITT 2044ITT 2065 Information Security Management3
ECT 1013 Installing and Configuring Windows Server 2012 ..... 3
ECT 2032 Linux/UNIX System Administration ..... 3MCSA: 13 credits
ITT 2780 Internship. ..... 1
1011 Supporting Microsoft Windows7 Professional3
ECT 1013 Installing and Configuring Windows Server 2012 ..... 3
2017 Microsoft Windows Server 2008Network Infrastructure3
Select one course from the following: 3 cr .
ITT 2020 Network Security Fundamentals ..... 3
ECT 1001 PC Hardware and Software. .....  4
ECT 2015 Administering Windows Server 2012 ..... 3
Storage Area Networking: 13 credits
ITT 2036 Network Attached Storage ..... 3
ITT 2038 Storage Area Network Management ..... 3
ITT 2051 Enterprise Computing Virtualization ..... 3
ITT 2780 Internship ..... 1
Select one course from the following: 3 cr .
ITT 2020 Network Security Fundamentals ..... 3
ITT ..... 2042
ITT
ITT ..... 2043 ..... 2043
ITT 2044
ECT ..... 1013
ECT 2032 Linux/UNIX System Administration ..... 3
VoIP Infrastructure and Management: 13 credits
ITT 1070 Telephony Systems ..... 3
ITT 2060 Computer Telephony Integration .....  3
ITT 2070 Video Integration .....  3
ITT 2780 Internship. ..... 1
Select one course from the following: 3 cr .
ITT 2020 Network Security Fundamentals .....  3
ITT 2042 Implementing Secure Converged Wide Area Networks (CCNP-2) .....  3
ITT 2043 Building Converged Cisco MultilayerSwitched Networks (CCNP-3) 3
ITT 2044 Optimizing Converged Networks (CCNP-4) .....  3
ECT 1013 Installing and Configuring WindowsServer 2012 3
ECT 2032 Linux/UNIX System Administration .....  3
General Education/MnTC Requirements: 16 Credits
Goal 1 - Communication: 7 credits
ENGL 1021 Composition I. ..... 4
Select one of the following COMM courses ..... 3
COMM ..... 1021
Fundamentals of Public SpeakingCOMM 1031 Interpersonal CommunicationCOMM 1041 Small Group Communication
COMM 1051 Intercultural Communication
Goal 2 - Critical Thinking is fulfilled when all MnTCgoals are complete

Goal 3 and/or Goal 4 - Sciences/Math/Logical Reasoning: 3 credits

Goal 5 - History/Social and Behavioral Sciences: 3 credits

Goal 6 - Humanities and Fine Arts: 3 credits
Goals 7-10: Three credits in ONE of the four goals (fulfilled by COMM course)

## Interior Design

## Program Options:

Home Furnishing Sales Certific ate (30)
Interior Design Consultant Certificate (16)
Interior Design Associate Diploma (48)
Interior Design AAS Degree (60)
Program Prerequisites:

1. Assessment score placement in MATH 0030 or completion of MATH 0010 with a grade of C or higher; assessment score placement in ENGL 1021 or completion of ENGL 0090 with a grade of C or higher, and assessment score placement into RDNG 1000 or completion of RDNG 0900 or RDNG 0950 with a grade of C or higher for those without prior higher education. Those individuals with prior higher education/college credits may be exempt with proof of course completion; official transcripts for all prior colleges must be sent to the college for exemption evaluations.
2. INTD 1040 Elements of Interior Design is a prerequisite for many Interior Design courses. This class is only offered in the Fall.
3. Laptops required for completion of AAS degree.

## Certificate

## Home Furnishings Sales

## Total Number of Credits: 30

Program Description: Home Furnishings Sales graduates will be prepared to consult with customers and to recommend and sell residential interior furnishing products and services appropriate to customer needs. In addition, a base of skills and knowledge suitable for continuing education and/or professional growth in the industry will be acquired.

## Career/Occupational Requirements: 27 credits

| INTD | 1020 | Drafting for Interior Design . . . . . . . . . . . . . . . 3 |
| :---: | :---: | :---: |
| INTD | 1030 | Design and Color . . . . . . . . . . . . . . . . . . . . . . 3 |
| INTD | 1040 | Elements of Interior Design. . . . . . . . . . . . . . . . 3 |
| INTD | 1050 | Lighting Fundamentals . . . . . . . . . . . . . . . . . 3 |
| INTD | 1060 | Furniture Styles and Periods . . . . . . . . . . . . . . 3 |
| INTD | 1080 | Textile Applications . . . . . . . . . . . . . . . . . . . . 3 |
| INTD | 2001 | Residential Studio I. . . . . . . . . . . . . . . . . . . . 3 |
| INTD | 2002 | Residential Studio II . . . . . . . . . . . . . . . . . . . 3 |
| INTD | 2020 | Professional Practice for Interior Design. . . . . . 3 |

## General Education/MnTC Requirements: 3 credits

Goal 1 - Communication: 3 credits
Select one of the following communication courses:
ENGL 1021 Composition I
COMM 1021 Fundamentals of Public Speaking

| COMM 1031 | Interpersonal Communication |
| :--- | :--- |
| COMM 1041 | Small Group Communication |
| COMM 1051 | Intercultural Communication |

## Certificate <br> Interior Design Consultant <br> Total Number of Credits: 16

Program Description: The Interior Design Certificate is designed for advanced students who have their AAS or bachelor's degree in Interior Design, to gain additional knowledge and expertise in specific specialty areas of the Interior Design industry. Students will select from two tracks that each specialize in a different focus.

Application Requirements: Must have an AAS or bachelor's degree in Interior Design or be in the semester of their graduation and instructor consent.

## Career/Occupational Requirements: 16 credits Select 1 of 2 Track Options

## Interior Design Specialties:16 credits

INTD 1090 Sustainable Design . . . . . . . . . . . . . . . . . . . . . . 3
INTD 2040 Dimensional Design Drawing . . . . . . . . . . . . . . 3
INTD 2070 Interior Design Portfolio .................... 1
Select a minimum of 9 credits from the following courses with guidance of program faculty:
INTD 2060 Revit for Interior Design ..................... . 3
INTD 2075 Design-Build Partnership. . . . . . . . . . . . . . . . . . 3
INTD 2080 Feng Shui..................................... . 3
INTD 2085 Window Covering Design . . . . . . . . . . . . . . . . . 3
INTD 2090 Residential Design for Aging in Place. ........ 3
INTD 2095 Interior Design: A Global Perspective . . . . . . . . 3
Technology Focus: 16 credits
INTD 1055 AutoCAD for Interior Design ................. . . 3
INTD 2040 Dimensional Design Drawing . . . . . . . . . . . . . . 3
INTD 2060 Revit for Interior Design ..................... . . 3
INTD 2070 Interior Design Portfolio ...................... 1
VCT 1018 Digital Imaging .............................. 3
VCT 1023 Web Design with XHTML . . . . . . . . . . . . . . . . 3

## Diploma <br> Interior Design Associate <br> Total Number of Credits: 48

Program Description: This program prepares students to design in terms of customer/client needs, the interior furnishings of residences and to specify and sell the products and services required for implementation of that design.

## 6 Programs of Study

Career/Occupational Requirements: 42 creditsINTD 1020 Drafting for Interior Design ..... 3
INTD 1030 Design and Color ..... 3
INTD 1040 Elements of Interior Design. ..... 3
INTD 1050 Lighting Fundamentals ..... 3
INTD 1055 AutoCAD for Interior Design ..... 3
INTD 1060 Furniture, Styles and Periods. ..... 3
INTD 1080 Textile Applications ..... 3
INTD 1090 Sustainable Design ..... 3
INTD 2001 Residential Studio I ..... 3
INTD 2002 Residential Studio II ..... 3
INTD 2020 Professional Practice for Interior Design ..... 3
INTD 2030 Design Sales ..... 3
INTD 2040 Dimensional Drawing ..... 3
INTD 2050 Commercial Design Studio ..... 3
General Education/MnTC Requirements: 6 credits
Goal 1 - Communication: 3 credits
Select one of the following communication courses ..... 3-4
ENGL 1021 Composition I
COMM 1021 Fundamentals of Public Speaking
COMM 1031 Interpersonal Communication
COMM 1041 Small Group Communication
COMM 1051 Intercultural Communication
General Education/MnTC electives ..... 2-3
See MnTC course list for options
Associate in Applied Science Degree Interior Design

Total Number of Credits: 60

Program Description: Associate in Applied Science graduates will be prepared to design in terms of customer/client needs, the interior furnishings of residences, Computer Aided Design, and to specify and sell the products and services required for implementation of design. In addition, the graduate will have acquired a foundation in marketing and general education necessary to be able to compete in today's workplace.

## Career/Occupational Requirements: 44 credits

INTD 1020 Drafting for Interior Design. ..... 3
INTD 1030 Design and Color ..... 3
INTD 1040 Elements of Interior Design. ..... 3
INTD 1050 Lighting Fundamentals ..... 3
INTD 1055 AutoCAD for Interior Design ..... 3
INTD 1060 Furniture, Styles and Periods. ..... 3
INTD 1080 Textile Applications ..... 3
INTD 1090 Sustainable Design ..... 3
INTD 2001 Residential Studio I ..... 3
INTD 2002 Residential Studio II .....  3
INTD ..... 2020
Professional Practice for Interior Design. .....  3
INTD ..... 2030
Design Sales .....  3
INTD 2040 Dimensional Drawing .....  3
INTD 2050 Commercial Design Studio .....  3
INTD ..... 2780
Internship. .....  2
General Education/MnTC Requirements: 16 credits
Goal 1 - Communication: 7 credits
ENGL 1021 Composition I. ..... 4
Select one of the following COMM courses ..... 3
COMM 1021 Fundamentals of Public Speaking
COMM 1031 Interpersonal Communication
COMM 1041 Small Group Communication
COMM 1051 Intercultural Communication
Goal 2 - Critical Thinking is fulfilled when all MnTCgoals are complete
Goal 3 and/or Goal 4 - Sciences/Math/Logical
Reasoning: 3 credits
Goal 5 - History/Social and Behavioral Sciences: 3 credits
Recommended:
PSYC 1020 General Psychology ..... 4 ..... OR
PSYC 1030 Psychology of Adjustment ..... 3
Goal 6 - Humanities and Fine Arts: 3 credits
ART 1020 Art Appreciation .....  3
Goals 7-10 - Three credits in one of the four goals (fulfilledby COMM course)
Kitchen and Bath
Program Options:
Kitchen and Bathroom Design Certificate (30)
Certificate
Kitchen and Bathroom Design Total Number of Credits: 30
Program Description: The Kitchen and Bathroom Design certificate program, which is accredited by the National Kitchen and Bath Association (NKBA), is designed to prepare individuals for entry-level and advanced positions in the kitchen and bath design industry. This program will include the knowledge, skills and attitudes necessary for working in this specialized design area. Students will learn presentation standards, construction and mechanical systems, basics of kitchen and bath design, materials and estimation, lighting, universal design and theme application, business practices for kitchen and bath designers, and computer-aided drafting specific for the kitchen and bathroom design industry. As a culmination of all
these courses, an internship within a kitchen and/or bath design firm is required. The basic competencies of this program are based on the specifications encouraged by the National Kitchen and Bath Association (NKBA) and is supported by the use of their reference and resource materials. Note: This program has a fall start only.

Application Requirements: Assessment score placement into MATH 0030 and ENGL 1021 for those without prior higher education.

## Career/Occupational Requirements: 30 credits

KBD 1010 Presentation Standards. . . . . . . . . . . . . . . . . . . 3

KBD 1020 Construction and Mechanical Systems. . . . . . . 3
KBD 1030 Basic Kitchen and Bath Design . . . . . . . . . . . . . 3
KBD 1040 Materials and Estimating . . . . . . . . . . . . . . . . . 2
KBD 1050 Lighting for Kitchen and Bath Design . . . . . . . . 1
KBD 2010 Advanced Kitchen and Bath Design . . . . . . . . . 3
KBD 2020 CAD for Kitchen and Bath . . . . . . . . . . . . . . . . 3
KBD $2030 \quad \begin{aligned} & \text { Business Practices for Kitchen and } \\ & \\ & \\ & \text { Bath Design . . . . . . . . . . . . . . . . . . . . . . . . . . } 1\end{aligned}$
KBD 2080 Customized Consulting and Presentation ..... 3
KBD 2085 Kitchen and Bath Internship Preparation ..... 2
KBD 2780 Kitchen and Bath Design Internship . . . . . . . . 3
Select one of the following elective courses:
ECAD 1070 Introduction to AutoCAD . . . . . . . . . . . . . . . . . . 3
INTD 2040 Dimensional Drawing . . . . . . . . . . . . . . . . . . . . 3
KBD 2060 Advanced CAD for Kitchen and Bath Design .. 3
or any other related course with instructor approval

## Additional Requirements:

Students will be required to have a laptop computer, as per the specification required by the program, to use throughout the duration of the program for the classroom section only.

## Law Enforcement

## Program Options:

Law Enforcement AS Degree (68)
See also Criminal Justice

## Associate in Science Degree Law Enforcement Total Number of Credits: 68

Program Description: This degree is primarily designed to meet the professional and educational needs of students interested in becoming licensed Peace Officers. After meeting core POST (Police Officer Standards and Training) requirements for education, students will be able to attend the Law Enforcement Education Center (LEEC) at Hennepin Technical College to take 22 career credits. Upon completion of this AS degree at Century, students are eligible to take a Police Officer Standards and Training Board (POST) exam to

become POST certified, and to apply for law enforcement positions in Minnesota. Upon completion of this AS degree, students may transfer to other colleges or universities.

## Career/Occupational Requirements: 36 credits

| CJS | 2081 | Police in the Community* |
| :---: | :---: | :---: |
| CJS | 2085 | Juvenile Justice and Delinquency* . . . . . . . . . 3 |
| ENGL | 1022 | Composition II OR |
| ENGL | 1025 | Technical and Professional Writing*. |
| PE | 1060 | Personal Fitness. . . . . . . . . . . . . . . . . . . . . . . . 2 |
| EMS | 1015 | Emergency Medical Responder (formerly First Responder). |

The following courses, the Professional Licensing (PL), are offered at the Law Enforcement Education Center at Hennepin Technical College in Brooklyn Park. For application requirements, see Century Advising, Counseling, \& Career Center for information.
LAWE 2225 Criminal Investigations . . . . . . . . . . . . . . . . . . . 3
LAWE 2230 Legal Issues in Law Enforcement . . . . . . . . . . . 3
LAWE 2231 Minnesota Criminal \& Traffic Codes . . . . . . . . . 3
LAWE 2240 Patrol Operations ............................... . . 3
LAWE 2250 Law Enforcement Operations ................. . . 3
LAWE 2260 In Progress. . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1
LAWE 2270 Traffic and Investigations ..................... . . 2
LAWE 2280 Defensive Tactics................................ . . 2
LAWE 2290 Firearms......................................... . . . . 2
LAWE 2300 Defensive Driving . . . . . . . . . . . . . . . . . . . . . . . . 0
General Education/MnTC Requirements: 32 credits
Goal 1 - Communication: 7 credits
ENGL 1021 Composition I*. . . . . . . . . . . . . . . . . . . . . . . . . . 4
Select one of the following COMM courses: . . . . . . . . . 3
COMM 1031 Interpersonal Communication
COMM 1041 Small Group Communication

## 6 Programs of Study



## Marketing

## Program Options:

Entrepreneurial Certificate (16)
Marketing Certificate (18)
Social Media Marketing Certificate (21)
Marketing Specialty Diploma (45)
Marketing Communications Technology AAS Degree (60)
Marketing Management AAS Degree (60)

Program Description: The Entrepreneurial Certificate is targeted for students who are interested in starting and running their own business. Emphasis may include identifying markets and potential, green/sustainable marketing, business plan development, e-marketing, and leading employees. Coursework will include marketing mix elements of product, place, price, and promotion. The certificate is meant to be a practical approach for developing entrepreneurial skills. The concepts discussed are also meant to provide and strengthen the student's skills to develop and implement new business growth initiatives within a firm.

## Career/Occupational Requirements: 16 Credits

MKTG 2005 Entrepreneurship Fundamentals . . . . . . . . . . . . 3
MKTG 2050 Principles of Marketing . . . . . . . . . . . . . . . . . . . 3
MKTG 2055 Web and Mobile Marketing .................. . . 3
MKTG 2063 Advertising and Sales Promotion . . . . . . . . . . . 3
Select at least 4 credits from the following, or other courses with instructor consent:
ACCT 1010 Introduction to Accounting . . . . . . . . . . . . . . . . 3
ACCT 1030 Computerized Accounting Applications ...... 3
CAPL 1022 Microsoft Outlook . . . . . . . . . . . . . . . . . . . . . . . . 1
MKTG 1020 Visual Merchandising and Store Planning .... 3
MKTG 2000 Customer Service Strategies . . . . . . . . . . . . . . . 3
MKTG 2010 Workplace Leadership. . . . . . . . . . . . . . . . . . . . 3
MKTG 2020 Negotiation Strategies ........................ . . 3
MKTG 2035 Trend Tracking and Futuring. . . . . . . . . . . . . . . . 3
MKTG 2065 Principles of Social Media Marketing. . . . . . . . 3
VCT 1012 Principles of Digital Communications I . . . . . . . 3
VCT 1015 Project Planning. . . . . . . . . . . . . . . . . . . . . . . . . 3

## Certificate <br> Marketing <br> Total Number of Credits: 18

Program Description: This certificate serves learners interested in exploring career options. Each course is built on fundamental principles of marketing and retailing-providing the right product/ service at the right place and time. The certificate credits may be applied to the 45-credit marketing specialty diploma as well as the 64-credit Associate in Applied Science (AAS) Marketing Management or Communication Technology degrees.

## Career/Occupational Requirements: 18 credits

MKTG 2050 Principles of Marketing . . . . . . . . . . . . . . . . . . . 3
MKTG 1025 Professional Development. . . . . . . . . . . . . . . . . 3
Select 12 credits from the following:
MKTG 1020 Visual Merchandising and Store Planning .... 3
MKTG 2000 Customer Service Strategies. . . . . . . . . . . . . . . 3
MKTG 2005 Entrepreneurship Fundamentals . . . . . . . . . . . . 3
MKTG 2010 Workplace Leadership. . . . . . . . . . . . . . . . . . . . 3
MKTG 2035 Trend Tracking and Futuring. . . . . . . . . . . . . . . . 3

## Certificate <br> Entrepreneurial <br> Total Number of Credits: 16

MKTG 2055 Web and Mobile Marketing ................. . 3
MKTG 2065 Principles of Social Media Marketing. . ....... . 3
MKTG 2080 Retail Principles and Practices ............... 3
MKTG 1790 Independent Study. .......................... . . 1

## Certificate <br> Social Media Marketing <br> Total Number of Credits: 21

Program Description: The Social Media Marketing certificate is targeted toward students interested in social media marketing and developing the skills necessary for creating and implementing successful social media marketing strategies. This certificate emphasizes developing social media strategies, understanding social media tools such as blogs and social media sites, understanding and using web applications, writing for social media marketing, and evaluating the performance of social media marketing strategies and tactics. Coursework will include an emphasis on the fundamentals of marketing: price, place, product and promotion in the profit and not-for-profit sectors.

## Career/Occupational Requirements: 21 credits

| CAPL | 1010 | Introduction to Software Applications | 3 |
| :---: | :---: | :---: | :---: |
| MKTG | 2050 | Principles of Marketing |  |
| MKTG | 2065 | Principles of Social Media Marketing. | 3 |
| MKTG | 2063 | Advertising and Sales Promotion |  |
| Select 9 credits from the following courses: |  |  |  |
| MKTG | 2055 | Web and Mobile Marketing | 3 |
| MKTG | 2000 | Customer Service Strategies. |  |
| MKTG | 2005 | Entrepreneurship Fundamentals |  |
| MKTG | 2035 | Trend Tracking and Futuring. |  |
| MKTG | 2055 | Web and Mobile Marketing | 3 |
| VCT | 1023 | Web Design with HTML5 and CSS3 . | 3 |
| BMGT | 2060 | Business Communications |  |

## Diploma <br> Marketing Specialty Total Number of Credits: 45

Program Description: The Marketing Specialty program is designed for students who desire careers in marketing specialty areas. Some may be interested in opening and operating their own businesses, while others may want to work as sales professionals, retail managers, floor merchandisers or in support positions like visual merchandising or special event production. Web assisted courses are integral to the program delivery.

| Career/Occupational Requirements: 42 credits |  |  |  |
| :--- | :--- | :--- | :--- |
| BMGT | 1020 | Introduction to Business ................... 3 |  |
| CAPL | 1010 | Introduction to Software Applications ....... 3 |  |
| MKTG | 1025 | Professional Development. .................. 3 |  |

CAPL 1010 Introduction to Software Applications ........ 3
MKTG 1025 Professional Development. ................... 3
MKTG 2050 Principles of Marketing ..... 3
Select 30 credits from the following courses:
MKTG 1020 Visual Merchandising and Store Planning .... 3
MKTG 1043 Fashion Marketing Essentials .....  3
MKTG 1066 Event, Convention, and Meeting Planning .....  3
MKTG 2000 Customer Service Strategies. .....  3
MKTG 2005 Entrepreneurship Fundamentals .....  3
MKTG 2010 Workplace Leadership. .....  3
MKTG 2020 Negotiation Strategies ..... 3
MKTG 2035 Trend Tracking and Futuring. .....  3
MKTG 2055 Web and Mobile Marketing .....  3
MKTG 2060 Relationship Selling. .....  3
MKTG 2063 Advertising and Sales Promotion ..... 3
MKTG 2065 Principles of Social Media Marketing. .....  3
MKTG 2080 Retailing Principles and Practices. ..... 3
General Education/MnTC Requirements: 3 creditsGoal 1 - Communication: 3 credits
COMM 1031 Interpersonal Communication ..... 3
Associate in Applied Science Degree Marketing Communications Technology Total Number of Credits: 60

Program Description: This polytechnic degree program blends three Century College areas: the theories and strategies of the Marketing Program, the application skills of the Visual Communications Technologies Program and the hands-on and aesthetic teachings of the Art and Art Studio coursework. In addition, courses from the English, Communication, and Philosophy disciplines round out this curriculum and form a balanced theory/practice approach. Learners with this type of preparation find fulfilling careers in a variety of visual communications as well as visual marketing fields.

## Core Requirements: 29 Credits

CAPL 1010 Introduction to Software Applications ..... 3
MKTG 2035 Trend Tracking and Futuring. .....  3
MKTG 2050 Principles of Marketing ..... 3
MKTG 2055 Web and Mobile Marketing ..... 3
MKTG 2063 Advertising and Sales Promotion .....  3
VCT 1012 Principles of Digital Communications I. .....  3
VCT 1013 Design Basics ..... 4
VCT 1015 Project Planning. .....  3
VCT 1018 Digital Imaging .....  3
VCT 2076 Portfolio Development- Marketing Communications ..... 1
Career/Occupational Requirements: 9 Credits
Select 3 credits from the following courses:
MKTG 1020 Visual Merchandising and Store Planning .... 3
MKTG 2000 Customer Service Strategies. ..... 3

## 6 Programs of Study

| MKTG | 2005 | Entrepreneurship Fundamentals | 3 |
| :---: | :---: | :---: | :---: |
| MKTG | 2020 | Negotiation Strategies | 3 |
| MKTG | 2055 | Electronic Marketing Concepts | 3 |
| MKTG | 2065 | Principles of Social Media Mark | 3 |
| MKTG | 2080 | Retailing Principles and Practices | 3 |
| Select 6 credits from the following courses: |  |  |  |
| VCT | 1023 | Web Design with HTML5 and CSS3 | 3 |
| VCT | 1030 | Video I | 3 |
| VCT | 1071 | Introduction to Digital Photography | 3 |
| VCT | 1061 | Electronic Publishi | 3 |
| General Education/MnTC Requirements: 22 Credits Goal 1 - Communication: 7 credits |  |  |  |
| ENGL | 1021 | Composition | 4 |
| COMM |  | Small Group Communication. | 3 |
| Goal 2 - Critical Thinking is fulfilled when all MnTC goals are complete |  |  |  |
| Goal 3 and/or Goal 4 - Sciences/Math/Logical Reasoning: 3 credits |  |  |  |
| Goal 5 - History/Social and Behavioral Sciences: 3 credits |  |  |  |
| COMM | 1061 | Introduction to Mass Communication. | 3 |
| Goal 6 - Humanities and Fine Arts: 9 credits |  |  |  |
| ART | 1020 | Art Appreciation | 3 |
| ART | 1041 | Drawing I | 3 |
| PHIL | 1031 | Ethics | 3 |
| Goals 7-10 - Three credits in one of the four goals |  |  |  |

## Associate in Applied Science Degree Marketing Management Total Number of Credits: 60

Program Description: Marketing Management focuses on the decisions facing marketing practitioners who must balance the objectives and resources of an organization with the needs and opportunities in the marketplace. Graduates may pursue careers in either business-to-business marketing environments or the area of consumer markets in either the private or public sector.Career/Occupational Requirements: 44 Credits
BMGT 1020 Introduction to Business ..... 3
CAPL 1010 Introduction to Software Applications ..... 3
MKTG 1025 Professional Development. ..... 3
MKTG 2050 Principles of Marketing ..... 3
Select 32 credits from the following courses:
MKTG 1020 Visual Merchandising and Store Planning . . . . 3
MKTG 1043 Fashion Marketing Essentials ..... 3
MKTG 1066 Event, Convention, and Meeting Planning ..... 3
MKTG 2000 Customer Service Strategies. ..... 3
MKTG 2005 Entrepreneurship Fundamentals ..... 3
MKTG 2010 Workplace Leadership ..... 3
MKTG 2020 Negotiation Strategies ..... 3
MKTF 2035 Trend Tracking and Futuring. ..... 3
MKTG 2055 Web and Mobile Marketing ..... 3
MKTG 2060 Relationship Selling. ..... 3
MKTG 2063 Advertising and Sales Promotion ..... 3
MKTG 2065 Principles of Social Media Marketing. ..... 3
MKTG 2080 Retailing Principles and Practices. ..... 3
MKTG 2780 Marketing Internship ..... 1-6
General Education/MnTC Requirements: 16 credits Goal 1 - Communication: 7 credits
ENGL 1021 Composition I ..... 4
COMM 1031 Interpersonal Communication ..... 3
Goal 2 - Critical Thinking is fulfilled when all MnTC goals arecomplete
Goal 3 and/or Goal 4 - Sciences/Math/Logical Reasoning: 3 credits
Goal 5 - History/Social and Behavioral Sciences: 3 credits
Goal 6 - Humanities and Fine Arts: 3 credits
Goals 7-10 - Three credits in one of the four goals

## Medical Assistant

## Program Options:

Medical Assistant Diploma (51)

## Diploma Medical Assistant Total Number of Credits: 51

Program Description: The Medical Assistant program is designed for career opportunities as a professional, multi-skilled person dedicated to assisting in patient care management. The medical assistant performs clinical, laboratory and administrative skills in clinics, doctor offices, and other health care agencies. The clinical externship is under the direct supervision of a physician, and is a 300 hour unpaid experience. Graduates of the Medical Assistant program are eligible to take the Certification Exam of the American Association of Medical Assistants (AAMA). The Century College Medical Assistant Program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Curriculum Review Board of the Medical Assistant Education Review Board (MAERB).

## Application Requirements/Program Prerequisites

1. High School graduate or GED
2. Assessment score placement in RDNG 1000 or completion of RDNG 0900 or RDNG 0950 with a grade of "C" or higher
3. NEW: Arithmetic assessment score of 64 or higher or elementary

algebra assessment score of 76 or higher OR completion of MATH 0010 (previously) or MATH 0015 or MATH 0030 with a grade of C or higher. We strongly encourage students who score below 64 to meet with an advisor or counselor to discuss their review and course options PRIOR to Math assessment retesting or registering for a Math course. Contact the Advising, Counseling, and Career Center at 651.779.3285, West 2410.
Please refer to program application information available in Admissions, the Advising, Counseling, \& Career Center, and the Century website for day and evening program application requirements.

## Additional Program Requirements:

A grade of "C" or higher must be obtained in all career/occupational requirements.

Career/Occupational Requirements: 38 credits

Select one of the following COMM courses: ..... 3
COMM 1031 Interpersonal Communication ..... 3
OR
COMM 1051 Intercultural Communication ..... 3
Goal 3 and/or Goal 4 - Sciences/Math/Logical Reasoning3 credits
BIOL 1024 Human Biology ..... 3
Goal 5 - History/Social and Behavioral Sciences:
3 or 4 credits
Select one of the following PSYC courses: ..... 3-4
PSYC 1030 Psychology of Adjustment .....  3
OR
PSYC 1020 General Psychology ..... 4
OR
PSYC 1041 Developmental Psychology: Lifespan ..... 4
Microcomputer Support Technology
This Program Name has been changed to Enterprise Computing Technology. Please see Enterprise Computing Technology for these Program Options.
Music
Program Options:
Music AFA Degree (68)
Associate in Fine Arts Degree Music

Total Number of Credits: 68
Application Requirements/Program Prerequisites
Prospective students are expected to have, at minimum, a basiccompetency level of musicianship (voice or primary instrument) anda basic music reading ability. Students must consult with the musicfaculty before beginning the AFA in Music program.
Program Requirements
Career/Occupational Requirements: 38 credits
MUSC 1061 Music Theory I ..... 3
MUSC 1062 Music Theory II ..... 3
MUSC 1071 Ear Training I .....  2
MUSC 1072 Ear Training II .....  2
MUSC 2061 Advanced Music Theory I .....  3
MUSC 2062 Advanced Music Theory II .....  3

## 6 Programs of Study

| MUSC | 2071 | Advanced Ear Training I | 2 |
| :---: | :---: | :---: | :---: |
| MUSC | 2072 | Advanced Ear Training II | 2 |
| MUSC | 2081 | Music History I. | 3 |
| MUSC | 2082 | Music History II | 3 |
| Select 4 credits from the following Music Ensemble Courses |  |  |  |
| MUSC | 1000 | College Choir |  |
| MUSC | 1005 | Century Chamber Singers | 1 |
| MUSC | 1010 | Century Chamber Orchestra | 1 |
| MUSC | 1011 | Theatre Orchestra | 1 |
| MUSC | 1015 | Century Concert Band | 1 |
| MUSC | 1018 | Century Guitar Ensemble. |  |
| MUSC | 1019 | Century Piano Ensemble |  |
| MUSC | 1021 | Jazz Combo |  |

Select 8 credits from the following applied lessons courses
Note: All 8 credits must be in a declared primary instrument
MUSC 2011 Private Instrumental ............................ . . 1
MUSC 2012 Private Instrumental-Advanced. . . . . . . . . . . . . 2
MUSC 2021 Private Guitar. . . . . . . . . . . . . . . . . . . . . . . . . . . 1
MUSC 2022 Private Guitar-Advanced . . . . . . . . . . . . . . . . . . 2
MUSC 2031 Private Piano ................................... . . . . 1
MUSC 2032 Private Piano-Advanced. . . . . . . . . . . . . . . . . . . 2
MUSC 2041 Private Voice . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1
MUSC 2042 Private Voice-Advanced. . . . . . . . . . . . . . . . . . . 2

## General Education/MnTC Requirements: 30 Credits

Five additional credits are needed beyond the minimums to reach 30 credits. See MnTC course list for options.

## Goal 1 - Communication: 7 credits

ENGL 1021 Composition I. . . . . . . . . . . . . . . . . . . . . . . . . . . . 4
Select one of the following COMM courses . . . . . . . . . 3
COMM 1021 Fundamentals of Public Speaking
COMM 1031 Interpersonal Communication
COMM 1041 Small Group Communication
COMM 1051 Intercultural Communication
Goal 2 - Critical Thinking is fulfilled when all MnTC goals are complete
Fulfilled automatically when all other MnTC goals are complete
Goal 3 and/or Goal 4 - Sciences/Math/Logical Reasoning: 6 credits

Select TWO courses from goal 3 and/or 4
Goal 5 - History/Social and Behavioral Sciences: 6 credits
Select TWO courses from TWO different disciplines
Goal 6 - Humanities and Fine Arts: 6 credits
Select TWO courses from TWO different disciplines
Goals 7-10: Three credits in TWO of the four goals (COMM course fulfills one of these goals

Additional Requirements: Piano Proficiency is required by transfer institutions for a baccalaureate degree in music. MUSC 1026 Class Piano for Music Majors or MUSC 2031 Private Piano is strongly recommended.

## Nursing

## Program Options:

Nursing Assistant Certificate (4)
Nursing AS Degree (75)

## Certificate <br> Nursing Assistant Total Number of Credits: 4

Program Description: This certificate is designed for individuals seeking employment in direct patient care under the supervision of a nurse in long term care, acute care, and/or home care settings. Upon completion of this certificate, students will be eligible to take the examination for placement on the Minnesota Department of Health Nursing Assistant Registry.

Program Requirements: Minnesota State Registry of Nursing Assistants requirement is 16 years of age or older.

## Core Requirements: 4 credits

HSCI 1001 Nursing Assistant . . . . . . . . . . . . . . . . . . . . . . . 4

## Associate in Science Degree Nursing - Mobility Track Total Number of Credits: 75

Program Description: The Century College Associate Degree Nursing Program is designed to educate students who are prepared to begin professional nursing careers and administer safe, culturally competent patient-centered nursing care in a variety of healthcare settings in our increasingly diverse communities. Coursework includes nursing theory focusing on holistic assessment, therapeutic nursing interventions including complementary/alternative modalities, communication, levels of prevention, critical thinking, collaboration and leadership/management concepts. Clinical application occurs in a variety of settings including: acute, sub-acute and long-term care facilities, community clinics, schools and home health settings. Safe, caring, competent nursing care across the lifespan is fostered. Graduates are awarded an associate in science degree in nursing and are eligible to apply to take the NCLEX-RN and meet the Minnesota State Board of Nursing requirements for licensure. Graduates are also able to continue for a further three semesters with upper division full-partner schools in the Minnesota Alliance for Nursing Education (MANE) to complete their Bachelor of Science in Nursing. The Mobility Nursing Track is offered to qualified licensed practical nurses (LPN) and qualified paramedics. Mobility track students are granted 5 credits of advanced standing and participate in a transition course to assist
in the change of role to professional nursing. All students will be dually enrolled in Century College and an upper division full-partner MANE college to allow seamless education to a Bachelor of Science in Nursing. A Minnesota statewide nursing articulation agreement provides articulation agreements to students who pursue their bachelor's degree from most baccalaureate nursing programs offered throughout the state who are not participating in the MANE initiative.

## Application Requirements/Program Prerequisites

Refer to program information available in Admissions, the Century College website, or Advising, Counseling, \& Career Center.

## Program Requirements

## Career/Occupational Requirements: 35 credits

| NURS | 2720 | LPN and Paramedic Mobility Student Only: Transition to the Role of the Professional Nurse (3 theory/1 clinical/ 5 advanced standing). |
| :---: | :---: | :---: |
| NURS | 2750 | Nutrition and the Role of the Professional Nurse |
| NURS | 2800 | Chronic \& Palliative Care (3 theory/1 lab/3 clinical). |
| NURS | 2820 | Pharmacology and the Role of the Professional Nurse |
| NURS | 2850 | Applied Pathophysiology for Nursing I . . . . . . 2 |
| NURS | 2900 | Acute \& Complex Care <br> (3 theory/1 lab/3 clinical) |
| NURS | 2920 | Applied Pathophysiology for Nursing II. . . . . . 2 |
| NURS | 2950 | Nursing Leadership I (2 theory/1 clinical) . . . . 3 |
| General Education/MnTC Requirements: 40 credits <br> Goal 1 - Communication: 7 credits |  |  |
| ENGL | 1021 | Composition I. . . . . . . . . . . . . . . . . . . . . . . . . 4 |
| Select one of the following COMM courses . . . . . . . . . . . . 3 |  |  |
| COMM | 1031 | Interpersonal Communication |
| COMM | 1041 | Small Group Communication |
| COMM | 1051 | Intercultural Communication |
| Goal 2 - Critical Thinking is fulfilled when all MnTC goals are complete |  |  |

Goal 3 and/or Goal 4 - Sciences/Math/Logical Reasoning: 11 credits
BIOL 2031 Human Anatomy \& Physiology I ..... 4
BIOL 2032 Human Anatomy \& Physiology II ..... 4
BIOL 2035 Microbiology ..... 3
Goal 5 - History/Social and Behavioral Sciences: 10 credits
PSYC 1020 General Psychology ..... 4
PSYC 1041 Developmental Psychology Lifespan. ..... 4
SOC or ANTH MnTC General Education Elective in Sociology or Anthropology ..... 3
Goal 6 - Humanities and Fine Arts: 3 credits
PHIL 1035 Biomedical Ethics ..... 3

Goals 7-10: Three credits in two of the four goals

## Additional Requirements:

## MnTC/Gen Ed electives: 8 credits

CHEM 1020 or CHEM 1041 and BIOL 1020 or BIOL 1041 with a grade of "C" or higher or MnTC/General Education Electives if high school biology and chemistry with a grade of "C" or higher within the last three years prior to registering for BIOL 2031. 8

## Associate in Science Degree Nursing - Traditional Track Total Number of Credits: 75

Program Description: The Century College Associate Degree Nursing Program is designed to educate students who are prepared to begin professional nursing careers and administer safe, culturally competent patient-centered nursing care in a variety of healthcare settings in our increasingly diverse communities. Coursework includes nursing theory focusing on holistic assessment, therapeutic nursing interventions including complementary/alternative modalities, communication, levels of prevention, critical thinking, collaboration and leadership/management concepts. Clinical application occurs in a variety of settings including: acute, sub-acute and long-term care facilities, community clinics, schools and home health settings. Safe, caring, competent nursing care across the lifespan is fostered. Graduates are awarded an associate in science degree in nursing and are eligible to apply to take the NCLEX-RN and meet the Minnesota State Board of Nursing requirements for licensure. Graduates are also able to continue for a further three semesters with upper division full-partner schools in the Minnesota Alliance for Nursing Education (MANE) to complete their Bachelor of Science in Nursing. The Mobility Nursing Track is offered to qualified licensed practical nurses (LPN) and qualified paramedics. Mobility track students are granted 5 credits of advanced standing and participate in a transition course to assist in the change of role to professional nursing. All students will be dually enrolled in Century College and an upper division full-partner MANE college to allow seamless education to a Bachelor of Science in Nursing. A Minnesota statewide nursing articulation agreement provides articulation agreements to students who pursue their bachelor's degree from most baccalaureate nursing programs offered throughout the state who are not participating in the MANE initiative.

## Application Requirements/Program Prerequisites:

Refer to program information available in Admissions, the Century College website, or Advising, Counseling, \& Career Center.

Program Requirements
Career/Occupational Requirements: 35 credits
NURS 2700 Traditional Students Only: Foundations of Nursing - Health Promotion (4 theory/2 lab/3 clinical) 9
NURS 2750 Nutrition and the Role of the Professional Nurse 2
NURS 2800 Chronic \& Palliative Care

## 6 Programs of Study

(3 theory/1 lab/3 clinical) ..... 7
NURS 2820 Pharmacology and the Role of the Professional Nurse ..... 3
NURS 2850 Applied Pathophysiology for Nursing I ..... 2
NURS 2900 Acute \& Complex Care (3 theory/1 lab/3 clinical) ..... 7
NURS 2920 Applied Pathophysiology for Nursing II. ..... 2
NURS 2950 Nursing Leadership I (2 theory/1 clinical) ..... 3
General Education/MnTC Requirements: 40 credits
Goal 1 - Communication: 7 credits
ENGL 1021 Composition I ..... 4
Select one of the following COMM courses ..... 3
COMM 1031 Interpersonal CommunicationCOMM 1041 Small Group Communication
$\qquad$
COMM 1051 Intercultural Communication
$\qquad$
Goal 2 - Critical Thinking is fulfilled when all MnTC goalsare complete
Goal 3 and/or Goal 4 - Sciences/Math/Logical Reasoning: 11 credits
BIOL 2031 Human Anatomy \& Physiology I ..... 4
BIOL 2032 Human Anatomy \& Physiology II ..... 4
BIOL 2035 Microbiology ..... 3
Goal 5 - History/Social and Behavioral Sciences: 10 credits
PSYC 1020 General Psychology ..... 4
PSYC 1041 Developmental Psychology Lifespan. ..... 4
SOC or ANTH MnTC/General Education Elective in Sociology or Anthropology ..... 3
Goal 6 - Humanities and Fine Arts: 3 credits
PHIL 1035 Biomedical Ethics ..... 3
Goals 7 - 10: Three credits in two of the four goals

## Additional Requirements:

MnTC/Gen Ed electives: 8 creditsCHEM 1020 or CHEM 1041 and BIOL 1020 or BIOL 1041 with a gradeof "C" or higher or MnTC/General Education Electives if high schoolbiology and chemistry with a grade of "C" or higher within the lastthree years prior to registering for BIOL 2031. 8

## Office Technology

## Program Options:

Computer Skills Certific ate (10)
Software Applications Certificate (16)
Office Assistant Certificate (30)
Office Support Diploma (48)
Administrative Assistant AAS Degree (60)
Medical Office Support Certificate (18)
Medical Administrative Support Diploma (47)
Medical Office Assistant AAS Degree (60)
Other computer-related courses are offered in the following disciplines: Computer Application Technology, Computer Science, Enterprise Computing Technology, Information and Telecommunications Technology

## Certificate

## Computer Skills

## Total Number of Credits: 10

Program Description: This certificate is designed for students that have a limited computer background and are interested in learning basic computer skills. The students may be employed in part-time, seasonal, temporary, work-study positions, and other work settings.

## Application Requirements/Program Prerequisites

## Program Requirements

Career/Occupational Requirements:
CAPL 1010 Introduction to Software Applications ....... 3
CAPL 1021 Microsoft PowerPoint . . . . . . . . . . . . . . . . . . . . 3
CAPL 1023 Microsoft Word. . . . . . . . . . . . . . . . . . . . . . . . . 3
OFFT 1001 Document Formatting Essentials. . . . . . . . . . . . 1

## General Education/MnTC Requirements:

Additional Requirements: Grade of "C" or higher in all Career/ Occupational Courses.

## Certificate

## Software Applications

## Total Number of Credits: 16

Program Description: This certificate is designed for students interested in updating their skills after re-entering the work force, acquiring a new position, or their current position requires current software technology, etc. Students will be able to earn the shortterm certificate and then continue to other existing offerings in a seamless path.

## Career Requirements: 16 credits

| CAPL | 1010 | Introduction to Software Applications . . . . . . . . 3 |
| :--- | :--- | :--- |
| CAPL | 1023 |  |

Select 10 credits from the following courses:
CAPL 1021 Microsoft PowerPoint3
CAPL 1022 Microsoft Outlook ..... 1
CAPL 1025 Microsoft Excel ..... 3
CAPL 1027 Microsoft Access. ..... 3
CAPL 2020 Desktop Publishing ..... 3
MKTG 1025 Professional Development. ..... 3
OFFT 2055 Administrative Office Procedures ..... 3

Additional Requirements: Grade of " C " or higher in all Career/ Occupational courses.

## Certificate <br> Office Assistant <br> Total Number of Credits: 30

Program Description: This certificate is designed for students interested in updating their skills after re-entering the work force, acquiring a new position, or their current position requires current software technology. Students will be able to earn the short-term certificate and then continue to other existing offerings in a seamless path.
Career/Occupational Requirements: 27 credits
ACCT $1010 \quad$ Introduction to Accounting .................. 3
BMGT 2035 Human Relations in Business . . . . . . . . . . . . . . 3
CAPL 1010 Introduction to Software Applications . . . . . . . 3
CAPL 1021 Microsoft PowerPoint . . . . . . . . . . . . . . . . . . . . 3
CAPL 1022 Microsoft Outlook ............................. . . . 1
CAPL 1023 Microsoft Word . . . . . . . . . . . . . . . . . . . . . . . . . 3
OFFT 1001 Document Formatting Essentials. . . . . . . . . . . . 1
OFFT 2000 Records Classification Systems. . . . . . . . . . . . . 3
OFFT 2055 Administrative Office Procedures . . . . . . . . . . . 3
OFFT 2099 Office Technology Capstone . . . . . . . . . . . . . . . 3
Career Related Electives . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1
General Education/MnTC Requirements: 3 credits
Goal 1 - Communication: 3 credits
Select one of following communication courses:
COMM 1021 Fundamentals of Public Speaking . . . . . . . . . . . 3
COMM 1031 Interpersonal Communication................. . . 3
COMM 1041 Small Group Communication. . . . . . . . . . . . . . . 3
COMM 1051 Intercultural Communication................. . . 3
ENGL 1021 Composition I. ............................... . . . . 4
Additional Requirements: Grade of " C " or higher in all Career/ Occupational courses.
Diploma
Office Support
Total Number of Credits: 48
Program Description: This program is designed for students
interested in a comprehensive program in the office field. A graduate
may become employed as a data entry clerk, receptionist, secretary,
software application specialist, or in other administrative relatedpositions.
Career/Occupational Requirements: 41 credits
ACCT 1010 Introduction to Accounting ..... 3
BMGT 1020 Introduction to Business ..... 3
BMGT 2035 Human Relations in Business ..... 3
BMGT 2060 Business Communications
OR
ENGL 1025 Technical and Professional Writing ..... 3
CAPL 1010 Introduction to Software Applications .....  3
CAPL 1021 Microsoft PowerPoint ..... 3
CAPL 1022 Microsoft Outlook .....  1
CAPL 1023 Microsoft Word ..... 3
CAPL 1025 Microsoft Excel ..... 3
CAPL 1027 Microsoft Access. ..... 3
CAPL 2020 Desktop Publishing ..... 3
OFFT 1001 Document Formatting Essentials. ..... 1
OFFT 2000 Records Classification Systems. ..... 3
OFFT 2055 Administrative Office Procedures ..... 3
OFFT 2099 Office Technology Capstone ..... 3
General Education/MnTC Requirements: 7 credits
Goal 1 - Communication: 7 credits
ENGL 1021 Composition I ..... 4
Select one of the following COMM courses: ..... 3
COMM 1021 Fundamentals of Public SpeakingCOMM 1031 Interpersonal CommunicationCOMM 1041 Small Group CommunicationCOMM 1051 Intercultural Communication
Additional Requirements: Grade of "C" or higher in all Career/
Occupational courses.
Administrative Assistant

Associate in Applied Science Degree

Total Number of Credits: 60
Program Description: This program is designed to prepare students with broad-based skills--general business knowledge and knowledge of software/hardware technology. Students may be employed in various administrative support positions in business, government, and organizational operations.
Career/Occupational Requirements: 44 credits
ACCT 1010 Introduction to Accounting

## 6 Programs of Study

| BMGT | 1020 | Introduction to Business . . . . . . . . . . . . . . . . . 3 |
| :---: | :---: | :---: |
| BMGT | 2035 | Human Relations in Business . . . . . . . . . . . . . 3 |
| BMGT | 2060 | Business Communications OR |
| ENGL | 1025 | Technical and Professional Writing. . . . . . . . . 3 |
| CAPL | 1010 | Introduction to Software Applications . . . . . . 3 |
| CAPL | 1021 | Microsoft PowerPoint . . . . . . . . . . . . . . . . . . 1 |
| CAPL | 1022 | Microsoft Outlook . . . . . . . . . . . . . . . . . . . . . . 1 |
| CAPL | 1023 | Microsoft Word . . . . . . . . . . . . . . . . . . . . . . . 3 |
| CAPL | 1025 | Microsoft Excel . . . . . . . . . . . . . . . . . . . . . . . 3 |
| CAPL | 1027 | Microsoft Access. . . . . . . . . . . . . . . . . . . . . . . 3 |
| CAPL | 2020 | Desktop Publishing . . . . . . . . . . . . . . . . . . . . 3 |
| OFFT | 1001 | Document Formatting Essentials. . . . . . . . . . . 1 |
| OFFT | 2000 | Records Classification Systems. . . . . . . . . . . . 3 |
| OFFT | 2055 | Administrative Office Procedures . . . . . . . . . . 3 |
| OFFT | 2099 | Office Technology Capstone . . . . . . . . . . . . . . 3 |
| Electives (career related) |  |  |
| General Education Requirements: 16 credits <br> Goal 1 - Communication: 7 credits |  |  |
| ENGL | 1021 | Composition I. . . . . . . . . . . . . . . . . . . . . . . . . 4 |
| Select one of the following COMM courses: . . . . . . . . . 3 |  |  |
| COMM | 1021 | Fundamentals of Public Speaking |
| COMM | 1031 | Interpersonal Communications |
| COMM | 1041 | Small Group Communications |
| COMM | 1051 | Intercultural Communications |
| Goal 2 - Critical Thinking is fulfilled when all MnTC goals are complete |  |  |
| Goal 3 and/or Goal 4 - Sciences/Math/Logical Reasoning: 3 credits |  |  |
| Goal 5 - History/Social and Behavioral Sciences: 3 credits <br> Goal 6 - Humanities and Fine Arts: 3 credits |  |  |
|  |  |  |
| Goals 7-10: Three credits in one of the four goals |  |  |
| Additional Requirements: Grade of "C" or higher in all Career/ Occupational courses. |  |  |
| Office Technology - Medical |  |  |

## Application Requirements/Program Prerequisites

## Program Prerequisites:

- Declared Office Technology-Medical major with the Century College Records Office.
- Assessment score placement in ENGL 1021 or completion of ENGL 0090 with a grade of " $C$ " or higher.
- Assessment score placement in RDNG 1000 or completion of RDNG 0900 or RDNG 0950 with a grade of "C" or higher.
- Completed all online self-assessments on the Century College Online Learning Guide (http://www.century.edu/files/ onlinelearning_guide.pdf) to determine if technology requirements are met.
- SmarterMeasure (http://century.smartermeasure.com/) is one of the self-assessments that must be completed. Students must have a score of 76 or above in the Overall Technical Competency on the SmarterMeasure assessment.
- Typing accuracy of at least $85 \%$ and typing speed of at least 30 words per minute as measured on the SmarterMeasure Typing Speed and Accuracy assessment.
- A minimum score of 80 percent on http://www.gcflearnfree.org/ Microsoft Office Suite Word.
Students should contact the Advising, Counseling, \& Career Center (651.779.3285) for advising.


## Certificate <br> Medical Office Support <br> Total Number of Credits: 18

Program Description: The Medical Office Support certificate will prepare students for work as medical receptionists or other entrylevel positions in many health area settings, e.g., hospital departmental office, clinics, chiropractic and health information settings. Students will be trained in patient registration, correspondence, interpersonal skills, document preparation, as well as terminology/language, insurance, electronic health records, and organization of healthcare settings. Students will be able to earn the short-term certificate and then continue to other existing offerings in a seamless path.

## Career/Occupational Requirements:

CAPL 1010 Introduction to Software Applications ....... 3
OFFT 2006 Medical Office Fundamentals . . . . . . . . . . . . . . 3
OFFT 2010 Medical Office Terminology. . . . . . . . . . . . . . . . 3
OFFT 2021 Electronic Medical Records. . . . . . . . . . . . . . . . . 3
OFFT 2030 Medical Office: Insurance and Billing . . . . . . . . 3
OFFT 2041 Healthcare Documentation Fundamentals . . . . 3
Additional Requirements: Grade of C or higher in required courses

## Diploma <br> Medical Office Assistant <br> Total Number of Credits: 60

Program Description: The Medical Office Support diploma will prepare students in competencies using current office technologies. Program graduates following the Administrative Track may be employed in support positions in healthcare facilities, insurance, industrial, and research medical facilities. Program graduates following the Healthcare Documentation Track may take the registered healthcare documentation specialist (RHDS) credentialing exam. Program graduates holding an RHDS may be employed as medical transcriptionists/editors in transcription service companies, medical clinics, or hospitals. Program graduates following the Coding Track
may take the CCA or CCP credentialing exams. Program graduates holding a coding credential may be employed in healthcare settings such as clinics, insurance companies, government agencies, public health, home health agencies, long-term care facilities, hospitals and dental offices.

## Core Requirements: 18 credits

| CAPL | 1010 | Introduction to Software Applications . . . . . . . 3 |
| :--- | :--- | :--- | :--- |
| OFFT | 2006 | Medical Office Fundamentals . . . . . . . . . . . . . 3 |
| OFFT | 2010 | Medical Office Terminology. . . . . . . . . . . . . . 3 |
| OFFT | 2021 | Electronic Health Records . . . . . . . . . . . . . 3 |
| OFFT | 2030 | Medical Office: Insurance and Billing . . . . . . 3 |
| OFFT | 2041 | Healthcare Documentation Fundamentals . . . . 3 |

Career/Occupation Requirements: Select one of three Specialty Track Options
Administrative Track: $\mathbf{2 2}$ credits
BMGT 2035 Human Relations in Business ..... 3
CAPL 1023 Microsoft Word ..... 3
CAPL 1022 Microsoft Outlook ..... 1
HSCl 1000 Introduction to Healthcare Careers ..... 3
OFFT 1002 Speech Recognition. ..... 1
OFFT 2000 Records Classification Systems ..... 3
OFFT 2050 Introduction to Health Information ..... 3
OFFT 2099 Office Technology Capstone ..... 3
OFFT 2783 Medical Office Practicum ..... 2
Coding Track: 22 credits
CAPL 1022 Microsoft Outlook ..... 1
HSCI 1000 Introduction to Healthcare Careers ..... 3
OFFT 2012 Medical Office: Disease Concepts ..... 2
OFFT 2013 Medical Office: Pharmacology \& Lab Medicine ..... 2
OFFT 2031 ICD Coding ..... 3
OFFT 2032 CPT-4 Coding ..... 3
OFFT 2035 Advanced Coding .....  3
OFFT 2050 Introduction to Health Information ..... 3
OFFT 2783 Medical Office Practicum ..... 2
Healthcare Documentation Track: 22 credits
CAPL 1022 Microsoft Outlook ..... 1
CAPL 1023 Microsoft Word ..... 3
HSCl 1000 Introduction to Healthcare Careers ..... 3
OFFT 1002 Speech Recognition. ..... 1
OFFT 2012 Medical Office: Disease Concepts ..... 2
OFFT 2013 Medical Office: Pharmacology \& Lab Medicine ..... 2
OFFT 2044 Healthcare Documentation Capstone ..... 3
OFFT 2783 Medical Office Practicum ..... 3
OFFT 2099 Office Technology Capstone ..... 3
Career related electives selected with instructor consent ..... 1

## General Education/MnTC Requirements (required for ALL tracks): 7 credits <br> Goal 1 - Communication: 4 credits <br> ENGL 1021 Composition I. . . . . . . . . . . . . . . . . . . . . . . . . . . . 4 <br> Goal 3 and/or Goal 4 - Sciences/Math/Logical Reasoning: 3 credits <br> BIOL 1024 Human Biology. .................................. . . 3 <br> Additional Requirements: Grade of "C" or higher in each required course. Prospective students should be aware that a MN Human Services background study with no restrictions may be required for the internships/practicums. Note: Any career-related electives may be taken from ACCT, BMGT, CAPL, CSCI, ENGL, OFFT, MKTG, PSYC, SPAN, and/or COMM course(s) not already included in the program. Other courses must be approved by academic petition.

## Medical Office Assistant <br> Associate in Applied Science Degree Number of Credits: 60

Program Description: This program is designed for students interested in employment in the medical office field. Program graduates completing the Administrative Track may be employed as administrative assistants in healthcare facilities, the insurance industry, or medical device industry. Program graduates completing the Healthcare Documentation Track may take the registered healthcare documentation specialist (RHDS) credentialing exam. Program graduates holding an RHDS may be employed as medical transcriptionists/editors in transcription service companies, medical clinics, or hospitals. Program graduates completing the Coding Track may take the CCA or CCP credentialing exams. Program graduates holding a coding credential may be employed in healthcare settings such as clinics, insurance companies, government agencies, public health, home health agencies, long-term care facilities, hospitals, and dental offices.

## Core Requirements: 18 credits

CAPL 1010 Introduction to Software Applications ....... 3

OFFT 2006 Medical Office Fundamentals . . . . . . . . . . . . . . . 3
OFFT 2010 Medical Office Terminology. . . . . . . . . . . . . . . . 3
OFFT 2021 Electronic Health Records . . . . . . . . . . . . . . . . . 3
OFFT 2030 Medical Office: Insurance and Billing . . . . . . . . 3
OFFT 2041 Healthcare Documentation Fundamentals . . . . 3
Career/Occupational Requirements: Select one of the three Specialty Track Options

## Administrative Track: $\mathbf{2 6}$ credits

BMGT 2035 Human Relations in Business ..... 3
CAPL 1022 Microsoft Outlook ..... 1
CAPL 1023 Microsoft Word ..... 3
HSCl 1000 Introduction to Healthcare Careers ..... 3
OFFT 1002 Speech Recognition. ..... 1
OFFT 2000 Records Classification Systems ..... 3

## 6 Programs of Study



## 26 credits

BMGT 2035 Human Relations in Business .................... 3

HSCl 1000 Introduction to Healthcare Careers . . . . . . . . . . 3
OFFT 1002 Speech Recognition. . . . . . . . . . . . . . . . . . . . . . 1
OFFT 2012 Medical Office: Disease Concepts . . . . . . . . . . 2
$\begin{aligned} \text { OFFT } 2013 & \begin{array}{l}\text { Medical Office: Pharmacology and } \\ \text { Lab Medicine . . . . . . . . . . . . . . . . . . . . . . . . . } 2\end{array}\end{aligned}$
OFFT 2031 ICD Coding. . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
OFFT 2032 CPT-4 Coding . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
OFFT 2035 Advanced Coding. . . . . . . . . . . . . . . . . . . . . . . . . 3
OFFT 2050 Introduction to Health Information . . . . . . . . . . 3
Medical Office Practicum
Healthcare Documentation Track: $\mathbf{2 6}$ credits
BMGT 2035 Human Relations in Business . . . . . . . . . . . . . . 3
CAPL 1022 Microsoft Outlook . . . . . . . . . . . . . . . . . . . . . . . . 1
CAPL 1023 Microsoft Word . . . . . . . . . . . . . . . . . . . . . . . . . . 3
HSCI 1000 Introduction to Healthcare Careers . . . . . . . . . . 3
OFFT 1002 Speech Recognition. . . . . . . . . . . . . . . . . . . . . . 1
OFFT 2012 Medical Office: Disease Concepts . . . . . . . . . . 2
OFFT $2013 \quad \begin{aligned} & \text { Medical Office: Pharmacology and } \\ & \text { Lab Medicine . ................................. . . . . } 2\end{aligned}$
OFFT 2044 Healthcare Documentation Capstone . . . . . . . . 3
OFFT 2099 Office Technology Capstone ................... . . 3
OFFT 2783 Medical Office Practicum ..................... . . 3

General Education/MnTC Requirements (required for
ALL tracks): 16 credits
Goal 1 - Communication: 7 credits
ENGL 1021 Composition I. .................................. . . . 4
Select one of the following COMM courses: . . . . . . . . . 3
COMM 1031 Interpersonal Communications
COMM 1051 Intercultural Communications
Goal 2 - Critical Thinking is fulfilled when all MnTC goals are complete
Goal 3 and/or Goal 4 - Sciences/Math/Logical Reasoning: 3 credits
BIOL 1024 Human Biology. . . . . . . . . . . . . . . . . . . . . . . . . . 3
Goal 5 - History/Social and Behavioral Sciences: 3 credits
Goal 6 - Humanities and Fine Arts: 3 credits
Goals 7-10: Three credits in one of the four goals.

Additional Requirements: Grade of "C" or higher in each required course; Prospective students should be aware that a MN Human Services background study with no restrictions may be required for the internships/practicum.
Note: Any career-related electives may be taken from ACCT, BMGT, CAPL, CSCI, ENGL, OFFT, MKTG, PSYC, SPAN, and/or COMM course(s) not already included in the program. Other courses must be approved by academic petition.

## Orthotic and Prosthetic Clinical Applications

## Program Options:

Orthotic and Prosthetic Clinical Applications Diploma (71) Orthotic and Prosthetic Fitter AAS Degree (60)

## Diploma Orthotic and Prosthetic Clinical Applications Total Number of Credits: 71

Program Description: Students who earn the Orthotic and Prosthetic Clinical Applications Diploma will meet the requirements to be employed as an Orthotic/Prosthetic Assistant or enter a baccalaureate degree or a master's degree in Orthotics and Prosthetics.

Application Requirements/Program Prerequisites: Orthotic and Prosthetic Fitter AAS OR equivalent skills through work experience in the field assessed by program coordinator OR instructor consent. Assessment score placement in RDNG 1000 or completion of RDNG 0900 or RDNG 0950 with a grade of "C" or higher and assessment score placement in ENGL 1021 or completion of ENGL 0090 with a grade of "C" or higher.

## Program Requirements

Career/Occupational Requirements: 39 credits
OPCA 2010 Clinical Applications of Lower Extremity Foot Orthoses 4
OPCA 2020 Clinical Applications of Lower Extremity Orthoses 4
OPCA 2030 Clinical Applications of Upper Extremity Orthoses3
OPCA 2040 Clinical Applications of Spinal Orthoses. ..... 4

OPCA 2050 Clinical Applications of Trans-Tibial Prostheses I3

OPCA 2060 Clinical Applications of Trans-Tibial Prostheses II4

OPCA 2070 Clinical Applications of Trans-Femoral Prostheses .4
OPCA 2080 Clinical Applications of Upper Limb Prostheses 4
$\begin{array}{llll}\text { OPCA } & 2090 & \text { Clinical Internship ......................... } 7 \\ \text { HITH } & 1001\end{array}$
General Education/MnTC Requirements: 32 credits
Goal 1-Communication: 7 credits
ENGL 1021 Composition I................................. 4
Select one of the following COMM courses:. ............... . 3
COMM 1021 Fundamentals of Public Speaking
COMM 1031 Interpersonal Communication
COMM 1041 Small Group Communication
COMM 1051 Intercultural Communication
Goal 3 and/or 4 - Sciences/Math/Logical Reasoning: 19 credits
PHYS 1020 Physics Concepts. ............................ . 4
BIOL 1020 Biology Concepts. ............................ . 4
BIOL 1024 Human Biology. ............................. . . 3
CHEM 1020 Chemistry Concepts.......................... . 4
MATH 1025 Statistics .................................... 4
Goal 5 - History/Social and Behavioral Sciences: 6 credits
SOC 1020 Introduction to Sociology. . . . . . . . . . . . . . . . . 3
PSYC 1041 Developmental Psychology Lifespan. ......... 4

## Associate in Applied Science Degree Orthotic and Prosthetic Fitter Total Number of Credits: 60

Program Description: Students who earn the Orthotic and Prosthetic Fitter Associate in Applied Science degree will meet the requirements to be employed as an Orthotic Fitter.
Application Requirements/Program Prerequisites: Assessment score placement in RDNG 0950 or above or completion of RDNG 0900 with a grade of " C " or higher and assessment score placement in ENGL 0090 or above or completion of ENGL 0080 with a grade of "C" or higher.
Program Requirements
Career/Occupational Requirements: 36 credits

| OPCA | 1010 | Introduction to Orthotic and Prosthetic Lab and Basic Hand Skills $\qquad$ |
| :---: | :---: | :---: |
| OPCA | 1020 | Foot Orthosis Fabrication and Shoe Modifications. |
| OPCA | 1030 | Metal Orthoses Fabrication. . . . . . . . . . . . . . . 4 |
| OPCA | 1040 | Leatherwork for Lower Limb Orthoses . . . . . . 3 |
| OPCA | 1050 | Thermoplastic Orthoses. . . . . . . . . . . . . . . . . . 4 |
| OPCA | 1060 | Trans-Tibial Exoskeletal Fabrications . . . . . . . . 4 |


OPCA 1070 Trans-Tibial Endoskeletal Fabrications ..... 3
OPCA 1080 Trans-Femoral Fabrications .....  3
OPCA 1090 Trans-Radial/Humeral Fabrications. ..... 4
OPCA 1095 Orthotic Fitter/Prefabricated Orthoses .....  4
HLTH 1001 Medical Terminology ..... 2
General Education/MnTC Requirements: 24 credits
Goal 1-Communication: 7 credits
ENGL 1021 Composition I. ..... 4
Select one of the following COMM courses: ..... 3
COMM 1021 Fundamentals of Public Speaking
COMM 1031 Interpersonal Communication
COMM 1041 Small Group Communication
COMM 1051 Intercultural Communication
Goal 2 - Critical Thinking is fulfilled when all MnTC goals arecompleteGoal 3 and/or 4 - Sciences/Math/Logical Reasoning:8 credits
PHYS 1020 Physics Concepts. ..... 4
BIOL 1020 Biology Concepts .....  4
Goal 5 - History/Social and Behavioral Sciences: 6 credits
SOC 1020 Introduction to Sociology. ..... 3
PSYC 1041 Developmental Psychology Lifespan. ..... 4
Goal 6 - Humanities and Fine Arts: 3 credits

## 6 Programs of Study

## Orthotic Technology

## Program Options:

Orthotic Technician Diploma (46)
Orthotic Technology AAS Degree (60)

## Diploma <br> Orthotic Technician <br> Total Number of Credits: 46

Program Description: The Orthotic Technician program prepares students for entry into the field of Orthotics at the technician level. Didactic and laboratory coursework is combined with individualized instruction in the areas of lower limb, upper limb and spinal. Each of these areas contains instruction in anatomy, terminology, measurement forms, fabrication process, system alignment, and suspension techniques, components, materials, repair and maintenance procedures. The clinical section enables the student to practice fabrication skills in an orthotic facility for a minimum of 160 hours.

Career/Occupational Requirements: 40 credits

ORTE $1020 \quad$| Introduction to the Orthotic |
| :--- |
| Lab and Basic Hand Skills . . . . . . . . . . . . . . . 5 |

ORTE 1030 Spinal Orthoses Fabrication ................. 5
ORTE 1040 Foot Orthosis Fabrication
and Shoe Modification/Repair . ............. . . 3
ORTE 1050 Stirrup Layout and Fabrication ............... . . 3
ORTE 1060 Ankle-Foot Orthoses Fabrication ............ 3
ORTE 1070 Knee-Ankle-Foot Orthoses Fabrication ....... 5
ORTE $2000 \begin{aligned} & \text { Leather Work for Lower-Limb } \\ & \text { Orthoses Fabrication . . . . . . . . . . . . . . . . . . . } 4\end{aligned}$
ORTE 2010 Thermoplastic Orthoses. . . . . . . . . . . . . . . . . . . 4
ORTE 2020 Upper-Limb Fabrication ...................... . . 4
ORTE 2780 Orthotic Technician Clinical. . . . . . . . . . . . . . . 4
General Education/MnTC Requirements: *6 credits
Goal 1 - Communication: 3 credits
Select one of the following communication courses . . . . 3
ENGL 1021 Composition I
COMM 1021 Fundamentals of Public Speaking
COMM 1031 Interpersonal Communication
COMM 1041 Small Group Communication
COMM 1051 Intercultural Communication
General Education/MnTC electives . . . . . . . . . . . . . . . . . . . . . 2-3

* Completion of all general education credits is recommended before enrolling in ORTE 2780.


## Associate in Applied Science Degree Orthotic Technology Total Number of Credits: 60

Program Description: The Orthotic Technician program prepares individuals for entry into the field of orthotics at the technician level. Didactic and laboratory coursework is combined with individualized instruction in the areas of lower limb, upper limb and spinal. Each of these areas contains instruction in anatomy, terminology, measurements forms, fabrication process, system alignment, and suspension techniques, components, materials, repair and maintenance procedures. The clinical section enables the student to practice fabrication skills in an orthotic facility for a minimum of 160 hours.

## Career/Occupational Requirements: 40 credits

ORTE 1020 Introduction to the Orthotic Lab and Basic Hand Skills
ORTE 1030 Spinal Orthoses Fabrication ................. . . 5
ORTE 1040 Foot Orthosis Fabrication and Shoe Modification/Repair 3
ORTE 1050 Stirrup Layout and Fabrication ............... 3
ORTE 1060 Ankle-Foot Orthosis Fabrication .............. . 3
ORTE 1070 Knee-Ankle-Foot Orthosis Fabrication. ........ 5
ORTE 2000 Leatherwork for Lower-Limb Orthoses ....... . 4
ORTE 2010 Thermoplastic Orthoses. . . . . . . . . . . . . . . . . . . 4
ORTE 2020 Upper Limb Fabrication . . . . . . . . . . . . . . . . . . 4
ORTE 2780 Orthotic Technician Clinical. . . . . . . . . . . . . . . 4
General Education/MnTC Requirements: 20 credits
Goal 1 - Communication: 7 credits
ENGL 1021 Composition I. ............................... . . 4
Select one of the following COMM courses. . . . . . . . . . . . . . . . . 3
COMM 1021 Fundamentals of Public Speaking
COMM 1031 Interpersonal Communication
COMM 1041 Small Group Communication
COMM 1051 Intercultural Communication
Goal 2 - Critical Thinking is fulfilled when all MnTC goals are complete
Goal 3 and/or Goal 4 - Sciences/Math/Logical Reasoning: w3-4 credits
Goal 5 - History/Social and Behavioral Sciences: 3 credits
Goal 6 - Humanities and Fine Arts: 3 credits
Goals 7-10: Three credits in one of the four goals

## Paramedic Technology

## See Emergency Medical Services

## Pedorthic

## Program Options:

Pedorthic Certificate (18)
Program Description: A pedorthist is a health care professional who is specifically educated and trained to manage comprehensive pedorthic patient care. This includes patient assessment, formulation of a treatment plan, implementation of the treatment plan, follow-up and practice management. This pedorthic certificate is designed to exceed the requirements established by the National Commission on Orthotic and Prosthetic Education (NCOPE) for a therapeutic shoe fitter pre-certification education and pedorthic pre-certification education. After meeting experience and eligibility requirements graduates can seek certification from the American Board for Certification in Orthotics, Prosthetics \& Pedorthics.

Career/Occupational Requirements: 18 credits
PEDO 1020 Therapeutic Shoe Fitter . . . . . . . . . . . . . . . . . . 3
PEDO 1030 Shoe Modifications ............................ . 3
PEDO 1040 Fabrication of Functional and Accommodative Orthoses. .3
PEDO 1050 Functional Anatomy and Pathology of the Foot and Ankle. . 3
PEDO 1060 Clinical Applications of Foot Orthoses ....... 3
PEDO 1070 Clinical Applications of Prefabricated Ankle-Foot Orthoses

## Prosthetic Technology

Program Options:<br>Prosthetic Technician Diploma (46)<br>Prosthetic Technology AAS Degree (60)

## Diploma <br> Prosthetic Technician <br> Total Number of Credits: 46

Program Description: The Prosthetic Technician program prepares individuals for entry into the field of prosthetics at the technician level. Didactic and laboratory coursework is combined with individualized instruction in the areas of lower limb and upper limb. Each of these areas contains instruction in anatomy, terminology, measurement forms, fabrication process, system alignment, suspension techniques, components, materials, repair and maintenance procedures. The clinical
section enables the student to practice fabrication skills in a prosthetic facility for a minimum of 160 hours.

## Career/Occupational Requirements: 40 credits

| PRTE | 1020 | Introduction to Prosthetics |
| :---: | :---: | :---: |
| PRTE | 1030 | Anatomy of the Trans-Tibial Amputations. |
| PRTE | 1040 | Trans-Tibial Socket Inserts, Alignment and Duplication |
| PRTE | 1050 | Finishing Procedures for Patellar Tendon-Bearing (PTB) Prosthesis. |
| PRTE | 1060 | Fabrication of Patellar TendonBearing (PTB) Joint and Lacer |
| PRTE | 1070 | Anatomy of Trans-Femoral Amputati |
| PRTE | 1080 | Trans-Femoral Socket Fabrication |
| PRTE | 2000 | Finishing Procedures for Trans-Femoral Prostheses |
| PRTE | 2010 | Thermoplastic Check Socket Fabrication .... 3 |
| PRTE | 2020 | Anatomy of Upper Limb Amputations and Long Trans-Radial Fabrication |
| PRTE | 2030 | Fabrication of Short Trans-Radial and Trans-Humeral Prosthesis. |
| PRTE | 2780 | Clinical Internship Practicum. |

## General Education/MnTC Requirements: *6 credits <br> Goal 1 - Communication: 3 credits

Select one of the following communication courses:
ENGL 1021 Composition I
COMM 1021 Fundamentals of Public Speaking
COMM 1031 Interpersonal Communication
COMM 1041 Small Group Communication
COMM 1051 Intercultural Communication
General Education/MnTC electives. . . . . . . . . . . . . . . . . 2-3
*Completion of all general education credits is recommended before enrolling in PRTE 2780.

## Associate in Applied Science Degree <br> Prosthetic Technology <br> Total Number of Credits: 60

Program Description: The Prosthetic Technician program prepares individuals for entry into the field of prosthetics at the technician level. Didactic and laboratory coursework is combined with individualized instruction in the areas of lower limb and upper limb. Each of these areas contains instruction in anatomy, terminology, measurement forms, fabrication process, system alignment, suspension techniques, components, materials, repair and maintenance procedures. The clinical section enables the student to practice fabrication skills in a prosthetic facility for a minimum of 160 hours.

## Career/Occupational Requirements: 40 credits

PRTE 1020 Introduction to Prosthetics 3

## 6 Programs of Study

| PRTE | 1030 | Anatomy of the Trans-Tibial Amputations. . . |
| :---: | :---: | :---: |
| PRTE | 1040 | Trans-Tibial Socket Inserts, Alignment, and Duplication. . . . . . . . . . . . . . . . 3 |
| PRTE | 1050 | Finishing Procedures for Patellar <br> Tendon-Bearing (PTB) Prostheses . . . . . . . . . . . 3 |
| PRTE | 1060 | Fabrication of Patellar Tendon-Bearing (PTB) Joint and Lacer. |
| PRTE | 1070 | Anatomy of Trans-Femoral Amputations. . . . . 3 |
| PRTE | 1080 | Trans-Femoral Socket Fabrication. |
| PRTE | 2000 | Finishing Procedures for Trans-Femoral Prostheses . . . . . . . . . . . . . . . . 3 |
| PRTE | 2010 | Thermo-Plastic Check Socket Fabrication. . . . 3 |
| PRTE | 2020 | Anatomy of Upper-Limb Amputations and Long Trans-Radial Fabrication ........... 3 |
| PRTE | 2030 | Fabrication of Short Trans-Radial and Trans-Humeral Prostheses . . . . . . . . . . . . . 4 |
| PRTE | 2780 | Clinical Internship Practicum. |
| General Education/MnTC Requirements: 20 credits Goal 1 - Communication: 7 credits |  |  |
| ENGL | 1021 | Composition I.......................... . 4 |
| Select one of the following COMM courses . . . . . . . . 3 |  |  |
| COMM |  | Fundamentals of Public Speaking |
| COMM |  | Interpersonal Communication |
| COMM | 1041 | Small Group Communication |
| COMM | 1051 | Intercultural Communication |
| Goal compl | - Critic <br> te | IThinking is fulfilled when all MnTC goals are |
| $\begin{aligned} & \text { Gal } 3 \\ & 3-4 \text { ch } \end{aligned}$ | and/or edits | Goal 4 - Sciences/Math/Logical Reasoning: |
| Goal 5 | - Histor | /Social and Behavioral Sciences: 3 credits |
| Goal 6 | - Hum | nities and Fine Arts: 3 credits |
| Goals | 7-10: | ree credits in one of the four goals |
| Public Safety |  |  |
| Program Options: |  |  |
| Public Safety Leadership Certificate (16) |  |  |
| Fire Services Certificate (16) |  |  |
| Public Safety AAS Degree (60) |  |  |
| Certificate |  |  |
| Public Safety Leadership |  |  |
| Total Number of Credits: 16 |  |  |
| Program Description: This certificate presents a good overview of information for potential or current leaders in the public safety |  |  |

field. It provides formal recognition that the student has a basic understanding of public safety leadership. Should the student elect to proceed with the program and seek a degree, this certificate fits into the Public Safety AAS Degree as a specialty track.

```
Career/Occupational Requirements: 16 credits
PSAF 1020 Foundations of Public Safety. . . . . . . . . . . . . 3
PSAF 1032 Principles of Public Safety Leadership ....... }
PSAF 1035 Community Service Principles . . . . . . . . . . . . 3
Select 7 credits from the following:
BMGT 1020 Introduction to Business . ................... . . 3
BMGT 2040 Human Resource Management. . . . . . . . . . . 3
CJS 2081 Police in the Community . . . . . . . . . . . . . . . 3
MKTG 2010 Workplace Leadership...................... . 3
PE 1060 Personal Fitness. . . . . . . . . . . . . . . . . . . . . . 2
PSAF 1790 Independent Study. ...................... . . .4
PSAF 2040 Incident Command Strategies . ............. . 4
SPAN 1005 Spanish for Public Safety Professionals I . . . . 3
```


## Certificate <br> Fire Services <br> Total Number of Credits: 16

Program Description: This certificate provides recognition to the student who has completed ten credits in the basic firefighter training series. With six additional elective credits, an entry level firefighter will receive acknowledgement that he/she is fully capable of providing emergency services. Additionally, this certificate fits into the Public Safety AAS Degree as a specialty track.

## Career/Occupational Requirements: 16 credits

| FRTA | 1091 | Firefight |
| :---: | :---: | :---: |
| FRTA | 1092 | Firefighter II |
| FRTA | 1095 | Hazardous Materials Operations. . . . . . . . . . 3 |
| Select 6 credits from the following: |  |  |
| EMS | 1015 | Emergency Medical Responder (formerly First Responder) . |
| EMSB | 1020 | Emergency Medical Technician. . . . . . . . . . . 9 |
| PE | 1060 | Personal Fitness. |
| PSAF | 1020 | Foundations of Public Safety |
| PSAF | 1790 | Independent Study. . . . . . . . . . . . . . . . . . 1-4 |
| SPAN | 1005 | Spanish for Public Safety Professionals I . |

## Associate in Applied Science Degree Public Safety <br> Total Number of Credits: 60

Program Description: This degree is designed to provide an interdisciplinary approach for individuals already working in the field
and those interested in pursuing career opportunities in public safety. which includes emergency medical services (EMS), firefighting, emergency management, dispatching/communications, leadership/ management, and public safety education. The student will interact with others in their discipline as well as those with similar missions to understand how these components function as a whole in an "allhazards" approach to public safety. There are multiple classes with national and/or state certifications available through fire and public safety communication professional organizations.

## Application Requirements/Program Prerequisites

Assessment score placement in RDNG 0950 or above, or completion of RDNG 0900 with a grade of " $C$ " or higher.

## Career/Occupational Requirements <br> Career/Occupational Core: 9 credits

PSAF 1020 Foundations of Public Safety. ................ . 3

PSAF 2045 Project Management. . . . . . . . . . . . . . . . . . . . . 3
PSAF 2050 Public Safety Capstone . . . . . . . . . . . . . . . . . . 3
Career Occupational Electives: Select 15 credits from the following:
CAPL 1010 Introduction to Software Applications ........ 3
PE 1060 Personal Fitness. ........................... . 2
PSAF 1032 Principles of Public Safety. ................... . . 3
PSAF 1035 Community Service Principles .............. 3
PSAF 1790 Independent Study. .........................1-4
PSAF 1080 Public Safety Telecommunicator. ............. 3
FRTA 2011 Building Construction for the Fire Service..... 3
FRTA 2021 Fire Instructor. ................................ . . 2
FRTA 2031 Fire Officer I. ................................ . . 2
FRTA 2071 Fire Apparatus Operator . . . . . . . . . . . . . . . . . 3
FRTA 2081 Structural Firefighting: Strategies \& Tactics . . . 2
FRTA 2096 Hazardous Materials Technician ............. 3
Any EMS, PSAF, and/or CJS courses not part of core or selected specialty track.
General Education/MnTC courses based on student academic, career, or transfer goals with instructor consent by academic petition.
ACE-transcripted military credits may also be applied with instructor consent.

## Career/Occupational Specialty Track: 16 credits

Select one of three Specialty Track Options:

## Fire Suppression

FRTA 1091 Firefighter I. .................................... . . 5
FRTA 1092 Firefighter II. ................................. . . 2
Select 9 credits from the following
FRTA 1095 Hazardous Materials Operations. . ............ 3
EMS 1010 AHA BLS for the Healthcare Provider (CPR) . . . 1
EMS 1015 Emergency Medical Responder
(formerly First Responder) . . . . . . . . . . . . . . . . . 3
EMSB 1020 Emergency Medical Technician............... 9

## Emergency Medical Services

EMSB 1020 Emergency Medical Technician. ..... 9
EMS 1025 EMS Interventions I ..... 5
EMS 1026 EMS Interventions II ..... 2
Leadership and Management
BMGT 1020 Introduction to Business ..... 3
BMGT 2040 Human Resource Management ..... 3
MKTG 2010 Workplace Leadership. ..... 3
PSAF 1790 Independent Study. ..... 1-4
Electives chosen from any BMGT, EMS, PSAF, and/or CJS courses notpart of core or selected specialty track
General Education/MnTC Requirements: 20 credits
Goal 1 - Communication: 7 credits
ENGL 1021 Composition I. ..... 4
Select one of the following COMM courses ..... 3
COMM 1021 Fundamentals of Public SpeakingCOMM 1031 Interpersonal Communication - RecommendedCOMM 1041 Small Group Communication
COMM 1051 Intercultural Communication - Recommended
Goal 2 - Critical Thinking is fulfilled when all MnTC goals arecomplete
Goal 3 and/or Goal 4 - Sciences/Math/Logical Reasoning: 3credits
ESCI 1080 Natural Disasters 3 -Recommended
Goal 5 - History/Social and Behavioral Sciences: 7 credits
PSYC 1020 General Psychology ..... 4
Select a course from any Sociology courses. ..... 3
SOC 1020 Intro to Sociology. ........... . 3 -Recommended
SOC 1080 Intro to Criminal Justice ..... 3 -Recommended
Goal 6 - Humanities and Fine Arts: 3 credits
PHIL 1031 Ethics or. ..... 3
PHIL 1035 Biomedical Ethics
Goals 3-10: Three credits in one of the four goals
Radiologic Technology
Program Options:
Radiologic Technology Associate in Applied Science (78)Computed Tomography Advanced Certificate (16)
Associate in Applied Science Degree Radiologic Technology Total Number of Credits: 78

Program Description: The purpose of the program is to prepare entry-level radiographers to meet the community needs. Graduates of

## 6 Programs of Study

the program must successfully pass the national certification exam of The American Registry of Radiologic Technologists. The program has been awarded the maximum accreditation status by the Joint Review Committee in Education on Radiologic Technology.

Application Requirements/Program Prerequisites - Admission to the program is selective and applicants must meet minimum admission requirements. However meeting the minimum admission requirements does not guarantee admission when there are more applicants than spaces. Applicants are ranked on several criteria. Refer to program information available on Century website, in Admissions, or the Advising, Counseling, \& Career Center.

Admission requirements: Assessment score placement into MATH 0070 or higher or completion of MATH 0030 with a grade of " $C$ " or higher.
BIOL 1024 with a grade of " $C$ " or higher.
PHYS 1020 with a grade of " $C$ " or higher.

## Additional Program Requirements:

1. A current physical/technical standards examination, including tuberculosis screening, and documentation of current immunizations as recommended by CDC and clinical affiliates.
2. Minnesota Human Services background check with no restrictions is required prior to clinical coursework.
3. Two-year CPR certification for the Health Care Provider must be valid from program start date through program completion.
4. Students must possess no uncorrectable hearing or vision problems.

## Career/Occupational Requirements: 58 credits <br> RADT 1020 Fundamentals of Radiography. . . . . . . . . . . . . . 3

RADT 1031 Anatomy and Positioning I. . . . . . . . . . . . . . . . . 5
RADT 1032 Anatomy and Positioning II . . . . . . . . . . . . . . . . 3
RADT 1040 Radiography Exposure Factors . . . . . . . . . . . . . 3
RADT 1781 Clinical Radiography I . . . . . . . . . . . . . . . . . . . . 6
RADT 1782 Clinical Radiography II. . . . . . . . . . . . . . . . . . . . 6
RADT 2000 Radiation Biology and Protection . . . . . . . . . . . 1
RADT 2010 Imaging Pathology. . . . . . . . . . . . . . . . . . . . . . . 1
RADT 2020 Introduction to Sectional Anatomy . . . . . . . . . . 2
RADT 2030 Radiation Physics and Quality Control ....... 2
RADT 2060 Radiography Seminar . . . . . . . . . . . . . . . . . . . . 2
RADT 2090 Topics in Radiology . . . . . . . . . . . . . . . . . . . . . . 1
RADT 2100 Introduction to Computed Tomography. . . . . . . 1
RADT 2783 Clinical Radiography III . . . . . . . . . . . . . . . . . . . 8
RADT 2784 Clinical Radiography IV . . . . . . . . . . . . . . . . . . . 8
RADT 2785 Clinical Radiography V. . . . . . . . . . . . . . . . . . . . . 6
Additional Optional Career/Occupational courses
RADT 1051 Bone Densitometry I . . . . . . . . . . . . . . . . . . . . . 1
RADT 1052 Bone Densitometry II. . . . . . . . . . . . . . . . . . . . . 1
RADT 2095 Introduction to Mammography . . . . . . . . . . . . . 1

General Education/MnTC Requirements: 20 Credits
Goal 1 - Communication: 7 credits
ENGL 1021 Composition I. . . . . . . . . . . . . . . . . . . . . . . . . . . 4
Select one of the following COMM courses . . . . . . . . . 3
COMM 1021 Fundamentals of Public Speaking
COMM 1031 Interpersonal Communication
COMM 1041 Small Group Communication
COMM 1051 Intercultural Communication
Goal 2 - Critical Thinking is fulfilled when all MnTC goals are complete
Goal 3 and/or Goal 4 - Sciences/Math/Logical Reasoning: 7 credits

BIOL 1024 Human Biology. . . . . . . . . . . . . . . . . . . . . . . . . . 3
PHYS 1020 Physics Concepts. . . . . . . . . . . . . . . . . . . . . . . . 4
Goal 5 - History/Social and Behavioral Sciences: 3 credits
Goal 6 - Humanities and Fine Arts: 3 credits
Goals 7 - 10: Three credits in ONE of the four goals
(fulfilled by COMM course)

## Certificate

Computed Tomography
Total Number of Credits: 16
Program Description: Courses of the Computed Tomography Certificate are designed to assist the individual preparing for the American Registry of Radiologic Technologist Examination in Computed Tomography.
Application Requirement: Currently enrolled in a JRCERT accredited program or be an ARRT registered technologist in good standing. Proof of the former will be required upon initial application to the courses.

## Career/Occupational Requirements: 16 credits

RADT 2800 Cross Sectional Anatomy I . . . . . . . . . . . . . . . . 2
RADT 2804 Cross Sectional Anatomy II . . . . . . . . . . . . . . . . 2
RADT 2808 Patient Assessment in Computed Tomography 2
RADT $2812 \begin{aligned} & \text { Computed Tomography Physics and } \\ & \text { Instrumentation I . . . . . . . . . . . . . . . . . . . . } 2\end{aligned}$
RADT $2816 \begin{aligned} & \text { Computed Tomography Physics and } \\ & \text { Instrumentation II . . . . . . . . . . . . . . . . . . . . } 2\end{aligned}$
RADT 2820 Computed Tomography Radiation Safety and Quality Control2

RADT 2824 Computed Tomography Pathology. . . . . . . . . . . 2
RADT 2828 Computed Tomography Imaging and Application.2

## Renewable Energy

## Program Options:

Solar Assessor Certificate (16)
Advanced Photovoltaic Energy Systems Certificate (30)
Advanced Solar Thermal Energy Systems Certificate (30)
Energy Technical Specialist Associate in
Applied Science Degree (60)

## Certificate

## Solar Assessor

## Total Number of Credits: 16

Program Description: The Solar Assessor Certificate is designed to prepare students to work as solar assessors for solar contractors. Graduates will be able to do a basic site assessment including the feasibility of solar thermal, estimated costs, recommend product and other information for a solar contractor to create a professional assessment and cost estimate of a solar project.
Career/Occupational Requirements: 16 credits

| FST | 1000 | Construction Technology .................. 4 |
| :--- | :--- | :--- | :--- |
| FST | 1001 | Facility Workplace Safety ................ 2 |
| SOLR | 1020 | Introduction to Solar Site Assessment ....... 3 |
| SOLR | 1030 | Construction for Solar Energy ............ 2 |
| SOLR | 2030 | Advanced Solar Thermal Energy Concepts.... 3 |
| SOLR | 2035 | Solar Thermal Lab ......................... 2 |

## Certificate <br> Advanced Solar Photovoltaic Energy Systems Total Number of Credits: 30

Program Description: This Certificate is designed to provide entrance into the field of photovoltaic energy systems. It is also designed to provide existing contractors and other industry professionals with skills necessary to work in photovoltaic installation and maintenance.

Program Prerequisites: Assessment score placement in RDNG 0950 or above, or completion of RDNG 0900 with a grade of " C " or higher.

## Career/Occupational Requirements: 24 credits

| ECAD | 1023 | Blueprint Reading for Renewable Energy. |
| :---: | :---: | :---: |
| FST | 1001 | Facility Workplace Safety |
| FST | 1030 | Basic Electricity |
| MATH | 1015 | Applied Mathematics |
| SOLR | 1020 | Introduction to Solar Site Assessment |
| SOLR | 1030 | Construction for Solar Energy |
| SOLR | 1780 | Photovoltaic System |
|  |  | Integration Internship |

SOLR 2020 Advanced Photovoltaic Systems ..... 3
SOLR 2025 Photovoltaic Systems Lab ..... 2
General Education/MnTC Requirements: 4 credits
ESCI 1040 Energy Concepts ..... 3
ISCI 1045 Energy Concepts Lab ..... 1
Additional Requirements: Sufficient credits to total 30
Certificate
Advanced Solar Thermal Energy Systems Total Number of Credits (30)

Program Description: The Advanced Certificate in Solar Thermal Energy Systems is designed to provide existing contractors and other industry professionals with skills necessary to become solar contractors.

Application Requirements: Must have a diploma or degree in plumbing, pipefitting, construction HVAC or related field, or consent of instructor.

## Career/Occupational Requirements: 24-26 credits

ECAD 1023 Blueprint Reading for Renewable Energy ..... 3
FST 1001 Facility Workplace Safety ..... 2
HVAC 1073 Hydronic Heating and Boilers ..... 3
HVAC 1080 Residential Energy Auditing and Conservation. .....  3
SOLR 1020 Introduction to Solar Site Assessment ..... 3
SOLR 1781 Solar Thermal Installation Internship ..... 1-3
SOLR 2030 Advanced Solar Thermal Energy Concepts ..... 3
SOLR 2035 Solar Thermal Lab ..... 2

## General Education/MnTC Requirements: 4 credits

Goal 3 and/or Goal 4 - Sciences/Math/Logical Reasoning: 4 credits
ESCI 1040 Energy Concepts . . . . . . . . . . . . . . . . . . . . . . . . 3

ESCI 1045 Energy Concepts Lab1

Additional Requirements: Sufficient credits to total 30. Minimum of 4 credits in a related field such as electrical, HVAC or FST.

## Associate in Applied Science Degree Energy Technical Specialist Total Number of Credits: 60

Program Description: This AAS Degree will convey the skills and knowledge necessary to be successful in the traditional and renewable energy fields. The degree will prepare students for work as technicians in the following industries: coal-fired electrical power generation, natural gas distribution, ethanol production, biodiesel production, wing turbine maintenance and solar energy.
Core Requirements: 33 credits
ECAD 1020 Interpreting Engineering Drawings
2

## 6 Programs of Study

FST 1000 Construction Technology . . . . . . . . . . . . . . . . . . 4
FST 1001 Facility Workplace Safety ..... 2
FST 1030 Basic Electricity ..... 3
FST 1033 Electric Motors and Electric Controls ..... 3
MATH 1015 Applied Mathematics ..... 5
Consortium Digital Electronics ..... 2
Consortium Hydraulics ..... 3
Consortium Mechanical Fundamentals for Process Control ..... 3
Consortium PLC Fundamentals ..... 3
Consortium Introduction to Process Control and Instrumentation ..... 3

## Career/Occupational Requirements: 10 credits

Students must choose a minimum of 10 credits from one of the Energy Technician tracks offered by Century College (solar) or one of its partner colleges. These tracks may include solar, wind, biodiesel, ethanol or other approved tracks.
SOLR 1020 Introduction to Solar Site Assessment . ....... 3
SOLR 1030 Construction for Solar Energy . . .............. 2
SOLR 2030 Advanced Solar Thermal Energy Concepts .... 3
SOLR 2035 Solar Thermal Lab ........................... . 2
Biofuels Production: Diesel-Minnesota West Community
and Technical College .................................. 10
Biofuels Production: Ethanol-Minnesota West Community
and Technical College ...................................... . . . 10
Fossil Fuels-St. Cloud Technical College . . . . . . . . . . . . . . . . . . 10
Power Generation-Alexandria Technical College .............. 10
Wind Power-Minnesota West Community
and Technical College ................................... 10
General Education/MnTC Requirements: 17 credits
Goal 1 - Communication: 7 credits
ENGL 1021 Composition I................................. . 4
Select one of the following COMM courses: .................... 3
COMM 1021 Fundamentals of Public Speaking
COMM 1031 Interpersonal Communication
COMM 1041 Small Group Communication
COMM 1051 Intercultural Communication
Goal 2 - Critical Thinking is fulfilled when all MnTC goals are complete
Goal 3 and/or Goal 4 - Sciences/Math/Logical Reasoning: 7 credits
ESCI 1040 Energy Concepts . . . . . . . . . . . . . . . . . . . . . . . . 3
PHYS 1020 Physics Concepts. ........................... . 4
Goal 5 - History/Social and Behavioral Sciences: OR
Goal 6 - Humanities and Fine Arts: 3 credits
Goals 7-10: Three credits in one of the four goals

## Sports Management

## Program Options:

Ice Arena Management Certificate (21)
Golf Course Management Certific ate (21)
Sports/Athletic Management Certificate (21)
Program Description: The sports management program is designed to prepare individuals who seek to move into workplace positions and upgrade proficiency of individuals who are currently employed in sport management positions. This certificate focuses on the skills, knowledge, and credentials to support advancement of individuals within an organization and the sports management occupational field. Coursework helps participants develop a strong blend of field experience and leadership skills. Students wishing to transfer to a four-year degree program should consult with a counselor, the program coordinator, and the college they intend to transfer to. They may choose to also complete the AA degree including the Sports Management certificate credits in the elective area.

## Certificate <br> Ice Arena Management <br> Total Number of Credits: 21

The Ice Arena Management Certificate is designed to prepare individuals for employment as ice arena managers.

## Program Requirements

## Career/Occupational Requirements: 15 credits

BMGT 1020 Introduction to Business ..... 3
PE 2080 Introduction to Sports Management ..... 3
COMM 1031 Interpersonal Communication ..... 3
HVAC 1041 Basic Refrigeration I ..... 3
PE 1780 Internship: Sports Facility/Operations
Management ..... 3
General Education/MnTC Requirments:
Additional Requirements: 6 credits
Select a minimum of two courses from the following
FST 1030 Basic Electricity ..... 3
POLS 1033 State and Local Government. ..... 3
BMGT 2051 Legal Environment of Business ..... 3
MKTG 1066 Event, Convention, and Meeting Planning ..... 3
MKTG 2055 Web and Mobile Marketing ..... 3
PE 1080 Foundations of Physical Education ..... 3
HVAC 1042 Basic Refrigeration II ..... 3

## Certificate <br> Golf Course Management <br> Total Number of Credits: 21

Program Description: The Golf Course Management Certificate is designed to prepare individuals for employment at a golf course in the areas of turf maintenance, pro shop manager or greens keeper.

## Program Requirements

Career/Occupational Requirements: 15 credits
BMGT $1020 \quad$ Introduction to Business ................... . . 3
COMM 1031 Interpersonal Communication................ . 3
HORT 1000 Introduction to Horticulture . . . . . . . . . . . . . . . . 3
PE 2080 Introduction to Sports Management. . ........ 3
PE 1780 Internship: Sports Facility/Operations Management 3 OR.
PE 2780 Internship: Sports Management . . . . . . . . . . . 3

## General Education/MnTC Requirements:

## Additional Requirements: 6 credits

Select a minimum of two courses from the following
BMGT $2051 \quad$ Legal Environment of Business ............. 3
FST 1030 Basic Electricity ............................ . . 3
HORT 1023 Soil Science. ................................... . . 3
HORT 1025 Pest Management. . . . . . . . . . . . . . . . . . . . . . . 3
HORT 2045 Turfgrass Science and Management. . . . . . . . . 3
HVAC 1041 Basic Refrigeration I ......................... . . 3
MKTG 1066 Event, Convention, and Meeting Planning .... 3
MKTG 2055 Web and Mobile Marketing .................. . 3
POLS 1033 State and Local Government. . . . . . . . . . . . . . . 3
PE 1080 Foundations of Physical Education ........... 3

## Certificate

Sports/Athletic Management
Total Number of Credits: 21
Program Description: The Sports/Athletic Management Certificate is designed to prepare individuals for employment as sport/athletic field managers.

## Program Requirements

| Career/Occupational Requirements: 15 credits |  |  |  |
| :---: | :---: | :---: | :---: |
| BMGT | 1020 | Introduction to Business | 3 |
| POLS | 1033 | State and Local Government. | 3 |
| PE | 2080 | Introduction to Sports Management. | 3 |
| COMM | 1031 | Interpersonal Communication | 3 |
| PE | 1780 | Internship: Sports Facility/Operations Management 3 OR |  |
| PE | 2780 | Internship: Sports Management . . |  |

## General Education/MnTC Requirements:

## Additional Requirements: 6 credits <br> Select a minimum of two courses from the following:

BMGT 2030 Management Fundamentals ..... 3
BMGT 2035 Human Relations in Business ..... 3
BMGT 2051 Legal Environment of Business ..... 3
MKTG 1066 Event, Convention, and Meeting Planning ..... 3
MKTG 2055 Web and Mobile Marketing ..... 3
PE 1080 Foundations of Physical Education ..... 3
HORT 1023 Soil Science ..... 3
HORT 2045 Turf Science Management ..... 3
HVAC 1041 Basic Refrigeration I ..... 3
HVAC 1042 Basic Refrigeration II. ..... 3
Translating and Interpreting

## Program Options:

Translating and Interpreting Certificate (30)
Translating and Interpreting AAS Degree (60)

## Certificate

Translating and Interpreting
Total Number of Credits: 30
Program Description: The Translating and Interpreting Certificate is designed to educate students who wish to develop professional interpreting skills and prepare for careers in our increasingly diverse population. It is especially well suited for students who have previous post-secondary education who wish to provide accurate, culturallycompetent interpretation in a variety of settings. Coursework includes consecutive interpreting, simultaneous interpreting, translation techniques, standards of practice and codes of ethics of interpreting, intercultural communication, critical thinking, collaboration, and concepts in psychology and socio-linguistics. Students will practice interpreting with material related to education, healthcare, community, social service agencies, and legal settings.

Application Requirements: Assessment score placement in RDNG 1000, or completion of RDNG 0900 or RDNG 0950 with a grade of "C" or higher; assessment score placement in ENGL 1021, or completion of ENGL 0090 with a grade of " C " or higher; assessment score placement in MATH 0030 or completion of MATH 0010 with a grade of "C" or higher; Advanced High or Superior rating on the ACTFL Oral Proficiency Interview (OPI) in English and the second language, or equivalent prior to TRIN 1041. Advanced Mid rating is considered on a case-by-case basis.
MN Human Services background study without restrictions may be required for the internship, service learning and field experience requirements. For more information, refer to the program webpage (www.century.edu/trin)

## 6 Programs of Study

| Core Requirements: 17 credits |  |  |
| :---: | :---: | :---: |
| TRIN | 1000 | Orientation to Interpreting . . . . . . . . . . . . . . 1 |
| TRIN | 1021 | Introduction to Translation . . . . . . . . . . . . . . . 3 |
| TRIN | 1031 | Standards of Practice and Skills of Interpreting |
| TRIN | 1041 | Beginning Skills of Interpreting. . . . . . . . . . . . 4 |
| TRIN | 1061 | Glossary Development |
| TRIN | 2022 | Intermediate Skills of Interpreting .......... . 4 |
| TRIN | 2780 | Translation and Interpreting Internship . . . . . . 1 |

Career/Occupational Requirements: 6 credits
Select six credits the following courses:
BIOL $1023 \quad$ Introduction to Forensic Biology . . . . . . . . . . . . 4

EDUC 2070 Special Education Issues for Educators . . . . . . 3
HLTH 1001 Medical Terminology . . . . . . . . . . . . . . . . . . . . . 2
LING 2020 Introduction to Linguistics . . . . . . . . . . . . . . . . . 4
SOC 1080 Introduction to the Criminal Justice System. . . 3
TRIN 2035 Interpreting in Education. . . . . . . . . . . . . . . . . . 2
TRIN 2036 Interpreting in Health Care . . . . . . . . . . . . . . . . 2
TRIN 2037 Interpreting in Legal Settings . . . . . . . . . . . . . . 2

## General Education/MnTC Requirements: 7 credits

Goal 1 - Communication: 3 credits
COMM 1051 Intercultural Communication................... . . 3
Goal 5 - History/Social and Behavioral Sciences: 4 credits
LING 2030 Introduction to Socio-Linguistics. . . . . . . . . . . . 4

## Additional Requirements:

Structured interpreting practicums, service learning and field experiences are important components of quality interpreter programs. Students in the Certificate in Translating and Interpreting Program are required to complete a minimum of 30 hours of approved practicums, field experiences, or service learning, as part of TRIN 2780.

Grade of "C" or higher in all TRIN courses, Career/Occupational courses, and General Education/MnTC requirement courses.

## Associate in Applied Science Degree Translating and Interpreting Total Number of Credits: 60

Program Description: The AAS in Translating and Interpreting is designed to educate students who wish to develop professional interpreting skills and prepare for careers in our increasingly diverse population. It is especially well suited for students who have previous post-secondary education who wish to provide accurate, culturallycompetent interpretation in a variety of settings. Coursework includes consecutive interpreting, simultaneous interpreting, translation techniques, standards of practice and codes of ethics of interpreting, intercultural communication, critical thinking, collaboration and concepts in psychology and socio-linguistics. Students will practice interpreting with material related to education, healthcare, community
and social service agencies, and legal settings.

## Application Requirements/Program Prerequisites

Assessment score placement in RDNG 1000, or completion of RDNG 0900 or RDNG 0950 with a grade of "C" or higher; assessment score placement in ENGL 1021, or completion of ENGL 0090 with a grade of "C" or higher; Advanced High or Superior rating on the ACTFL Oral Proficiency Interview (OPI) in English and the second language, or equivalent prior to TRIN 1041. Advanced Mid rating is considered on a case-by-case basis.

MN Human Services background study without restrictions may be required for the internship, service learning and field experience requirements. For more information, refer to the program webpage (www.century.edu/trin).

## Core Requirements: 22 credits

TRIN 1000 Orientation to Interpreting .................... 1

TRIN 1021 Introduction to Translation .................... . . 3
TRIN $1031 \quad \begin{aligned} & \text { Standards of Practice and } \\ & \text { Skills of Interpreting . . . . . . . . . . . . . . . . . . . } 3\end{aligned}$
TRIN 1041 Beginning Skills of Interpreting. . . . . . . . . . . . . 4
TRIN 1061 Glossary Development . . . . . . . . . . . . . . . . . . . . 1
TRIN 2022 Intermediate Skills of Interpreting . . . . . . . . . . 4
TRIN 2023 Advanced Skills of Interpreting. . . . . . . . . . . . . 4
TRIN 2780 Translation and Interpreting Internship. . . . . . 2

## Career/Occupational Requirements: 15 credits

Select one or more of the following courses:
TRIN 2035 Interpreting in Education. . . . . . . . . . . . . . . . . 2
TRIN 2036 Interpreting in Health Care . . . . . . . . . . . . . . . . 2
TRIN 2037 Interpreting in Legal Settings . . . . . . . . . . . . . . 2
Select one or more of the following courses:
BIOL 1023 Introduction to Forensic Biology . . . . . . . . . . . . 4
EDUC 2070 Special Education Issues for Educators . . . . . . 3
HLTH 1001 Medical Terminology . . . . . . . . . . . . . . . . . . . . . 2
SOC 1080 Introduction to the Criminal Justice System. . . 3
COMM 1021 Fundamentals of Public Speaking . . . . . . . . . . . 3
Select from the following courses to total 15 credits:
BMGT 1020 Introduction to Business . . . . . . . . . . . . . . . . . . 3
BMGT 2030 Management Fundamentals . . . . . . . . . . . . . . . 3
BMGT 2060 Business Communications. . . . . . . . . . . . . . . . . 3
EDUC 2050 Legal Issues in Education ...................... 3
ENGL 2052 Contemporary World Literature. . . . . . . . . . . . . 3
ENGL $2095 \quad \begin{aligned} \text { Ethics and Environments: The Literature } \\ \text { of Place . . . . . . . . . . . . . . . . . . . . . . . . . } 3\end{aligned}$
ESOL $1033 \quad \begin{array}{ll}\text { American English: Advanced } \\ \text { Listening and Speaking ...................... . . } 3\end{array}$
ESOL 1035 ESOL for College . . . . . . . . . . . . . . . . . . . . . . . . 3
HLTH 1040 Success over Stress. . . . . . . . . . . . . . . . . . . . . . 2
HLTH 1050 Human Sexuality . . . . . . . . . . . . . . . . . . . . . . . . 3
LING 2020 Introduction to Linguistics ..... 4
POLS 2069 Introduction to Political Science ..... 3
TRIN 1071 Reading and Writing in Spanish ..... 3
TRIN 1073 Reading and Writing in Hmong ..... 3
TRIN 1075 Reading and Writing in Somali ..... 3
TRIN Translation Technologies ..... 3
GNDR 1061 Foundations of Women and Gender Studies ..... 3
General Education/MnTC Requirements: 23 credits
Goal 1 - Communication: 10 credits
ENGL 1021 Composition I ..... 4
COMM 1051 Intercultural Communication ..... 3
Select one of the following COMM courses
COMM 1031 Interpersonal Communication ..... 3
COMM 2071 Communication and Gender ..... 3
COMM 2051 Minnesota's New Immigrants: Communication, Culture, and Conflict3
Goal 2 - Critical Thinking is fulfilled when all MnTC goalsare complete
Goal 3 and Goal 4 - Sciences/Math/Logical Reasoning:3 credits
BIOL 1023 Introduction to Forensic Biology ..... 4
BIOL 1024 Human Biology. ..... 3
BIOL 2031 Human Anatomy and Physiology I. ..... 4
Goal 5 - History/Social and Behavioral Sciences: 4 credits
LING 2030 Introduction to Socio-Linguistics. ..... 4
Goal 6 - Humanities and Fine Arts: 3 creditsSelect one of the following courses:
HUM 1030 Culture and Civilization of Spanish Speaking
Peoples ..... 3
HUM 1035 Culture and Civilization of French Speaking Peoples ..... 3
HUM 1040 Culture and Civilization of Chinese Speaking Peoples ..... 3
PHIL 1031 Ethics ..... 3
PHIL 1035 Biomedical Ethics ..... 3
Goals 7 - 10: Three credits in one of the four goals

## Additional Requirements:

Structured interpreting practicums, service learning and field experiences are important components of quality interpreter programs. Students in the AAS in Translating and Interpreting Program are required to complete a minimum of 60 hours of approved practicums, field experiences or service learning, as part of TRIN 2780. Grade of " $C$ " or higher in all TRIN courses, Career/Occupational courses, and General Education/MnTC requirement courses.

## Visual Communications Technologies

## Program Options:

Advanced 3D Animation Certificate (12)
Webmaster Certificate (16)
Visual Communications Assistant Certificate (16)
Visual Communications Technician Diploma (48)
Visual Communications Technologies AAS Degree (60)
Marketing Communications Technology AAS Degree (60)

## Certificate <br> Advanced 3D Animation Total Number of Credits: 12

Program Description: The Visual Communications Technologies program prepares students for a career field involving the delivery of messages in visual forms. This Advanced Certificate is intended for VCT students enrolled in the Interactive Media Specialty area of the VCT Program as well as other students, such as industry professionals, interested in gaining advanced 3D animation skills. Emphasis is on providing the valuable technical, concept, and design skills necessary for those wishing to obtain a position as a 3D animator in the visual communications industry.
Admission Requirements: VCT 2026, or industry equivalent skills and/or consent of instructor
Career/Occupational Requirements: 12 credits
VCT 1017 Concept Drawing and Storyboarding ......... 3

VCT 2084 Advanced Modeling for 3D Animation......... 3
VCT 2085 Advanced Texturing for 3D Animation. . . . . . . . 3
VCT 2087 Advanced 3D Animation Project . . . . . . . . . . . . 3

## Certificate <br> Visual Communications Assistant Total Numbers of Credits: 16

Program Description: The Visual Communications Technologies program students for a career field involving the delivery of messages in visual forms. This fundamentals certificate will acquaint students with the Visual Communications Technologies industry by exploring industry professions and concepts, while obtaining essential foundational skills. The basic of design, working with digital images, planning projects, working with a variety of the most important computer applications used in the VCT industry, as well as the techniques of professional networking are covered. Student wishing to get started in the Visual Communications Technologies industry will be ready to move forward into such areas as Interactive Media, Digital Video, Photography, Graphic Design.

## Career/Occupation Requirements: 16 credits

VCT 1012 Principles of Digital Communications I....... 3
VCT 1013 Design Basics ................................ . . 4

## 6 Programs of Study

| VCT | 1015 | Project Planning....... |
| :--- | :--- | :--- |
| VCT | 1018 | Digital Imaging ...... |
| VCT | 1019 | Principles of Digital Con |
|  |  |  |
| Diploma |  |  |
| Visual Communications Technician |  |  |
| Total Number of Credits: $\mathbf{4 8}$ |  |  |

Program Description: The Visual Communications Technologies program prepares students for a career involving the delivery of messages in visual forms. Emphasis areas include interactive media, digital video, photography, and graphic design. In addition to these core areas, the General Education/MnTC courses required will help ensure individuals have the necessary oral, written, and critical thinking skills to help them with their professional responsibilities.
Core Requirements: 16 credits
VCT 1012 Principles of Digital Communications I . ...... 3
VCT 1013 Design Basics .............................. . . 4
VCT 1015 Project Planning. ............................. . 3
VCT 1018 Digital Imaging .............................. . . 3
VCT 1019 Principles of Digital Communications II ...... 3

## Career/Occupational Requirements:

Select 1 of 5 Specialty Track Options

## Interactive Media: 29 credits


Photography: 29 credits
VCT 1071 Introduction to Digital Photography ..... 3
VCT 1073 Photo Editing and Printing ..... 3
VCT 1076 Basic Lighting and Photography) ..... 3
VCT 1078 Intermediate Lighting and Photography ..... 3
VCT 2071 Advanced Lighting and Photography ..... 3
VCT 2073 Advanced Image Processing ..... 3
VCT 2075 Photography Business and Profession ..... 3
VCT 2078 Photography Presentation Design. ..... 3
VCT 2079 Portfolio Development - Photography ..... 1
Electives selected with instructor consent ..... 4
Graphic Design: 29 credits
VCT 1060 Typography. ..... 3
VCT 1061 Electronic Publishing I ..... 3
VCT 1063 Imaging and Printing Methods ..... 3
VCT 2061 Electronic Publishing II ..... 3
VCT 2062 Electronic Publishing III ..... 3
VCT 2064 Print Production ..... 3
VCT 2067 Color Concepts in Graphic Design. ..... 3
VCT 2069 Information Graphics ..... 3
VCT 2066 Portfolio Development - Graphic Design ..... 1
Electives selected with instructor consent ..... 4
3D Animation: 29 credits
VCT 1017 Concept Drawing and Storyboarding ..... 3
VCT 1035 Digital Editing I ..... 3
VCT 2025 3D Animation I ..... 3
VCT 2026 3D Animation II ..... 3
VCT 2033 Motion Graphics ..... 3
VCT 2084 Advanced Modeling for 3D Animation ..... 3
VCT 2085 Advanced Texturing for 3D Animation ..... 3
VCT 2087 Advanced 3D Animation Project ..... 3
VCT 2089 Portfolio Development - 3D Animation ..... 1
Electives selected with instructor consent ..... 4
General Education/MnTC Requirements: 3 credits
Suggestions for fulfilling this requirement are listed below:

| ART | 1041 | Drawing I |
| :--- | :--- | :--- |
| ENGL | 1021 | Composition I |
| HUM | 1045 | American Film |
| COMM | 1021 | Fundamentals of Public Speaking |
| COMM | 1031 | Interpersonal Communication |
| COMM | 1041 | Small Group Communication |
| COMM | 1061 | Mass Media and Communication |

## Associate in Applied Science Degree Visual Communications Technologies Total Number of Credits: 60

Program Description: The Visual Communications Technologies program prepares students for a career involving the delivery of messages in visual forms. Emphasis areas include interactive media, digital video, photography, 3D animation, and graphic design. In addition to these core areas, the general education/MnTC courses required will help ensure individuals have the necessary oral, written and critical thinking skills to help them with their professional responsibilities.

## Core Requirements: 16 credits

VCT 1012 Principles of Digital Communications ........ 3

VCT 1013 Design Basics ............................... . . 4
VCT 1015 Project Planning.............................. 3
VCT 1018 Digital Imaging ............................... . . 3
VCT 1019 Principles of Digital Communications II ...... 3

## Career/Occupational Requirements:

Select 1 of 5 Specialty Track Options

## Interactive Media: 28 credits

VCT 1021 Flash Interactive Media I. . . . . . . . . . . . . . . . . 3
VCT 1023 Web Design with HTML5 and CSS3) ........ 3
VCT 1024 Advanced Web Design with CSS3 ........... 3
VCT 1027 Interactive Web Design with JavaScript and jQuery . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
VCT 1031 Digital Audio . . . . . . . . . . . . . . . . . . . . . . . . . . 3
VCT 2021 Flash Interactive Media II . . . . . . . . . . . . . . . . . 3
VCT 2022 App Design for Mobile Devices. . . . . . . . . . . . . 3
VCT 2028 Responsive Web Design for Desktop and Mobile Devices . . . . . . . . . . . . . . . . . . . . . 3
VCT 2029 Portfolio Development - Interactive Media . . . 1
Electives selected with instructor consent . . . . . . . . . . . . . . . . . . 3
Digital Video: 28 credits
VCT 1030 Video I........................................... 3

VCT 1031 Digital Audio . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
VCT 1035 Digital Editing I . . . . . . . . . . . . . . . . . . . . . . . . . 3
VCT 2030 Video II. .......................................... . 3
VCT 2031 Video Production I . . . . . . . . . . . . . . . . . . . . . . . 3
VCT 2032 Video Production II. . . . . . . . . . . . . . . . . . . . . . . 3
VCT 2033 Motion Graphics for Video ................... . 3
VCT 2035 Digital Editing II. . . . . . . . . . . . . . . . . . . . . . . . 3
VCT 2037 Portfolio Development-Digital Video. . . . . . . . . 1
Elective selected with instructor consent . . . . . . . . . . . . . . . . . . . 3
Photography: $\mathbf{2 8}$ credits
VCT 1071 Introduction to Digital Photography ......... . . 3
VCT 1073 Photo Editing and Printing . . . . . . . . . . . . . . . . 3

VCT 1076 Basic Lighting and Photography ............. . 3
VCT 1078 Intermediate Lighting and Photography ...... 3
VCT 2071 Advanced Lighting and Photography. . . . . . . . . 3
VCT 2073 Advanced Image Processing ................. . . 3
VCT 2075 Photography Business and Profession ....... 3
VCT 2078 Photography Presentation Design............ 3
VCT 2079 Portfolio Development - Photography . ....... 1
Electives selected with instructor consent ...................... . 3
Graphic Design: $\mathbf{2 8}$ credits
VCT 1060 Typography. ................................... . . 3
VCT 1061 Electronic Publishing I . . . . . . . . . . . . . . . . . . . . 3
VCT 1063 Imaging and Printing Methods ............... . . 3
VCT 2061 Electronic Publishing II ...................... . . 3
VCT 2062 Electronic Publishing III . . . . . . . . . . . . . . . . . . 3
VCT 2064 Print Production ................................ . 3
VCT 2067 Color Concepts in Graphic Design. . . . . . . . . . . 3
VCT 2069 Information Graphics . . . . . . . . . . . . . . . . . . . 3
VCT 2066 Portfolio Development - Graphic Design ..... 1
Electives selected with instructor consent . . . . . . . . . . . . . . . . . . . 3
3D Animation: 28 credits
VCT 1017 Concept Drawing and Storyboarding ......... 3
VCT 1035 Digital Editing I . . . . . . . . . . . . . . . . . . . . . . . . . 3
VCT 2025 3D Animation I................................. . 3
VCT 2026 3D Animation II . . . . . . . . . . . . . . . . . . . . . . . . . 3
VCT 2033 Motion Graphics . . . . . . . . . . . . . . . . . . . . . . . 3
VCT 2084 Advanced Modeling for 3D Animation ........ 3
VCT 2085 Advanced Texturing for 3D Animation ....... 3
VCT 2087 Advanced 3D Animation Project . . . . . . . . . . . . 3
VCT 2089 Portfolio Development - 3D Animation ...... 1
Electives selected with instructor consent . . . . . . . . . . . . . . . . . . 3
General Education/MnTC Requirements: 16 credits
Goal 1 - Communication: 7 credits
ENGL 1021 Composition I. . . . . . . . . . . . . . . . . . . . . . . . . . . 4
Select one of the following COMM courses: .................... 3
COMM 1021 Fundamentals of Public Speaking
COMM 1031 Interpersonal Communication
COMM 1041 Small Group Communication
COMM 1051 Intercultural Communication
Goal 2 - Critical Thinking is fulfilled when all MnTC goals are complete
Goal 3 and Goal 4 - Sciences/Math/Logical Reasoning: 3 credits
Goal 5 - History/Social and Behavioral Sciences: 3 credits
Goal 6 - Humanities and Fine Arts: 3 credits
Goals $7-10$ : Three credits in one of the four goals.

## 6 Programs of Study

## Associate in Applied Science Degree <br> Marketing Communications Technology Total Number of Credits: 60

Program Description: This polytechnic degree program blends three Century College areas: the theories and strategies of the Marketing Program, the application skills of the Visual Communications Technologies Program and the hands-on and aesthetic teachings of the Art and Art Studio coursework. In addition, courses from the English, Communication, and Philosophy disciplines round out this curriculum and form a balanced theory/practice approach. Learners with this type of preparation find fulfilling careers in a variety of visual communications as well as visual marketing fields.

Core Requirements: 29 Credits
CAPL 1010 Introduction to Software Applications ....... 3
MKTG 2035 Trend Tracking and Futuring. . . . . . . . . . . . . . . . 3
MKTG 2050 Principles of Marketing ....................... . 3
MKTG 2055 Web and Mobile Marketing .................. 3
MKTG 2063 Advertising and Sales Promotion ............. 3
VCT 1012 Principles of Digital Communications I........ 3
VCT 1013 Design Basics . . . . . . . . . . . . . . . . . . . . . . . . . . 4
VCT 1015 Project Planning. . . . . . . . . . . . . . . . . . . . . . . . . 3
VCT 1018 Digital Imaging . . . . . . . . . . . . . . . . . . . . . . . . . 3
VCT 2076 Portfolio Development-
Marketing Communications ................. 1

## Career/Occupational Requirements: 9 Credits

Select 3 credits from the following courses:
MKTG 1020 Visual Merchandising and Store Planning . . . . . . . . . . . . . . . . . . . . . . . . . 3
MKTG 2000 Customer Service Strategies.3

MKTG 2005 Entrepreneurship Fundamentals .............. 3
MKTG 2020 Negotiation Strategies ...................... 3
MKTG 2080 Retailing Principles and Practices . . . . . . . . . . . 3
Select 6 credits from the following courses:
VCT 1023 Web Design with HTML5 and CSS3 . . . . . . . . 3
VCT 1030 Videol.......................................... 3
VCT 1041 Introduction to Digital Photography .......... 3
VCT 1061 Electronic Publishing I ...................... 3
General Education/MnTC Requirements: 22 Credits
Goal 1 - Communication: 7 credits
ENGL 1021 Composition I................................. . . 4
COMM 1041 Small Group Communication. ................ 3
Goal 2 - Critical Thinking is fulfilled when all MnTC goals are complete
Goal 3 and/or Goal 4 - Sciences/Math/Logical Reasoning: 3 credits
Goal 5 - History/Social and Behavioral Sciences: 3 credits
COMM 1061 Introduction to Mass Communication......... 3
Goal 6 - Humanities and Fine Arts: 9 credits
ART 1020 Art Appreciation ............................. . 3
ART 1041 Drawing I..................................... . . 3
PHIL 1031 Ethics........................................... 3
Goals 7-10 - Three credits in one of the four goals.

Women and Gender Studies

This Program Name has been changed to Gender Studies. Please see Gender Studies for these Program Options.

## Chapter 7

## Course Descriptions

## Course Identification

## Prefixes and Numbers

Courses at Century College are identified by discipline prefix (ART, ENGL, etc.) and number. Courses numbered 1000 to 1999 are designed as foundations for future learning. Courses numbered 2000-2999
require higher level skills in thinking and are often based on foundation courses. Career course numbers do not necessarily follow the above system.

Courses numbered below 1000 do not meet the requirements of "college level" as specified for each of the several degrees offered by Century.

## Prerequisite, Restriction

Recommendation
Course prerequisites, restrictions, and recommendations are listed immediately following the course descriptions.

Prerequisite is a body of knowledge or level of competence a student should have achieved to ensure readiness for a course. In special circumstances, a prerequisite may be waived by approval of the appropriate department. Students are not permitted to register for courses for which prerequisites have not been met. A prerequisite is met by earning credit in a course. Some courses may have specific grade requirements. See course description for grade requirements.

Restriction indicates a condition which may prevent a student from earning credit in a particular course. Exceptions to a restriction may be granted by the instructor.

Recommendation indicates a condition which is desirable but not necessary. They usually are used to indicate when prior learning experience makes success in the course more attainable.


## Course Transferability:

Students are responsible for knowing whether courses for which they register will transfer to a specific school as a required course, as an elective, or not at all. To obtain this information, students should check with the college of their choice and with a Century counselor/advisor.

## Accounting

## Introduction to Accounting ACCT 1010 <br> 3 Credits

This course introduces the practice of accounting. Topics include transaction analysis, double-entry accounting, cash, petty cash, purchases/payables, sales/ receivables, and specialized journals. Year-end procedures and financial statement preparation for service and merchandise companies, payroll, inventory valuation, and corporate structure and equity accounting are also covered. Recommendation: Assessment score placement in Math 0030 or above or completion of Math 0010 with a grade of "C" or higher

## Payroll Procedures ACCT 1020

## 3 Credits

This course covers the numerous laws pertaining to employment practice and compensation as well as computations and payment of salaries and wages and related taxes. Topics include employment recordkeeping requirements, preparation of the payroll register, individual earnings records, tax reports, and other forms required by government agencies. The accounting procedures necessary to properly prepare accounting transactions are also covered. Prerequisite: ACCT 1010, or ACCT 2020 or concurrent enrollment. Recommendation: Assessment score placement in MATH 0030 or above or completion of MATH 0010 with a grade of "C" or higher.

## Computerized Accounting Applications ACCT 1030

This course is a comprehensive overview of QuickBooks Pro software for business. Students will perform multiple accounting transactions and run reports using QuickBooks. These include recording checks/deposits, preparing bank reconciliations, recording sales/receivables, recording purchases/ accounts payables, accounting for inventory, recording payroll transactions, recording fixed asset transactions and financial

## 7 Course Descriptions

statement preparation. Students will also gain experience writing accounting procedures related to QuickBooks. This course is relevant to prospective students interested in increasing their knowledge of QuickBooks for their business or current accounting position. Prerequisite(s): ACCT 1010 or ACCT 2020 with a grade of " $C$ " or higher and ACCT 1020 and CAPL 1010 or instructor consent.

## Financial Accounting ACCT 20204 Credits

This course includes the study of financial accounting concepts through the measurement, communication, and analysis of economic events for the benefit of investors, creditors, and other external users of financial accounting information. Emphasis is on the preparation and analysis of financial statements in a corporate annual report. Prerequisite: Assessment score placement in MATH 0070 or above or completion of MATH 0030 with a grade of C or higher.

## Managerial Accounting ACCT 2025

4 Credits
This course introduces the foundations of managerial accounting. The emphasis is on managements use of accounting information for planning, controlling, and decision making. Topics covered include cost behavior, an overview of job order and process costing, cost volume profit analysis, budgeting, cost analysis, and capital budgeting decisions. Prerequisite: ACCT 2020 with a grade of $C$ or higher or equivalent. Recommendation: Experience in the use of Excel.

## Federal Income Taxation ACCT 2035

3 Credits
This course is a study of taxation policy and the application of that policy to the preparation of federal income tax returns. Topics include taxable income, deductions, exemptions, and tax credits. This course also includes the use of a computer software package. Prerequisite: ACCT 1010 or ACCT 2020 with a grade of C or higher.

## Intermediate Accounting <br> ACCT 2050 <br> 4 Credits

This course provides an in-depth presentation of accounting for balance sheet accounts, financial statement preparation and analysis. This course expands on financial accounting topics such as inventory and financial statement analysis. Prerequisite: ACCT 1010 or ACCT 2020.

## Accounting Capstone ACCT 2099

## 3 Credits

This course requires students to apply financial accounting concepts and examine current issues in the accounting profession. Topics covered include the development of work papers, writing of accounting reports, understanding accounting documents, and the accountant-client relationship. Prerequisite: ACCT 1010 or ACCT 2020 and ENGL 1021, with a grade of $C$ or higher. Recommendation: Experience in the use of Excel.

## American Sign Language

## American Sign Language I

 ASL 10114 CreditsThis course focuses on American Sign Language (ASL) grammatical structures, non-manual behaviors, vocabulary and classifiers, fingerspelling and numbers, communication skills (conversations and discussions), and other language functions. Coursework activities include describing others, making requests, discussing family and occupations, attributing qualities to other people, and talking about daily routines and weekend activities. Supporting activities include attendance at Deaf events, film and video viewing, ASL literary readings, and other analytical activities. Prerequisite: Assessment score placement in RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher. Assessment score placement in ENGL 1021 or completion of ENGL 0090 with a grade of $C$ or higher.

## American Sign Language II

 ASL 10124 CreditsThis course, a continuation of ASL I, covers skill progression in ASL grammatical structures, non-manual behaviors, vocabulary and classifiers, fingerspelling and numbers, communication skills (conversations and discussions), and other language functions. Coursework includes applying skills learned in ASL I and practicing increasingly complex sign-language activities. Supporting activities include attendance at Deaf events, film and video viewing, ASL literary readings, and other analytical activities. Prerequisite: ASL 1011 with a grade C or higher or instructor consent.

## Anthropology

## Introduction to the Social and Behavioral Sciences: Anth, Psyc and Soc ANTH 1000 3 Credits

This course serves as a broad introduction to three of the social and behavioral sciences: Anthropology, Psychology, and Sociology. The course provides an overview of the history, theories, research methods, and research publications of each discipline. The course is designed to help students to acquire the knowledge and skills that will enable them to succeed in the introductory courses in these three disciplines. Prerequisite: Assessment score placement in RDNG 0900 OR RDNG 0950, or completion of RDNG 0900 with a grade of " $C$ " or higher or consent of the instructor. Restriction: May not be taken for credit if credit has been earned in PSYC 1000 or SOC 1000.

## Introduction to Physical Anthropology: Human Origins <br> ANTH 1022 <br> 3 Credits MnTC: Goals 03 \& 10

This course is an introduction to physical anthropology through the study of human origins. This includes a detailed introduction to evolutionary theory and related topics, such as Mendelian and population genetics, taxonomy, and primate behavior and ecology. Central to the course is the human and non-human primate fossil evidence, and the evolutionary origins of modern Homo sapiens. Students will attend lectures, have assigned readings, and do hands-on work with fossil replicas during the semester. This course is intended for new students in anthropology. Prerequisite: Assessment score placement in RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher.

## Introduction to Cultural Anthropology ANTH 1023 3 Credits MnTC: Goals 05 \& 08

This course examines the fundamental social processes that universally bind humans together and tear them apart: subsistence, language, kinship, reproduction, alliances, food production, economics, competition, warfare and death. The anthropological approach to these topics is to study human societies from around the world using the guiding concepts of culture and evolution. Prerequisite: Assessment score placement in RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of " $C$ " or higher.

## Introduction to Archaeology ANTH $1025 \quad 3$ Credits MnTC: Goals 05 \& 07

Archaeology is the study of past human behaviors. Using excavation and other methods, archaeologists study the material remains of people from the past. Students will study specific archaeological discoveries from all over the world and at different time periods, and learn about the methods and theories that archaeologists employ in their investigation of the past. Students will have hands-on experience with methods like mapping and excavation documentation and opportunities to discuss ethical issues in archaeology. Prerequisite: Assessment score placement in RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of " $C$ " or higher.

## Sex and Gender <br> ANTH 2031 MnTC: Goals 05 \& 08

## 3 Credits

This course will examine sex and gender from an anthropological perspective. Anthropology recognizes that human behavior and social systems arise as a result of the interaction of our biology and our environment. This class will begin by studying sex from an evolutionary perspective. Later, the class will turn to the topic of gender, which is the behavior associated with each sex as defined varyingly by different cultures. Students will study gender across many different cultures around the world and look for patterns to seek a better understanding of our species and ourselves. Prerequisite: ENGL 1021 with a grade of C or higher. Recommendation: ANTH 1021 or ANTH 1022 with a grade of C or higher.

## Anthropology of Human Nature ANTH 2061 3 Credits MnTC: Goals 05 \& 10

This class introduces the broad anthropological study of behavior from a Darwinian perspective. Students explore the evidence concerning the evolution of primate behavior and the past several million years of human evolution with a strong emphasis on the behavior of our ancestors. Initial topics include a detailed introduction to natural selection and a brief survey of human evolution. This is followed by readings and lectures on the evolution of primate and human tool use, diet, food-sharing, cooperation, mate selection, sex, child-rearing, and conflict. Finally, the course explores crosscultural patterns in modern human behavior.

Prerequisite: ENGL 1021 with a grade of $C$ or higher. Recommendation: ANTH 1021 or ANTH 1022 with a grade of C or higher.

Art

## Art Appreciation

ART $1020 \quad 3$ Credits MnTC: Goals 06 \& 08
This course introduces students to art from a variety of cultures and historical contexts. Topics include major art movements, varieties of materials, and aesthetic theories. Coursework covers formal terms, elements, and principles common to the study of art and architecture. Prerequisite: Assessment score placement of RDNG 1000, or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher, and assessment score placement of ENGL 1021 or completion of ENGL 0090 with a grade of $C$ or higher.

## Art History of the Western World I ART 1021 3 Credits MnTC: Goals 06 \& 08

This course traces the development of art and architecture in the west from the Paleolithic through the Gothic Periods - the art, architecture, philosophies, and traditions that continue to shape the modern western world. Students examine individual historical styles, techniques and ideological movements that have evolved in western art making, architecture and design. Prerequisite: Assessment score placement in RDNG 1000 or above, or completion of RDNG 0900 OR RDNG 0950 with a grade of " $C$ " or higher and assessment score placement in ENGL 1021 or completion of ENGL 0090 with a grade of "C" or higher.

## Art History of the Western World II ART 1022 3 Credits MnTC: Goals 06 \& 08

This course traces the development of Art in the West from the Renaissance Period through the 20th Century - the art, architecture, philosophies, and traditions that continue to shape the modern western world. Students examine individual historical styles, techniques and ideological movements that have evolved in western art making, architecture and design. Prerequisite: Assessment score placement in RDNG 1000 or above or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher and placement in ENGL 1021 or completion of ENGL 0090 with a grade of " $C$ " or higher.

## American Art <br> ART 1023 MnTC: Goals 06 \& 07

3 Credits

This course introduces students to American art and architecture from the Colonial period to the present. Coursework includes Native American culture, as well as influences from cultures outside of the United States. Emphasis is on the way historical events have shaped American diversity, values, and vision. Students will analyze major movements, artwork, and architecture, using terms and principles common to art. Prerequisite: Assessment score placement in RDNG 1000, or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher, and assessment score placement of ENGL 1021 or completion of ENGL 0090 with a grade of C or higher.

## 2D Design <br> ART 1024 <br> MnTC: Goal 06

This course is a foundation level study of the development, principles, and elements of two-dimensional design. Students will explore the concepts of composition through guided projects and demonstrations, discovering a working creative process, an awareness of design in our culture, and awareness of current design issues.

## 3D Design ART 1025 MnTC: Goal 06

This course is a foundation level study of the principles and elements of three-dimensional design. Students use a variety of media and art techniques to explore three-dimensional design; form, line, plane, volume, mass, space, texture, light, and time. Projects emphasize a working creative method for problem solving in threedimensions as well as a general knowledge of historical and contemporary design issues.

## Photography 1 <br> ART 1031 MnTC: Goal 06

3 Credits

This course is designed as an exploration of photography as a means of visual communication and creative expression. Students are introduced to the basics of 35 mm cameras and black and white darkroom practices. Projects address a range of design, aesthetic, and conceptual issues fundamental to the art of photography. Strong emphasis is on the development of both a technical foundation and a critical awareness of the medium as a creative tool. This course requires 2 additional lab hours per week. Recommendation: ART 1024

## 7 Course Descriptions

## Drawing I <br> ART 1041 <br> MnTC: Goal 06

This course introduces students to fundamental drawing strategies. Projects emphasize direct observation of nature, still life, and the human form. Assignments are designed to improve drawing skills, engage creative problem-solving, as well as broaden students' knowledge of the cultural/historical relevance of drawing.

## Painting 1 <br> ART 1051 <br> MnTC: Goal 06

This course provides an introduction to the fundamentals of painting principles, methods, materials, and critique. Students work from observation, simultaneously strengthening perceptual abilities increasing knowledge and use of acrylic paint. Painting assignments are supported by readings, discussions and research of historic, cultural and contemporary painting issues. Recommendations: ART1024, ART1041

## Watercolor <br> ART 1055 <br> MnTC: Goal 06

This course introduces fundamental strategies for painting form and spatial illusions with watercolor. Students explore their perceptions and creative ideas through a sequence of structured exercises. Projects emphasize direct observation of still life objects and nature. Coursework includes cultural and historical aspects of the medium. Recommendations: ART 1041

## Sculpture I <br> ART 1061

## 3 Credits

This course introduces students to a variety of materials and processes common to sculpture. Hands-on projects expand 3D design concepts and encourage students to develop their creative ideas. Students will explore contemporary trends and applications, as well as research cultural traditions throughout history. Coursework includes access to Century's FAB LAB, which can enhance projects, and connect students to projects around the world. Prerequisite: ART 1025.

## Ceramics 1

ART 1071
MnTC: Goal 06
This course introduces basic hand-building and wheel techniques with clay. Students will examine the diverse cultural history of
ceramic art and its continued relevance as a form of creative expression. The principles of 3 dimensional design, along with functional and non-functional applications, will be explored through a series of hands-on exercises and projects.

## Independent Study <br> ART 1790

## 1-3 Credits

Independent study is an opportunity for intermediate and advanced art students to complete an in-depth project or body of work in studio art or art-related research.
Prerequisite: Students must have completed all or most art courses offered at Century College or provide proof (transcripts or portfolio) of completing college-level foundation art courses. Project must be approved, prior to enrollment, first by instructor, and then dean. Recommendations: This offering is meant to assist students who are planning to major in studio art, art history, or art education.

## History of Photography MnTC: Goals 06 \& 08

This course surveys the works of artists throughout the world who have explored and defined the aesthetic boundaries of photography from the mediums invention to the present. The history of photography will be studied in terms of technological developments, social trends, and personal expression. Course content will focus on contextualizing photographs, in order to reveal their historic significance, content, and aesthetic form. Class discussions and writing assignments will introduce students to the basic methodological approaches to analyzing images. Prerequisite: ENGL 1021 with a grade of C or higher

## Photography II ART 2031 <br> MnTC: Goal 06

This course will challenge students to consider different ways that a variety of photographic processes can be used to communicate ideas. Students will be introduced to the tools, applications and creative methods used in making traditional as well as, nontraditional, alternative, and non-silver photographic images. Through class critiques, discussions of the history of photography and contemporary trends in art, and reading and writing assignments, students will expand their ability to evaluate, interpret and express ideas through the use of the camera and light sensitive materials. A group field trip
to a major metro area art venue is required. Prerequisite: Students must have a basic understanding of 35 mm SLR cameras and darkroom experience.

## Digital Photography

ART 2032
3 Credits MnTC: Goal 06
This course integrates aesthetic and technical challenges and strengthens visual problem solving skills utilizing the medium of digital photography. Students are introduced to the basics of Digital SLR cameras (DSLRs), image editing software and digital printing processes. Projects address a range of design, aesthetic, and conceptual issues fundamental to the art of digital photography. Strong emphasis is on the development of both a technical foundation and a critical awareness of the medium as a creative tool. This course requires 2 additional lab hours per week. Students are required to provide their own DSLR camera. Prerequisite: ART 1031, or VCT 1071 and instructor permission

## Drawing II ART 2041 <br> 3 Credits

This course expands and refines concepts covered in Drawing I. Additional topics include thematic intent and deeper investigation into the impact of composition. Students will also explore the properties of a variety of wet and dry materials, including color. Projects and exercises are based on direct observation of still life, the human form, architectural spaces, and nature. Coursework includes cultural/ historical research and considers a range of contemporary professional applications. Prerequisite: ART 1041. Recommendation: ART 1024.

## Figure Drawing <br> ART 2042

## 3 Credits

This course emphasizes traditional strategies for drawing the live human form, clothed and unclothed. Topics include proportional canons, relational measuring, basic anatomy for artists, portraiture, gesture drawing, and construction techniques. Students will study the way the human image has been used throughout art history, as well as explore contemporary trends and applications of figure drawing. Prerequisite: ART 1041 with a grade of " B " or higher. Recommendation: ART 2041.

## Painting 2 <br> ART 2051

## 3 Credits

This course expands on the foundational concepts presented in Painting I. Emphasis is placed on traditional and experimental
approaches to painting using water-based oils. Students will explore themes based on landscape, interior spaces, still life and the human form. Painting assignments are supported by sketchbook exercises, readings, discussions, and research of historic, cultural, and contemporary painting issues. Prerequisite: ART1024, ART1041, ART1051.

## Ceramics 2 <br> ART $2071 \quad 3$ Credits

This course is an expansion of concepts covered in Ceramics I. Students will refine technical skills as well as explore design concepts of greater complexity. Coursework includes functional and nonfunctional applications, glazing techniques, effects and functions of various clay bodies, firing procedures, and studio safety. In addition, students will research the diverse history of ceramic art and pottery, including contemporary trends and movements. Prerequisite: ART 1071. Recommendation: ART 1025.

## Portfolio: Professional Practices ART 2099 2 Credits

This course presents topics related to the creation of professional materials common to the Art profession. In addition to the creation of a professional portfolio of art work, discussions will include presenting to galleries, creation of an artist resume, and professional studio practices. This class is part of the final semester of the AFA-Art degree. Prerequisite: Sufficient credits in ART and consent of instructor.

## Auto Body

## Introduction to Auto Body Trade ABOD $1000 \quad 4$ Credits

This course covers shop safety, tool maintenance, professionalism and the major work areas in a typical shop. Students are also exposed to the steps necessary in repairing a wrecked vehicle. Students must be able to perform physical tasks to complete course requirements.

## Introduction to Welding for Auto Body ABOD 1010 4 Credits

This course covers the identification and performance of gas, plasma cutting, and MIG equipment as it pertains to auto body. Topics include welding terms and safety procedures, setup, shutdown and performance on various
gauges of steel in a variety of positions. Students will perform bead, lap and butt welding in the vertical and overhead positions. Students must be able to perform physical tasks to complete course requirements.

## Auto Body Sheet Metal ABOD 1020

2 Credits
This course covers sheet metal repair processes for minor damage. Students will use tools and equipment on actual sheet metal panels and damaged vehicle panels. Students must be able to perform physical tasks to complete course requirements.

## Introduction to Auto Body Refinishing ABOD 1030 <br> 4 Credits

This course is an introduction to automotive refinishing. Topics include refinishing safety, tools, equipment, surface preparation and material application procedures. Students must be able to perform physical tasks to complete course requirements.

## Corrosion Protection and Body Fillers ABOD $1040 \quad 3$ Credits

This course covers rust repair techniques and corrosion protection material safety, tools, equipment and application. Topics include safe use of body fillers and repair sectioning or replacement of fiberglass body repairs. Students must be able to perform physical tasks to complete course requirements.

## Glass, Trim and Hardware ABOD 1050 <br> 2 Credits

This course covers safe procedures for the removal and replacement of all stationary and movable glass and various types of attachments on auto body trim and hardware. Glass and trim are not considered structural, but they are important components in the reconstruction of a vehicle. Different methods of glass removal, glass adhesives, and fasteners are discussed. Students must be able to perform physical tasks to complete course requirements. Prerequisite: ABOD 1000, ABOD 1010, ABOD 1020, ABOD 1030, ABOD 1040 or instructor consent.

## Collision Repair and Overall Refinishing ABOD 1060 <br> 3 Credits

This course covers the overall techniques for restoring damaged cars, reconditioning vehicles, and cleaning up. Topics include refinishing procedures and preparation for overall refinishing, hammer and dolley techniques, and removal of paint from damaged areas. Students must be able to perform physical tasks to complete course
requirements. Prerequisite(s): ABOD 1000, ABOD 1010, ABOD 1020, ABOD 1030, ABOD 1040 or instructor consent.

## Auto Body Electrical and Mechanical Components ABOD 1070 <br> 5 Credits

This course covers repairs to electrical, air conditioning, charging and recharging systems damaged in collisions. Topics include personal and shop safety, drive train, steering system, suspension, severed wiring, and engine sensors. Students must be able to perform physical tasks to complete course requirements. Prerequisite: ABOD 1000, ABOD 1010, ABOD 1020, ABOD 1030, ABOD 1040 or instructor consent.

## Independent Study <br> ABOD 1790

1-3 Credits
An opportunity for an in-depth study of a particular topic. Prerequisite: Consent of instructor and dean.

## Specialty Refinishing

 ABOD 2000
## 4 Credits

This course covers identification and correction of color mismatching, techniques in spot repairing full panels, application of pinstriping, interior and plastics repairs, chip protection and custom paint finishes. Students must be able to perform physical tasks to complete course requirements. Prerequisite: ABOD 2010, ABOD 2020, ABOD 2030 or instructor consent.

## Computer Estimating ABOD 2010

## 2 Credits

This course covers identification and calculation of the cost of vehicle damage, calculating cost of parts, material, and labor written from a manual or computer. Prerequisite: ABOD 1050, ABOD 1060, and ABOD 1070 or instructor consent.

## Unibody and Frame Damage ABOD 2020 <br> 4 Credits

In this course, students will use specialized equipment to locate key reference points on a damaged vehicle and compare them with published dimensions from an undamaged vehicle. The students will use this information to repair or replace the necessary parts. Students must be able to perform physical tasks to complete course requirements. Prerequisite: ABOD 1050, ABOD 1060, and ABOD 1070 or instructor consent.

## 7 Course Descriptions

## Major Collision Lab ABOD 2030

## 5 Credits

In this course, students will focus on analysis of impact damage from a major collision and determine strategies for repairs. Topics include determining the extent of damage to structural steel body panels and repairing, welding, or replacing in accordance with vehicle manufacturers' specifications.
Students must be able to perform physical tasks to complete course requirements. Prerequisite: ABOD 1050, ABOD 1060, and ABOD 1070 or instructor consent.

## Auto Body Management ABOD 2040

## 1 Credit

This course covers proper shop management procedures including parts ordering, payroll, employer-employee relations, customer relations, and communication skills as if the student owns and operates a body shop. Students are required to write a plan to build and operate their own shop. Prerequisite: ABOD 2010, ABOD 2020, ABOD 2030 or instructor consent.

## Refinishing Lab ABOD 2050

## 4 Credits

This course focuses on advanced color theory and repair procedures to a complete vehicle. It also includes undercoat and topcoat functions, types of undercoats, and application techniques for major or minor damage. Students must be able to perform physical tasks to complete course requirements. Prerequisite: ABOD 2010, ABOD 2020, ABOD 2030 or instructor consent.

## General Auto Body Lab ABOD 2060

4 Credits
In this course, students will apply concepts and skills learned in previous courses.
Students must develop a repair plan, time line, and cost estimate, and perform repair to industry standards. Students must be able to perform physical tasks to complete course requirements. Prerequisite: ABOD 2010, ABOD 2020, ABOD 2030 or instructor consent.

## Mechanical Suspension and Wheel Alignment ABOD 2070 6 Credits

In this course, students will replace damaged water pumps, radiators, and engines using proper safety techniques. Topics also include proper wheel alignment, suspension, and electrical repairs. Students must be able to perform physical tasks to complete course requirements. Prerequisite: ABOD 2010, ABOD 2020, ABOD 2030 or instructor consent.

## Auto Service Technology

## Automotive Workplace Safety AST 10051 Credit

This course covers safe practices in the automotive workplace. Topics include the labeling, handling, storage, removal, disposal, and recycling of hazardous and toxic materials, Minnesota Right to Know Act, and emergency shop procedures. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Concurrent enrollment in AST 1015, 1025, 1035, and 1045 or concurrent enrollment in AST 1055, 1065, 1075, 1085, and 1095. Assessment score placement in RDNG 0950 or completion of RDNG 0900 with a grade of C or higher; assessment score placement in MATH 0030 or completion of MATH 0010 with a grade of C or higher; and assessment score placement in ENGL 0090 or completion of ENGL 0080 with a grade of C or higher.

## Automotive Brakes for 916 Students AST 10121 Credit

This course is designed for Intermediate School District 916 students articulating into the Automotive Service Technology college program. These students are transferring in Aut 0100 course from the high school program and are enrolled in this course to complete the requirements for AST 1015. Instructor permission is required.

## Automotive Brakes <br> AST 1015

## 4 Credits

This course covers drum and disc brake systems, hydraulic systems, power brakes, and the basic theory of anti-lock brake systems. Theory, diagnosis, adjustment, and complete system rebuilding will be included during group discussions and shop applications. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Concurrent enrollment in AST 1005, 1025, 1035, and 1045. Assessment score placement in RDNG 0950 or completion of RDNG 0900 with a grade of C or higher; assessment score placement in MATH 0030 or completion of MATH 0010 with a grade of C or higher; assessment score placement in ENGL 0090 or completion of ENGL 0080 with a grade of C or higher.

## Steering and Suspension for 916 Students <br> AST $1022 \quad 1$ Credit

This course is designed for Intermediate School District 916 students articulating into
the Automotive Service Technology college program. These students are transferring in Aut 0300 course from the high school program and are enrolled in this course to complete the requirements for AST 1025. Instructor permission is required.

## Steering and Suspension Systems AST 10253 Credits

This course provides the basis for repairs and adjustments to the steering and suspension systems found on the modern automobile. Operating design theory, diagnosis, adjustment, and repair are included during group discussions and shop applications. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Concurrent enrollment in AST $1005,1015,1035$, and 1045. Assessment score placement in RDNG 0950 or completion of RDNG 0900 with a grade of C or higher; assessment score placement in MATH 0030 or completion of MATH 0010 with a grade of C or higher; assessment score placement in ENGL 0090 or completion of ENGL 0080 with a grade of C or higher.

## Four-Wheel Alignment AST 1035 <br> 4 Credits

This course covers diagnosis, corrections, and adjustments of the steering and suspension systems to correct poor handling, noise, and abnormal tire wear. Alignment theory, pre-alignment inspection, and adjustments using factory adjustments and after-market modifications on modern equipment are covered in group discussions and shop applications. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Concurrent enrollment in AST 1005, 1015, 1025, and 1045. Assessment score placement in RDNG 0950 or completion of RDNG 0900 with a grade of $C$ or higher; assessment score placement in MATH 0030 or completion of MATH 0010 with a grade of C or higher; assessment score placement in ENGL 0090 or completion of ENGL 0080 with a grade of C or higher.

## Standard Drive Train

 AST 1045
## 4 Credits

This course covers the theory and operation of manual transmissions/transaxles,clutches, RWD, universal joints, FWD, constant velocity joints, differentials, and 4-wheel drive systems. Group activities and shop work include the adjustments, repair, replacement and/or rebuilding of these units. Students must be able to perform physical tasks to complete course requirements. Prerequisite:

Concurrent enrollment in AST 1005, 1015, 1025, and 1035. Assessment score placement in RDNG 0950 or completion of RDNG 0900 with a grade of C or higher; assessment score placement in MATH 0030 or completion of MATH 0010 with a grade of C or higher; assessment score placement in ENGL 0090 or completion of ENGL 0080 with a grade of C or higher.

## Automotive Service <br> AST 1055 <br> 2 Credits

This course covers all of the tasks that are required for a person starting in the automotive field. Topics include automotive tools and equipment, perform tire service, lubrication, safety inspection, aim headlights, exhaust repair, drill and tap threads, install a helicoil, and interpret numbers associated with automotive repairs. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Concurrent enrollment in AST 1005, 1065, 1075, 1085, and 1095. Assessment score placement in RDNG 0950 or completion of RDNG 0900 with a grade of C or higher; assessment score placement in MATH 0030 or completion of MATH 0010 with a grade of C or higher; assessment score placement in ENGL 0090 or completion of ENGL 0080 with a grade of C or higher.

## Electrical Principles for 916 Students AST 1062 1 Credit

This course is designed for Intermediate School District 916 students articulating into the Automotive Service Technology college program. These students are transferring in Aut 0200 course from the high school program and are enrolled in this course to complete the requirements for AST 1065. Instructor permission is required.

## Electrical Principles AST $1065 \quad 3$ Credits

This course covers electrical terms, what electricity is, what it does as it flows through a circuit, series and parallel circuits, Ohms Law, how to connect and use a DVOM, battery theory, and how to test batteries using a VAT-40. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Concurrent enrollment in AST 1005, 1055, 1075, 1085, and 1095. Assessment score placement in RDNG 0950 or completion of RDNG 0900 with a grade of C or higher; assessment score placement in MATH 0030 or completion of MATH 0010 with a grade of C or higher;
assessment score placement in ENGL 0090 or completion of ENGL 0080 with a grade of $C$ or higher.

## Body Electrical Systems AST 1075 <br> 2 Credits

This course introduces the student to reading wiring diagrams and testing common automotive electrical circuits. In this course, students will be exposed to wiring diagrams and how to test power door locks, power windows, the turn and brake light circuits, the blower motor circuits, parking, headlights and dimmer circuits, along with the wipers and washer circuits. Students will practice on training boards and then move into testing and repair on live vehicles. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Concurrent enrollment in AST 1005, 1055, 1065, 1085, and 1095. Assessment score placement in RDNG 0950 or completion of RDNG 0900 with a grade of C or higher; assessment score placement in MATH 0030 or completion of MATH 0010 with a grade of C or higher; assessment score placement in ENGL 0090 or completion of ENGL 0080 with a grade of C or higher.

## Starting and Charging Systems AST 10854 Credits

In this course, students will study the components, circuits, and theory of operation of the starting and charging systems. Students will use test equipment, diagnostic procedures, and flowcharts to interpret test results so that the correct repairs will be performed on inoperative starting and charging systems. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Concurrent enrollment in AST 1005, 1055, 1065, 1075, and 1095. Assessment score placement in RDNG 0950 or completion of RDNG 0900 with a grade of C or higher; assessment score placement in MATH 0030 or completion of MATH 0010 with a grade of C or higher; assessment score placement in ENGL 0090 or completion of ENGL 0080 with a grade of $C$ or higher.

## Automatic Transmissions AST 10954 Credits

This course covers automatic transmission theory, sub-assembly operation, and operational controls. Rebuilding techniques, service procedures and diagnosis are covered in group discussions and shop applications. Students must be able to perform physical tasks to complete course requirements.

Prerequisite: Concurrent enrollment in AST 1005, 1055, 1065, 1075, and 1085. Assessment score placement in RDNG 0950 or completion of RDNG 0900 with a grade of C or higher; assessment score placement in MATH 0030 or completion of MATH 0010 with a grade of C or higher; assessment score placement in ENGL 0090 or completion of ENGL 0080 with a grade of C or higher.

## Automotive Engines <br> AST 2005

4 Credits
This course covers engine construction, operating theory and overhaul procedures. All engine subsystems will be studied in great detail. A complete engine overhaul on a component engine will be performed. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Completion of all AST 1000 level courses.

## Engine Diagnosis

## AST 2015

## 3 Credits

This course covers the diagnostic test procedures used to determine the operating condition of a gasoline engine. Diagnostic testing and test interpretation will be performed. Students must be able to perform physical tasks to complete course requirements. Prerequisite: AST 2005.

## Cooling System Service <br> AST 2025

2 Credits
This course covers the operation and service of the cooling system. Cooling system service and coolant recovery/recycling procedures will be performed. Students must be able to perform physical tasks to complete course requirements. Prerequisite: AST 2015.

## Emission Control AST 2035

 3 CreditsThis course covers the need for vehicle emission control. A complete description of the function and operation of most common emission control devices will be addressed. Testing of emission control devices will be performed. Students must be able to perform physical tasks to complete course requirements. Prerequisite: AST 2025.

## Computerized Engine Control AST 2045 <br> 4 Credits

This course covers the fundamentals of the microcomputer system used to control the automotive engine. Concepts covered include: central processing, memory/storage devices, input/output devices, adaptive strategy, and on-board diagnostics. Computer scanners will be used to test and analyze the engine control

## 7 Course Descriptions

computer system. Students must be able to perform physical tasks to complete course requirements. Prerequisite: AST 2035.

## Electronic Fuel Injection AST 2055 <br> 2 Credits

This course covers the operation and service of electronic fuel injection systems. System testing and necessary repairs will be performed. Students must be able to perform physical tasks to complete course requirements. Prerequisite: AST 2045.

## Engine Performance Maintenance AST 20654 Credits

This course covers ignition system theory, testing and repair procedures, four-gas analysis and engine performance maintenance. Engine performance maintenance using a variety of diagnostic test equipment will be performed. Students must be able to perform physical tasks to complete course requirements. Prerequisite: AST 2055.

## Supplemental Computer Systems AST $2075 \quad 2$ Credits

In this course, students will study supplemental computer systems used to control inflatable restraint systems. Repair and diagnostic procedures will be performed on live vehicles. Students must be able to perform physical tasks to complete course requirements. Prerequisite: AST 2065.

## Air Conditioning <br> AST $2085 \quad 3$ Credits

This course covers the fundamentals and service of the automotive air conditioning system. Topics include system operation, recovery/recycling of 134A, system charging, leak detection, performance testing, and retrofitting. Air conditioning service using typical service equipment will be performed. Students must be able to perform physical tasks to complete course requirements. Prerequisite: AST 2075.

## New Automotive Technology AST $2095 \quad 3$ Credits

This course introduces students to new technology in the automotive industry. Course content will range from shop management trends to new federally mandated systems that are and will be required on vehicles. Course content will change as vehicle technologies emerge. Students must be able to perform physical tasks to complete course requirements. Prerequisite: AST 1005, AST 1085, AST 1095, AST 1015, AST 1045.

## Carburetor Rebuild AST 2115

This course will cover the purpose and theory of operation of each of the seven carburetors' circuits for two- and four-barrel carburetors. Rebuild procedures and adjustments will be demonstrated with students performing complete rebuilds on vehicles. Computer controlled carburetors will also be explained and demonstrated. Students cannot be allergic to carburetor cleaner. Students must be able to perform physical tasks to complete course requirements.

## Biology

## Biology Concepts

$\begin{array}{ll}\text { BIOL } 1020 & 4 \text { Credits }\end{array}$ MnTC: Goal 03
This is a lab science course dealing with the basic concepts of general biology including cell biology, energy capture and utilization, heredity, origin and descent of life, classification of organisms, and environmental relationships of living things. Laboratory experiences are provided to acquaint students with basic lab methods and techniques. Prerequisite: Assessment score placement in RDNG 1000, or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher. Recommendation: High school chemistry or CHEM 1020 or equivalent.

## Biology of Women BIOL 1021 MnTC: Goal 03

This course investigates male and female reproductive anatomy and physiology, the basis of scientific inquiry and investigation, analysis of scientific data, and sexual and reproductive biology of women and men including contraception, pregnancy, childbirth, and infertility. The biology of cancers, sexually transmitted diseases and infections, and systemic chronic diseases throughout the lifespan is also included. Lab-like experiences and simulations are part of the course. Course is open to both women and men. Prerequisite: Assessment score placement in RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of a C or higher. Recommendation: High school biology or Biology 1020

## Introduction to Forensic Biology BIOL 1023 MnTC: Goal 03

This course deals with many of the basic concepts of general and human biology using forensic biology to demonstrate the concepts. These will include a survey of the organ systems and applications of forensic science to the human body systems, including the biology of DNA. Offered F, S. Prerequisite: Assessment score placement in RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of " C " or higher. Restriction: Closed to students who have already earned credit for Biology 1024, Human Biology.

## Human Biology <br> BIOL 1024 MnTC: Goal 03

This course is a survey of the human organ systems by structure and function. Organ systems include integumentary, skeletal, muscular, nervous, endocrine, circulatory, respiratory, digestive, urinary, and reproductive. The scientific method of inquiry, human reproduction, development, and heredity are other topics integrated into the biology of the human body. This course is designed for students who wish to gain a better understanding of the biology of the human body, including liberal arts majors. This course will include lab-like experiences. Prerequisite: Assessment score placement in RDNG 1000, or completion of RDNG 0090 with a grade of C or higher. Recommendation: High school biology or BIOL 1020Restriction: Closed to students who have earned credit in BIOL 1023, 2031, 2032, 2040 or 2045.

## Field Biology

BIOL 1025
MnTC: Goals 03 \& 10
This is a lab science course dealing with interrelationships between environmental influences and organisms as well as surveying flora and fauna. Concerns considered include climate change, ozone depletion, ground water contamination, acid rain, and hazardous waste disposal. This is an experience-centered course in which students have the opportunity to learn fundamental environmental principles, basic concepts of biology, and conservation through integrated laboratory and lecture presentation and field work. This is a lab science general education course. Prerequisite: Assessment score placement in RDNG 1000, or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher. Recommendation: High school biology or BIOL 1020 or equivalent.

## Plants and Society BIOL 1026 MnTC: Goals 03 \& 10

This is a lab science course dealing with the biological, historical, and cultural perspectives of roles plants have played in human civilizations. The course begins with an overview of roles of plants in our daily lives and follows with theories of the origins of agriculture, while integrating discussions of benefits of hundreds of plants and plant products. Also considered are the potential of yet to be discovered benefits of many plants. Laboratory demonstrations provide students with direct access to plants and plant products necessary to everyday life. This is a lab science course intended for liberal arts majors and for students with a general interest in plant biology. Prerequisite: Assessment score placement in RDNG 1000, or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher. Recommendation: High school biology or BIOL 1020 or equivalent.

## Climate Change Biology BIOL 1027 MnTC: Goals 03 \& 10

This course deals with the effects of climate change on various biological species and ecosystems. Topics include basic biology concepts including characteristics and organization of life, ecosystems, biogeochemical cycles, basic climate change science, and how various organisms are responding to it. Students will form eco-teams", a type of non-traditional lab component to the course, in which they will calculate their carbon footprints and analyze and determine ways to decrease their environmental impact. Students will explore practical ways to live more sustainably and how to be responsible citizens in regard to sustainability; all of which can improve one's quality of life, slow climate change, and help protect present and future generations of humans and other species. Prerequisite(s): Assessment score placement in RDNG 1000, or completion of RDNG 0900 OR RDNG 0950 with a grade of " $C$ " or higher.

## Ecology

BIOL 1028
4 Credits
MnTC: Goals 03 \& 10
This is a lab science course covering the basic concepts of ecology, including physical factors that influence the distribution and abundance of organisms, population regulation and interactions, nutrient cycling and energy flow, community change and succession. Natural
and human disturbances of ecosystems and the concept of sustainability will also be integrated within the basic concepts of ecology. The major biomes of Minnesota - prairie and coniferous and deciduous forests - will be explored in relationship to these concepts. The course is intended to be a lab science general education course. Prerequisite: Assessment score placement in RDNG 1000, or completion of RDNG 0900 OR RDNG 0950 with a grade of " $C$ " or higher. Recommendation: High school biology or BIOL 1020 or equivalent.

## Microbes and Society: An Introduction to Microbiology BIOL $1029 \quad 4$ Credits MnTC: Goal 03

Microbes and Society introduces students to the biology of the major microbial groups, their role in our everyday existence, and the methods of scientific inquiry. Contemporary topics, such as genetic engineering, bioterrorism, antibiotic resistance, biotechnology, emerging infectious diseases, and the consequences of public policies on the emergence, spread, and control of infectious disease will be examined. The laboratory will acquaint students with basic techniques used in the handling of microorganisms, and investigate the properties and uses of microbes. This course is intended for students who require a laboratory science course to fulfill general education or degree requirements. This course is not intended for students who require a microbiology course for Nursing, Pharmacy, Dental Hygiene or other allied health programs. Prerequisite: RDNG 0900 OR RDNG 0950 with a grade of "C" or higher, or assessment score placement in RDNG 1000.

## Introduction to Human Genetics BIOL $1033 \quad 3$ Credits MnTC: Goal 03

This introductory non-laboratory Biology course is designed to expose students to a wide range of topics surrounding genetics. Topics covered include: cell structure and function, cell reproduction, organismal reproduction, gene transfer, Mendelian genetics, mutations, and developmental genetics. Techniques used to study human genetics and reproduction will also be discussed. Ethical implications of gene manipulation will be interwoven throughout the course. This course will contain lab-like experiences although it is not a traditional lab course. Prerequisite: Assessment score
placement in RDNG 1000, or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher.

## Principles of Biology I <br> BIOL 1041 <br> 5 Credits MnTC: Goal 03

This is a lab science course that provides a general introduction to biological principles. Topics include the scientific method, molecular and cellular biology, energy acquisition and use, cell reproduction, genetics, ecology, and evolution. Laboratory exercises provide students with practical means to understand basic biological principles. This is a laboratory science course intended for biology and related liberal art majors and for pre-professional students. Prerequisite: Assessment score placement in RDNG 1000, or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher. Completion of CHEM 1020 and BIOL 1020 with a grade of " $C$ " or higher, or high school biology and chemistry within the last three years.

## Principles of Biology II BIOL 1042 MnTC: Goal 03

This is a lab science course dealing with a taxonomic survey of the major groups of organisms. It is a continuation of BIOL 1041. Topics include phylogeny, morphology, development, and structure-function relationships of viruses, bacteria, protistans, plants, fungi, and animals. Laboratory exercises consist of practical identification of various organisms and structures. Prerequisite(s): BIOL 1041

## Independent Study

BIOL 1790

## 1-3 Credits

This variable-credit elective course emphasizes the student's independent search for advanced knowledge as well as additional hands-on skills beyond current Biology course offerings. The student and instructor will devise a formal plan of study to satisfy credit workload requirements within the semester timeline. Prerequisite: Consent of instructor and dean. Recommendation: BIOL 1020 or equivalent.

## Human Anatomy and Physiology I BIOL 2031 4 Credits MnTC: Goal 03

This is the first of a two-semester lab science course. Human anatomy and physiology are studied using a body systems approach, with emphasis on the interrelationships between form and function at the gross and microscopic

## 7 Course Descriptions

levels of organization. Homeostasis is an integrating theme throughout this course. Subjects considered include basic anatomical and directional terminology, fundamental concepts and principles of cell physiology, histology, and the integumentary, skeletal, muscular, endocrine, nervous, and hematopoietic systems. This course is intended for anyone interested in gaining a better understanding of the anatomy and functioning of the human body. Prerequisite: Assessment score placement in RDNG 1000, or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher. CHEM 1020 and BIOL 1020 with a grade of " $C$ " or higher or high school biology and chemistry with a grade of " C " or higher within the last three years. Recommendation: BIOL 1041 and CHEM 1041.

## Human Anatomy and Physiology II <br> BIOL 20324 Credits MnTC: Goal 03

This is the second of a two-semester lab science course. Human anatomy and physiology are studied using a body systems approach, with emphasis on the interrelationships between form and function at the gross and microscopic levels of organization. Homeostasis is an integrating theme throughout this course. Subjects considered include the cardiovascular system, lymphatic system and immunity, respiratory system, digestive system and metabolism, urinary system, fluid/electrolyte and acid/base balance, and reproductive systems. This course is intended for anyone interested in gaining a better understanding human anatomy and body functions. Prerequisite: BIOL 2031 or equivalent.

## Microbiology <br> BIOL 2035 <br> MnTC: Goal 03

This is a lab science course that surveys the major groups of microorganisms with an emphasis on their structural characteristics, factors affecting growth and reproduction, interactions with host organisms and physical and chemical methods of control. Issues related to antibiotic use and infectious diseases are included. The laboratory portion includes experiences in the safe handling of microorganisms, and methods for the culture, visualization, and identification of known and unknown microorganisms. Prerequisite: Completion or concurrent enrollment in BIOL 2032 or BIOL 2045 with a grade of " $C$ " or higher.

## Comprehensive Human Anatomy BIOL 2040 4 Credits

This is a lab science course dealing with detailed anatomical study of the human organ systems, including: the integumentary, muscular, skeletal, nervous, endocrine, digestive, cardiovascular, Iymphatic, respiratory, urinary, and reproductive systems. The focus is on anatomy of the human body but does not ignore principles of physiology. Laboratory experiences provide students with a practical means to understanding human gross anatomy through comparisons to animal anatomy and selected organ dissections. This is a lab-science course intended for students in medically related programs. Prerequisite: BIOL 1041 and CHEM 1020 or equivalents. Recommendation: CHEM 1041.

## Comprehensive Human Physiology BIOL 20454 Credits

This is a lab science course dealing with a detailed physiological study of the human organ systems, including protection, construction and locomotion; coordination and sensation; hormonal regulation; circulation and immunoregulation; respiration and digestion, and excretion and reproduction. Laboratory experiences provide students with a practical means to gaining an understanding of human physiological concepts through individual experimentation and computer simulation. This is a lab-science course intended for students in medically related programs. Prerequisite: BIOL 2040 or equivalent.

## Introduction to Human Disease BIOL 2051 3 Credits

This is a comprehensive human disease course dealing with the pathology and pathophysiology of disease, correlated with the pathogenesis, clinical manifestations, diagnosis, and treatment of the common and important diseases affecting humankind. Selected case studies are reviewed for critical thinking analysis where appropriate. This is a lecture-demonstration course for students interested in healthcare. This course is not equivalent to NURS 2222. Prerequisite(s): BIOL 2031 and BIOL 2032, or BIOL 2040 and BIOL 2045, or equivalents.

## Business Management

## Personal Financial Planning BMGT 1005 <br> 3 Credits

This course covers the challenges that individuals face in the financial planning process and potential solutions to those issues. Topics include budgeting income, individual taxation, consumer loans, student loans, bank accounts, investment products, disability plans, retirement plans, and estate planning. Recommendation: Assessment score placement in MATH 0030 or above, or completion of MATH 0010 or MATH 0015 with a grade of C or higher.

## Introduction to Business BMGT 1020 <br> 3 Credits

This course is a study of contemporary business concepts in the areas of economics, business formation, management, marketing, accounting, finance and the future scope of business. The emphasis of the course includes learning business terminology and understanding applications of concepts in the business world. The perspective includes business interrelationships within the economic, legal, technological, competitive, social, and global environments.

## Survey of Business Economics BMGT $1030 \quad 3$ Credits

This course is a survey of both branches of economics-macroeconomics and microeconomics. Topics include economic institutions and tools and techniques of economic analysis, as they relate to the business community. Current economic issues and the impact of economic decisions upon individual and aggregate business activity are analyzed. This course does not fulfill Goal 5 of the MNTC curriculum or AA degree. Restriction: May not be taken for credit if credit has been earned in ECON 1021.

## Independent Study BMGT 1790 1-3 Credits

This variable-credit elective course emphasizes the student's independent search for advanced knowledge as well as additional hands-on skills beyond business management program offerings. The student and instructor will devise a formal plan of study to satisfy credit workload requirements within a one semester timeframe. Prerequisite: Consent of instructor and dean.


## Management Fundamentals BMGT 2030 <br> 3 Credits

This course is a study of the foundations, principles, and functions of management. The emphasis is on planning, organizing, staffing, leading, and controlling resources in organizations. Managerial strategies and decision models are analyzed, which contributes to the development and improvement of managerial skills and expertise. Prerequisite: BMGT 1020.

## Human Relations in Business BMGT $2035 \quad 3$ Credits

This course covers the creation and maintenance of well-managed working relationships in all types of organizations. The course includes a comprehensive discussion of the background and basis for human relations. Three core human relations skills are developed-motivation, leadership and communication. Additional aspects of human behavior in the work environment are explored including team building, the human/ technology interface, and managing change.

## Human Resources Management BMGT 2040 <br> 3 Credits

This course is a study of the importance of human resource management in contributing to the achievement of organizational objectives. Topics include the principle functions performed in human resource management such as planning and recruitment, training and career development, compensation and security, productive work
environments, and employee-management relations. Students study leaders who have contributed to the field as well as the various regulations, laws, events, and forces that have an impact upon it.

## Legal Environment of Business

 BMGT 2051
## 3 Credits

This course is a study of the principles, rules, and logic of business law and its relation to the social, economic, and moral forces underlying justice in our society. It provides an overview of the legal system including basic laws, contracts, constitutional law, and tort law.

## Business Communications BMGT 2060 <br> 3 Credits

This course covers the theory and processes of business communication. It concentrates on building skills and strategies used by business professionals including etiquette, interviewing, small and large group meetings, oral presentations, as well as business correspondence. This course examines nonverbal, intercultural, technological, and ethical aspects of business communications. Students develop employment search skill for career entry or advancement. Prerequisite: ENGL 1021.

## Business Finance BMGT 2090

## 3 Credits

This course is a study of financial management from the perspective of finance executives, employees, shareholders, and creditors. Students engage in problem solving activities
related to financial analysis and forecasting, leverage analysis, current asset management and short-term financing, time value of money, capital budgeting, and long-term equity and debt financing. Prerequisite: ACCT 1010 or ACCT 2020 or equivalent.

## International Business BMGT 2095

## 3 Credits

This course is a study of the key concepts and issues involved in the conduct of international business. Topics will include an examination of international economics and politics, comparative management styles and methods, international marketing and finance, business transactions in the major trading regions of the world, and ethical and cultural issues involved in international business.
Recommendation: ECON 1021 or BMGT 1030.

## Special Topics BMGT 2790

## 1-3 Credits

A course in which one of a variety of contemporary topics of interest would be selected as the focus for study. The specific topic will be announced in advance, and published at the time of registration. Prerequisite: Consent of instructor and dean.

## Career Studies

## Career Exploration and Planning CRRS 1005 1 Credit

This course guides students in the general exploration of appropriate career and educational options. Through assessment of interests, personality, skills, and values, students will examine themselves and explore their personal, career, and educational goals. Restriction: Cannot be taken for credit if credit has been received for CRRS 1010.

## Career and Life Planning CRRS 1010

## 2 Credits

This course guides students through the lifelong career exploration and decisionmaking process, using various career planning strategies and resources. It includes an examination of individual strengths, personality types, interests, values, and skills. Student will explore the world of work, examine educational options, and establish specific goals. The course presents processes for determining what gives meaning to students' lives and integrating the work role with other life roles. Prerequisite: Assessment score placement in RDNG 0950 or above, or completion of RDNG

## 7 Course Descriptions

0900 with a grade of "C" or higher. Restriction: Cannot be taken for credit if credit has been received for CRRS 1005.

## Chemical Dependency

## Introduction to Drugs and Alcohol CDEP $1020 \quad 3$ Credits

This course provides an overview of classification of mood altering addictions, signs and symptoms of addicted behavior, treatment, prevention, and cultural issues. The course meets the academic coursework requirement for Minnesota Statute 2005 Chapter 148C: "Overview of alcohol and drug counseling, focusing on the transdisciplinary foundations of alcohol and drug counseling and providing an understanding of theories of chemical dependency, the
continuum of care and the process of change." Service learning will be a component of this course.

## Pharmacology of Chemical Dependency CDEP 1030 3 Credits

This course is an overview of the basics of pharmacology as applied to various classifications of mood altering chemicals. It is also an examination of the central nervous system and drug/neurotransmitter interactions. The course examines substance abuse, detoxification, withdrawal, drug interaction, and dynamics of addiction. The course meets academic coursework criteria of Minnesota Statute 2005 Chapter 148c, Subdivision 5a, Area 2: "pharmacology of substance abuse disorders and the dynamics of addiction." Prerequisite: CDEP 1020 or consent of instructor.

## Overview of Gambling CDEP 1040

3 Credits
This course presents a historic overview of gambling and describes gambling addiction and the variety of ways in which it manifests itself in society. The course will also identify diagnostic criteria and treatment strategies for the pathological gambler and how gambling impacts family, society, and crime. When the academic coursework is completed to satisfy Minnesota Statute 2005 Chapter 148C, this course would be credited toward the 270 hours needed for chemical dependency licensure.

## Substance Abuse Prevention CDEP 1050 3 Credits

This course will focus on how a student can design and implement substance abuse prevention principles that meet the needs of communities. Students can compare evidencebased prevention programs, principles, and strategies when assessing the needs of communities. Successful completion of the course will qualify students for certification as a Certified Prevention Professional (CPP) through the Minnesota Certification Board. The course is intended for students or individuals in public health, law enforcement, school staff including teachers, administrators, nurses, counselors, and social workers, as well as community coalition workers with little or no training in substance abuse prevention. Prerequisite: Consent of instructor.

## Professional Conduct in Chemical Dependency CDEP 10603 Credits

This course addresses the multicultural aspects of chemical dependency, professional and ethical responsibilities, orientation, consultation, reporting and record keeping, referral, case management and treatment planning. Students explore a model for ethical decision making in reference to chemical dependency. They also discuss confidentiality, professional boundaries, and rules of conduct. The course includes a minimum of six hours of ethics as required by the Minnesota Certification Board, Minnesota Association of Resources for Recovery, and Chemical Health and National Association of Alcohol and Drug Abuse Counselors. This course meets academic coursework criteria of Minnesota Statute 2005 Chapter 148c, Subdivision 5a, Area 2 and Minnesota Rule 4747. Service learning is a component of this course. Prerequisite: CDEP 1020 and HSER 1030.

## Chemical Dependency Assessments CDEP 2010 3 Credits

 This course addresses the screening, intake, assessment, treatment planning, and the multicultural aspect of chemical dependency, case management, referral, record keeping, reports, consultation and professional conduct. Students focus on chemical dependency assessment and criteria including Rule 25, the Six Dimensions of treatment planning according to Rule 31. This course meets the academic course work requirement for Minnesota Statute 2005 Chapter 148C and Minnesota Rule 4747. Prerequisite: CDEP 1020 and HSER 1030.
## Counseling Skills CDEP 2020

## 4 Credits

This course addresses chemical dependency counseling theory and practice, crisis intervention, orientation, client education, referral, professional and ethical responsibility, treatment planning, case management, reporting and record keeping, as well as culturally appropriate models for counseling. The course focuses on enhancing motivation for change in substance abuse treatment, stages of client change, and counseling skills appropriate for each particular stage. Students also address crisis intervention, grief and loss, and the 12 steps. This course meets the requirement for Minnesota Statute 2005 Chapter 148C and Minnesota Rule 4747. Prerequisite: CDEP 1020.

## Group Counseling CDEP 2030

## 3 Credits

This course addresses chemical dependency group counseling theory and practice, crisis intervention, orientation, client education, referral, and professional and ethical responsibility, treatment planning, reporting and record keeping, and case management. Culturally appropriate models for group counseling, formation of groups, ground rules and documentation in groups are addressed. This course meets the academic course work requirement for Minnesota Statute 2005 Chapter 148C and Minnesota Rule 4747. Prerequisite: CDEP 1020 and HSER 1030.

## Case Management for Chemical Dependency Treatment CDEP 2050 3 Credits

This course will address an overview of the multiaxial assessment of the DSMIV. Special problems, including mental health issues will be discussed. The course provides students with knowledge and practice in case management, through screening, assessment, treatment planning, consulting, referral, and recordkeeping. The student will practice documentation of client problems, goals, objectives, and progress notes as required by treatment centers. This course meets the requirement for Minnesota Statute 2005 Chapter 148C and Minnesota Rule 4747. Prerequisite: CDEP 1020 and HSER 1030.

## Co-Occurring Disorders: Substance Abuse and Mental Health CDEP 2055 <br> 3 Credits

This course will meet the Rule 31 criteriafor training in co-occurring mental health problems and substance abuse. The course will include competencies related to
philosophy, screening, assessment, diagnosis and treatment planning, documentation, programming, medication, collaboration, mental heath consultation and discharge planning. The core functions involved include screening, intake, assessment, treatment planning, crisis intervention, referral and multicultural aspects of chemical dependency. Prerequisite: CDEP 1020 and HSER 1030 or instructor consent.

## Addiction Counseling Internship I CDEP 2781 4 Credits

This is the first internship course in a two-internship sequence. Students will work in a treatment facility to gain work experience integrating the 12 core chemical dependency counseling functions defined by state law in their practicum. Internship I consists of 440 hours of the 880 required by state law. In addition to work experience, students will meet with faculty at assigned times to discuss their internship experiences. Prerequisite: All required chemical dependency coursework completed and consent of chemical dependency coordinator. Recommendations: Student should plan to complete CDEP 2781 and CDEP 2782 in two consecutive semesters.

## Addiction Counseling Internship II CDEP 27824 Credits

This is the second internship course in a two-internship sequence. Students will work in a treatment facility to gain work experience integrating the 12 core chemical dependency counseling functions defined by state law in their practicum. It consists of the remaining 440 hours of the 880 required by state law. In addition to work experience, students will meet with faculty at assigned times to discuss their internship experiences. Prerequisite: All required chemical dependency coursework completed and consent of chemical dependency coordinator. Recommendations: Student should complete CDEP 2781 and CDEP 2782 in two consecutive semesters.

## Chemistry

## Chemistry Concepts CHEM 1020

MnTC: Goal 03
This course deals with the basic concepts of chemistry. Topic include general properties of matter, the development of the model of the atom, nuclear chemistry, basics of chemical bonding, chemical equations and their uses,
acids and bases, oxidation-reduction, and an introduction to organic chemistry. The laboratory portion of the course introduces students to basic
equipment and procedures used in the science laboratory and provides an opportunity to observe some of the concepts discussed in the classroom. This course is intended for students who have not had a high-school chemistry course within the last three years. Prerequisite: Assessment score placement in MATH 0070 or above, or completion of MATH 0030 with a grade of " C " or higher. Assessment score placement in RDNG 1000, or completion of RDNG 0090 with a grade of " $C$ " or higher.

## Principles of Chemistry I CHEM 1041 MnTC: Goal 03

This is the first course in a two-course introduction to chemistry. Students will investigate the basic concepts of chemistry, including atomic theory and structure, chemical nomenclature, chemical equations and stoichiometry, electron configuration and periodicity, chemical bonding, molecular structure, enthalpy changes associated with chemical reactions, the behavior of gases, and an introduction to organic chemistry. Quantitative laboratory experiments emphasize observation, organization of data, and analysis of data. This course is intended for students who need a course in general chemistry to fulfill a requirement for a variety of majors such as: chemistry, medicine, biology, nursing, dentistry, physical therapy and liberal arts. Prerequisite: Assessment score placement in MATH 1061 or above, or completion of MATH 0070 with a grade of "C" or higher. Assessment score placement in RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher.

## Principles of Chemistry II <br> CHEM 1042 <br> MnTC: Goal 03

This course is a continuation of CHEM 1041. Students will investigate solid state structure, properties of solutions, chemical kinetics, chemical equilibria, acids and bases, oxidation and reduction, and chemical thermodynamics. The laboratory work emphasizes observation, organization of data, analysis of data, and experimental design. This course is intended for students who need a second course in general chemistry to fulfill a requirement for a variety of majors such as: chemistry, medicine, biology, nursing, dentistry, physical therapy
and liberal arts. Prerequisite: Completion of CHEM 1041 with a grade of "C" or higher.

## Independent Study CHEM 1790

## 1-3 Credits

This variable-credit elective course emphasizes the student's independent search for advanced knowledge as well as additional lab and/or class work in an area of chemistry outside that covered in the regularly scheduled courses. The student and instructor will devise a formal plan of study to satisfy credit workload requirements within a one-semester (or summer session) timeline. Prerequisite: CHEM 1041 with a grade of " $B$ " or higher, and consent of instructor and dean.

## Organic Chemistry I

CHEM 2041

## 5 Credits

This course is an introduction to organic chemistry. Topics include a review of covalent bonding, acid-base chemistry, reaction energetics, and an introduction to organic functional groups, stereochemistry, and substitution reactions. The laboratory work provides an introduction to laboratory techniques used in organic chemistry synthesis, and the use of chromatography and spectroscopy in the analysis of organic compounds. Prerequisite: CHEM 1042 or equivalent, with a grade of " $C$ " or better.

## Organic Chemistry II CHEM 2042

5 Credits
This course is a continuation of CHEM 2041. Topics include the study of the properties and reaction of carbonyl compounds, alkenes, aromatic compounds, and free radicals. Applications of organic chemistry, including polymers, natural products, and photochemistry, will be introduced and discussed. The laboratory work will include examples of these reactions and the chemical and instrumental identification of organic compounds. Prerequisite: CHEM 2041 or equivalent, with a grade of " $C$ " or better.

## Chinese

## Beginning Chinese I <br> CHIN 1011 <br> 5 Credits MnTC: Goal 08

This course is an introduction to Mandarin Chinese. Fundamental grammar, correct oral-expression, aural comprehension and reading are stressed. Weekly listening and laboratory work are required. An introduction

## 7 Course Descriptions

to Chinese culture is also included. Restriction: If students have completed any Chinese language course, consent of instructor is required.

## Beginning Chinese II <br> CHIN $1012 \quad 5$ Credits MnTC: Goal 08

This course is the second course in a beginning sequence and a continuation of Chinese 1011. Continued development of all four language skills (speaking, listening comprehension, writing and reading) is stressed. Weekly listening and laboratory work are required. A further exploration of Chinese culture is included. Prerequisite: CHIN 1011 or equivalent.

## Intermediate Chinese I <br> CHIN $2021 \quad 5$ Credits MnTC: Goal 08

This course is the first term of second-year Chinese. Students will converse with a Mandarin speaker on simple topics of daily life, as well as formulate and understand structurally more complicated sentences. In addition, students will practice paragraphlevel Chinese reading and writing. The course material will incorporate topics that are of interest to the students with social and cultural aspects in Chinese-speaking societies. Two hours per week in the language laboratory are required. Prerequisite: CHIN 1012 or equivalent.

## Intermediate Chinese II <br> CHIN 2022 <br> 5 Credits MnTC: Goal 08

This course is the second term of secondyear Chinese, focused on developing communicative skills when dealing with routine tasks and social situations in Chinese. Students will read authentic Chinese texts and write compositions on specifically assigned topics to foster a deeper understanding of Chinese society and culture. Two hours per week in the language laboratory are required. Prerequisite: CHIN 2021 or equivalent.

## Communication

## Fundamentals of Public Speaking COMM 1021 3 Credits MnTC: Goals 01 \& 09

This course focuses on learning techniques for effective public speaking in academic, business, professional, and community
settings. Students practice these skills by preparing and presenting informative and persuasive oral presentations in class.Course topics include audience analysis, ethics, speech purpose, organization, delivery, visual aids, outlining, and speaker evaluation. Prerequisite: Assessment score placement in RDNG 1000, or completion of RDNG 0900 OR RDNG 0950 with a grade of " $C$ " or higher. Recommendation: Assessment score placement in ENGL 1021, or completion of ENGL 0090 with a grade of "C" or higher.

## Introduction to Intercollegiate Debate COMM 1023 <br> 3 Credits

Students will prepare for and compete in intercollegiate debate competition. Students will learn debate theory, current events research techniques, and presentation skills necessary to enter debate competition. Note: Interested students should contact instructor concerning weekend travel for competition and other requirements for participation on the debate team. These requirements may happen outside of scheduled class time. Students traveling off-campus for competition must meet established academic standards. The instructor can answer any questions about travel, extra meetings or academic standards. Prerequisite: Assessment score placement in RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of " $C$ " or higher; assessment score placement in ENGL 1021 or completion of ENGL 0090 with a grade of " $C$ " or higher, or consent of instructor. Recommendation: COMM 1021 should be completed prior to or during course.

## Advanced Intercollegiate Debate COMM 10243 Credits

Students will develop skills learned in Introduction to Intercollegiate Debate by preparing for and competing in intercollegiate debate competition. Students will learn advanced debate theory, advanced current events research techniques, and advanced presentation skills necessary to enter advanced levels of debate competition. Note: Interested students should contact instructor concerning weekend travel for competition and other requirements for participation on the debate team. These requirements may happen outside of scheduled class time. Students traveling off-campus for competition must meet established academic standards. The instructor can answer any questions about travel, extra meetings or academic standards. Prerequisite: COMM 1023 or consent of instructor.

## Interpersonal Communication COMM 1031 3 Credits MnTC: Goals 01 \& 07

This course focuses on basic communication theories and concepts, and the practice of interpersonal communication skills. Topics include the self and others as communicators, verbal and nonverbal messages, listening, conflict management, self-disclosure, and the dynamics of human relationships. The course content applies to everyday communication situations at home and on the job. Prerequisite: Assessment score placement in RDNG 0950 or higher, or completion of RDNG 0900 with a grade of $C$ or higher, and assessment score placement in ENGL 0090, or completion of ENGL 0080 with a grade of C or higher. Recommendation: Assessment score placement in RDNG 1000, or completion of RDNG 0900 OR RDNG 0950 with a grade of $C$ or higher, and assessment score placement in ENGL 1021, or completion of ENGL 0090 with a grade of C or higher.

## Small Group Communication COMM $1041 \quad 3$ Credits MnTC: Goals 01 \& 09

This course focuses on communication in small groups. Topics include small group communication theory and effective interpersonal skills; group leadership, cohesion, and emergence roles; conflict management; problem-solving and decisionmaking; planning and conducting meetings; and parliamentary procedure. The course content applies to everyday situations in the community and workplace, with emphasis on practical application and practice of oral skills. Some group meetings and activities outside scheduled class hours are required. Prerequisite: Assessment score placement in RDNG 0950 or higher, or completion of RDNG 0900 with a grade of C or higher, and assessment score placement in ENGL 0090, or completion of ENGL 0080 with a grade of C or higher. Recommendation: Assessment score placement in RDNG 1000, or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher, and assessment score placement in ENGL 1021, or completion of ENGL 0090 with a grade of C or higher.

## Intercultural Communication COMM $1051 \quad 3$ Credits MnTC: Goals 01 \& 08

Study cultural differences and how they affect communication and cause misunderstanding. Are people really different from one another or are they basically alike? Topics include the role of culture in human behavior; references
to a wide range of specific cultural groups; cultural aspects of domestic and international business; issues in refugee/immigrant resettlement and adaptation; and intercultural relationships. Materials/activities include reading, films, class discussions, group events, personal interviews. Prerequisite: Assessment score placement in RDNG 0950 or higher, or completion of RDNG 0900 with a grade of C or higher, and assessment score placement in ENGL 0090, or completion of ENGL 0080 with a grade of $C$ or higher. Recommendation: Assessment score placement in RDNG 1000, or completion of RDNG 0900 or RDNG 0950 with a grade of C or higher, and assessment score placement in ENGL 1021, or completion of ENGL 0090 with a grade of $C$ or higher.

## Communication, Travel and Tourism COMM $1053 \quad 1$ Credit MnTC: Goals 01 \& 08

This course is an introduction to being a cross-culturally effective traveler: intercultural communication applied to international travel. Topics include world tourism, its positive and negative effects on individuals and countries; tourism as an instrument of national development; appropriate everyday tourist behaviors; and survival skills for any trip abroad. For all students, especially those going overseas on business, for pleasure, or to study. Offered S, F.

## Introduction to Mass Communication COMM 1061 3 Credits <br> MnTC: Goals 05 \& 09

This course focuses on the historical, cultural, economic, and political impact of mass communication on individual media consumers and on American and global cultures. Topics may include corporate control, the role of government, freedom of expression, values and ethics, journalism, advertising, public relations, and media effects. Specific media industries, including radio, television, movies, newspapers, books, magazines, and the internet, will be examined. Prerequisite: Assessment score placement in OR RDNG 0950 or higher, or completion of RDNG 0900 with a grade of C or higher, and assessment score placement in ENGL 0090, or completion of ENGL 0080 with a grade of C or higher. Recommendation: Assessment score placement in RDNG 1000, or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher, and assessment score placement in ENGL 1021, or completion of ENGL 0090 with a grade of $C$ or higher.

## Interviewing COMM 2011 MnTC: Goals 01 \& 09

This course focuses on developing a working knowledge of the interview process and the communication skills necessary to effectively interview. Students will develop and conduct several types of interviews, which may include oral history, journalistic, research, persuasive, and employment interviews. Students' communication skills, including effective listening, appropriate responding, nonverbal communication, perception, and empathy, will be examined, practiced, and evaluated. Prerequisite: Assessment score placement into RDNG 1000 or completion of RDNG 0900 or RDNG 0950 with a grade of C or higher, and assessment score placement into ENGL 1021 or completion of ENGL 0090 with a grade of C or higher. Recommendation: Completion of ENGL 1021 with a grade of C or higher or concurrent enrollment.

## Nonverbal Communication COMM 2033 3 Credits MnTC: Goals 01 \& 07

Effective communication requires an understanding of nonverbal messages. Students will study a variety of nonverbal communicators, including gestures, facial expression, appearance, vocal cues, space, and time. This course is intended to help students understand and analyze their own and others' nonverbal communication in interpersonal, intercultural, and workplace relationships. Prerequisite: Assessment score placement into RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher, and assessment score placement into ENGL 1021 or completion of ENGL 0090 with a grade of $C$ or higher. Recommendation: Completion of ENGL 1021 with a grade of $C$ or higher or concurrent enrollment.

## Minnesota's New Immigrants: Communication, Culture \& Conflict COMM 2051 3 Credits MnTC: Goals 05 \& 07

Minnesota's recent immigrant/refugee population is markedly different from that of the rest of the U.S., with proportionately significant numbers of Hmong, Somalis, Liberians, and Tibetans among others. In this course we study some of the more visible groups and the regions they come from: Southeast Asia, Horn of Africa, West Africa, Latin America, former Soviet Union/Eastern Europe. Why did they leave their homeland? What culture and communication did they bring with them? What communication
adjustment and cultural conflicts do they experience? What are some important issues for their lives in Minnesota as they communicate with the larger society? Materials/activities include readings, films, discussions, interviews, and guest speakers/ on-site visits when possible. Prerequisite: Assessment score placement into RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade cement into ENGL 1021 or completion of ENGL 0090 with a grade of $C$ or higher. Recommendation: Completion of ENGL 1021 with a grade of C or higher or concurrent enrollment.

## Communication and Gender COMM 2071 <br> 3 Credits MnTC: Goals 01 \& 07

This course studies how communication and culture create, maintain, and influence perceptions of gender. Patterns of women's and men's communication, why these patterns differ, and how communication differences are perceived will be emphasized. Various communication contexts covered in this course will include the family, friendship, romantic relationships, education, the workplace, and the media. Prerequisite: Assessment score placement into RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher, and assessment score placement into ENGL 1021 or completion of ENGL 0090 with a grade of C or higher. Recommendation: Completion of ENGL 1021 with a grade of C or higher or concurrent enrollment.

## Health Communication COMM 2081 MnTC: Goals 01 \& 07

This course explores the vital relationship between health and communication. Topics include the study of personal, cultural, and political contexts in examining the theories of health communication to improve health literacy throughout a lifetime of change. This course applies to health communication situations at home and on the job. Prerequisite: Assessment score placement into RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher, and assessment score placement into ENGL 1021 or completion of ENGL 0090 with a grade of C or higher. Recommendation: Completion of ENGL 1021 with a grade of $C$ or higher or concurrent enrollment.

## Communication Capstone Certificate COMM 20991 Credit

This course will give students an opportunity to review communication courses successfully

## 7 Course Descriptions

completed in the certificate program. Students will reflect on how these courses have enhanced their current level of knowledge and skills and demonstrate how they have achieved the Communication Student Competencies defined in the Minnesota Transfer Curriculum. In addition, students will work with the course instructor to explore future career and academic goals as related to the Communication Certificate. Prerequisite: Consent of Instructor.

## Special Topics COMM 2790

## 1-3 Credits

This course covers topics of special interest in Communication which may vary. Prerequisite: Assessment score placement in RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher. Recommendation: Completion of ENGL 1021 with a grade of "C" or higher or concurrent enrollment in ENGL 1021.

## Computer Application Technology

## Computer Literacy CAPL 10001 Credit

This course is designed to provide students with the beginning skills and basic computer concepts needed in today's world. In a hands-on lab environment, students will be introduced to the computer and its terminology. Topics include computer system overview, basic exploration of some popular software packages, and managing computer files. Recommendation: OFFT 0092 Restriction: Closed to students who have earned credit in CAPL 1010 OR CSCI 1020.

## Introduction to Software Applications CAPL 1010 3 Credits

This introductory course is an overview of the following Microsoft Office programs: Microsoft Word-a word processing program; Microsoft Excel-an electronic spreadsheet; Microsoft Access-a database program; and Microsoft PowerPoint-a presentation graphics program. Students will reinforce their skills by completing assignments that integrate the applications. This course emphasizes hands-on computer applications. Prerequisite: Keyboarding skills (30 wpm or higher) or OFFT 1001

## Microsoft PowerPoint CAPL 1021

3 Credits
This course covers the creation, integration, and customization of professional-looking slide presentations. Skills presented include using design templates and auto layouts, working within different PowerPoint views, enhancing presentations using pictures and other graphical elements such as textboxes, SmartArt, shapes, and WordArt. Other topics covered are applying custom animations and animation schemes, modifying visual elements and presentation formats, running a slide show with hyperlinks and action buttons, creating a self-running presentation, customizing a template and using masters, developing a presentation with content from outside sources including tables and charts, and organizing slides and creating a photo album. Prerequisite: OFFT 1001 or instructor consent.

## Microsoft Outlook CAPL $1022 \quad 1$ Credit

This course uses Microsoft Outlook as an information management tool for business and personal use. This software includes a calendar feature, task and contact management, note taking, a journal, web browsing, and e-mail.

## Microsoft Word CAPL 1023

 3 CreditsThis course uses a comprehensive word processing program to create and edit professional-looking business documents. Students will create letters, memos, announcements, resume, fax cover sheets, mailing labels, mail-merge documents, and other types of business documents. Prerequisite: OFFT 1001 or consent of instructor.

## Microsoft Excel CAPL 1025 <br> 3 Credits

This course covers spreadsheet software that enables the student to organize data, work with formulas, charts and graphics, work with reports, and develop a professional worksheet. Other topics include: Excel lists, use of multiple worksheets/workbooks, Pivot Table and Pivot Charts. The students will apply critical thinking and problem-solving skills to real-life spreadsheet projects. Prerequisite: CAPL 1010 or CSCI 1020

## Microsoft Access CAPL 1027

## 3 Credits

This course covers the newest version of database software that allows the student
to create and build databases, define table structures, maintain and query databases, create and use forms and reports, enhance databases using advanced tools, integrate, analyze, and automate tasks, and secure a database. The students will apply critical thinking and problem-solving skills to real-life database projects. Prerequisite: CAPL 1010 or CSCI 1020

## Microsoft Project CAPL 1028

## 1 Credit

This course covers project management skills including planning a project, creating project schedules, communicating project information, assignment resources, tracking progress, and sharing information across application and the Web. Microsoft Project is used to facilitate project management as it is applied to various records-related projects. Trends and emerging technologies will be explored. Prerequisite: CAPL 1010 or consent of instructor.

## Web Design, Creation and Management CAPL $1050 \quad 3$ Credits

This course offers a hands-on approach to learning skills necessary to plan, create, publish, and maintain a Web site. Students will use professional Web design software to create modern, standards-based sites. Topics include HTML, hyperlinks, Cascading Style Sheets (CSS), graphics, and best practices in Web page and site design. No prior knowledge of Web design is assumed. Prerequisite: Keyboarding ( 35 WPM or OF 1001) and basic knowledge of word processing software or instructor consent. Recommendation: Basic knowledge of the Web environment and Web browsers

## Desktop Publishing

## CAPL 2020

## 3 Credits

In this course, students will use advanced features and design concepts to create a portfolio of a variety of business and personal publications. Document examples include conference signs, cover sheets, fax sheets, agendas, memos, letterheads, envelopes, business cards, calendars, address labels, personal stationery, and certificates. Throughout the course, students will apply problem-solving, critical-thinking, and creativethinking abilities as well as the hands-on computer skills to real-world situations. Prerequisite: CAPL 1023 or consent of instructor

## Computer Science

## Overview of Computer Science CSCI 10014 Credits

This course presents the foundations and limits of today's computing/information technology. It describes how to reason about applications and technological advances. Social topics covered include privacy, ethics, and impact of technology. Technological topics covered include algorithms for automating solutions, abstraction in design/problem solving, concepts of computer databases, networks, expert systems, the Internet, security, desktop software, and personal computers. Prerequisite(s): Assessment score placement in MATH 0070 or above, or completion of MATH 0030 with a grade or "C" or higher.

## Introduction to Game Programming CSCI 1011 3 Credits

What goes into creating a computer game? This course, for students with no programming background, explores fundamental game elements such as sprites, basic animation, collision detection, event-response mechanisms, and sound. Students will use game development software to create complete games of varying complexity. By using programming scripts the games' complexity will be limited only by the students' imagination and ingenuity. Prerequisite: Basic computer competency (use of keyboard, mouse, Windows).

## Introduction to Personal Computers and Information Systems CSCI 1020 3 Credits

This course is intended to give the layperson an understanding of personal computers and information systems. Computer concepts and applications will be covered. The concepts will include basic information on how personal computers, networks, and software work. Enterprise information systems and technologies will be discussed. Additional topics such as security, privacy, ethics, information literacy, and technological trends will be presented. Students will gain hands-on experience using current business applications (such as word processing, database, spreadsheet software). Prerequisite: Basic knowledge of Microsoft Windows.

## Spreadsheet \& Database Software CSCI 1021 3 Credits

This course teaches the theory and application of spreadsheet and database management software. The current software technologies will be used to demonstrate these concepts and principles. Students will study and apply spreadsheet concepts such as data lists, pivot tables, one-variable and two-variable input tables, importing data, and the creation of spreadsheet applications using a programming language. Students will study and apply database concepts such as table relationships, queries, forms and reports, macros, and the creation of database applications using a programming language. The intent of this course is to prepare students to be able to customize spreadsheet and database software applications. Prerequisite: Basic knowledge of Microsoft Windows, introductory knowledge of spreadsheets and databases. Recommendation: CSCI 1020 and CAPL 1010.

## Internet Essentials: Concepts, Use and Design CSCI 1050

## 3 Credits

This course provides a comprehensive overview of the Internet. Students begin by examining the hardware and software technologies that support the Internet such as TCP/P, HTML and JavaScript. This is followed by learning about many of the current features such as compression, search, e-mail, file transfer and internet conferencing. Concepts and guidelines are presented for internet security, privacy and safety. Students are introduced to web site design, management and search engine optimization (SEO). Current technologies, such as web browsers, content management systems (e.g. Wordpress, Joomla) and/or web-based tools are used to demonstrate the concepts and develop student proficiency. Prerequisite: Basic knowledge of Microsoft Windows

## Introduction to Programming CSCI $1060 \quad 3$ Credits

This course provides a comprehensive introduction to fundamental programming concepts for students interested in exploring computer programming for the first time. Program logic, algorithm design and programming control structures are emphasized. Programming activities introduce the student to contemporary concepts, possibly including objects, graphical user interfaces, and event-driven programming. Gaining knowledge of these concepts will prepare the beginning student to learn additional
programming languages. Prerequisite: Basic knowledge of Microsoft Windows. Assessment score placement in MATH 0030 or above, or completion of MATH 0010 or MATH 0015 with a grade or C or higher.

## Visual Basic for Applications

 CSCI 10623 CreditsThis course is designed to provide knowledge of how to use Visual Basic for Applications (VBA) to customize Microsoft Office applications. The course will cover the basic programming constructs in the VBA language and then demonstrate how they can be used to develop customized Word, Excel, and Access applications. VBA will be used by students to create working applications. Prerequisite: CSCI 1021 or equivalent working knowledge of Microsoft Office. Recommendation CSCI 1060 or equivalent background in the fundamentals of programming.

## Visual Basic CSCI 1065

## 3 Credit

This course explores how to develop Windows-based applications using the core features of Visual Basic (VB). Topics include programming Windows controls, event-driven programming, writing modular code, and using lists, arrays, structures and files. Using VB to write Internet applications will also be introduced. Prerequisite: Some knowledge of some another programming language (such as C, C+t, Java, JavaScript, Fortran, etc.). Working knowledge of Microsoft Windows. No knowledge of Windows programming is required. Assessment score placement in MATH 0030 or above, or completion of MATH 0010 with a grade or " C " or higher

## Programming Fundamentals CSCI 10814 Credits

This course introduces the fundamental concepts, structures and techniques of programming. Topics include introduction to algorithms, design and development and the fundamental constructs of programming and data. Students will use a modern integrated development environment to create complex, multi-file projects. The course also introduces students to numerical applications (using MATLAB), machine architecture, revision control, and unit testing. Differences between the C and $\mathrm{C}++$ language are presented. Prerequisite: Assessment score placement in MATH 0070 or above, or completion of MATH 0030 with a grade or C or higher. Recommendation: CSCI 1060 or a beginning course in programming

## 7 Course Descriptions

## Object-Oriented Programming CSCI 10823 Credits

This course introduces the concepts of object-oriented programming to students with a background in the procedural paradigm. It begins with a review of control structures and data types with emphasis on structured data types and array processing. It then programming approach, focusing on the definition and use of classes along with the fundamentals of object-oriented design. Other topics include an overview of programming language principles, simple analysis of algorithms and an introduction to software engineering issues. Prerequisite: CSCI 1081 or CSCI 2011.

## Internet Programming: <br> Client-Side Scripting and Applications CSCI 20054 Credits

This course focuses on how to design and implement information services over the Internet from the client side. The course focuses on both usability and client-side scripting. Current technologies such as HTML5, Cascading Style Sheets (CSS3), the DOM, XML and JavaScript will be used to develop Internet client applications. Principles of interface design and human factors will be used to improve usability. Ethical issues and information security principles related to web design will be presented. Prerequisite: Working knowledge of a contemporary programming language such as Java, C++ or Visual Basic. Recommendation: CSCI 1050; CSCI 1060 or CSCI 1081 or CSCI 1082; familiarity with HTML.

## Internet Programming: Server-side Applications CSCI $2006 \quad 3$ Credits

This course focuses on the server-side components involved in developing Internet programs. The course will examine some of the current languages, interfaces and technologies used to develop server-based applications that work in concert with clientside logic. Server-side scripting languages such as PHP and Ruby (in the Rails framework) will be used in conjunction with MySQL to create database-driven websites. Ajax will also be explored as a technique for enhancing the interactivity of a website.
Prerequisite: Working knowledge of an objectoriented programming language such as Java or C++. Working knowledge of JavaScript. Recommendation: CSCI 2005. CSCI 1081 or CSCI 1082. Introductory knowledge of database concepts and techniques.

## Concepts and Applications of Online Education Technology CSCI 2007 <br> 3 Credits

This course provides an introduction to concepts and application of online education technology. Students will be introduced to essential software and network concepts. A survey of current hardware and software technologies will be presented. Students will apply these technologies gaining practical experience developing online content. Additional legal and social topics such as intellectual property rights, privacy, ADA compliance, assessment and accreditation will also be presented. Effective support resources for online education will be presented. Prerequisite: Basic knowledge of Microsoft Windows.

## Discrete Structures of Computer Science CSCI 2014 4 Credits

This course covers discrete mathematical techniques and structures used in computer science. The content stresses problem solving techniques that involve the use of logic, various methods of proof, and sets. Topics of particular interest to computer scientists include big-0 notation, recursion, and the fundamentals of trees and graphs. Prerequisite: Assessment score placement into MATH 1081 or completion of MATH 1061 with a grade of "C" or higher.

## Introduction to the Organization of Computer Systems CSCI 20164 Credits

This course is an introduction to hardware/ software components of a computer system. Topics covered will include data representation, computer arithmetic, basic logic design, machine-level programs, instruction set architectures, processor and memory organization, storage hierarchy, optimization techniques and future trends. Students will write programs in a low-level language, such as assembly language. Prerequisite: CSCI 1020 or equivalent working knowledge; some experience in high-level language programming, and familiarity with basic concepts in computer science, such as those covered in CSCI 1060, CSCI 1065, or CSCI 1081.

## Elementary Computational Linear <br> Algebra <br> CSCI 20334 Credits

This course is an introduction to the numerical methods of Linear Algebra and their application to solving computational problems.

Topics covered will include matrices, linear transformations, linear vector spaces, inner product spaces, systems of linear equations, Eigenvalues, and singular values. Algorithms and computational matrix methods will be presented using MATLAB. Matrix methods will be used to solve a variety of computer science problems. Prerequisite: MATH 1081, CSCI 1081 or college-level course in programming

## Database Management Systems CSCI 2050 <br> 3 Credits

The course covers concepts and methods for the definition, creation, and management of databases. Emphasis is placed on the use of appropriate methods and tools to design and implement databases to meet identified needs. Conceptual, logical, and physical database design theories and techniques (such as Entity Relationship diagrams) are presented. SQL and query tools are covered and database systems are evaluated. Finally, database administration, integrity, security, and privacy are presented as well as current and emerging trends. Database management systems such as MySOL are used in the course. Prerequisite: CSCI 1082, CSCI 2082, and assessment score placement into MATH 1081 or completion of MATH 1061 with a grade of C or higher.

## Python for Programmers

## CSCI 2061

1 Credit
This course introduces students to the syntax, programming style, and library system of the Python programing language. It is intended only for students who already have a background in Object-Oriented programming in another language. A knowledge level equivalent to that obtained through successful completion of CSCI 1081 and CSCI 1082 will be assumed. Prerequisite: CSCI 1082 with a grade of C or higher or instructor consent.

## Data Structures and Algorithms CSCI 20823 Credits

This course builds on the foundation provided by the CSCI 1081, CSCI 1082 sequence to introduce the fundamental concepts of data structures and the algorithms that proceed from them. Topics include generic programming, recursion, the underlying philosophy of objectoriented programming, fundamental data structures (including stacks, queues, linked lists, and trees) and the basics of algorithmic analysis. Prerequisite: CSCI 1082 with a grade of C or higher.

## C\# Language and the .NET Framework CSCI 2091 4 Credits

This course introduces the C\# programming language and .NET framework. The course will present C\# language features designed to create a sequence of programs of increasing complexity. C\# language features covered will include basic constructs, object-oriented features, exception handling and the LINO language. Then, an overview of the .NET framework will be presented. Finally, students will use C\# in conjunction with .NET to create sophisticated GUI programs that access data and the web. Prerequisite: CSCI 1082 or thorough knowledge of an object-oriented programming language such as Java or C++.

## Mobile Application Development with Android CSCI 2094 <br> 4 Credits

This course teaches a student how to develop mobile applications for the Android operating system. Students will use state-of-the-art development tools to develop, debug, test and deploy applications of moderate complexity. Course topics will include how to incorporate Android features such as touch, motion, communication, multi-threading, audio and video to create applications that take full advantage of mobile device capabilities. Techniques for accessing data from databases and content providers will also be presented. Prerequisite: CSCI 1082 or thorough knowledge of Java

## Independent Study CSCI 2795 <br> 1-4 Credits

This course allows advanced computer science students to pursue topics of individual interest that are either outside of the existing CSCl offerings or which go beyond them in depth. Prerequisite: Students must have completed or be currently completing the core of the CSCl curriculum as defined by the core of the AS in Computer Science. Project must be approved, prior to enrollment, first by instructor, and then dean.

## Cosmetology

## Preclinical Introduction COS 1000 <br> 3 Credits

This course provides an introduction to cosmetology careers including professional image, Minnesota laws and rules, safety, and sanitation. Anatomy, electricity, and chemistry as related to the profession will
also be included. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Assessment score placement in RDNG 0950 or above, or completion of RDNG 0900 with a grade of "C" or higher.

## Preclinic Hair Styling and Design COS $1007 \quad 3$ Credits

This course provides elementary hair service skills including trichology, shampooing, conditioning, thermal and wet hairstyling on all types and lengths of hair, wigs, and extensions. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Assessment score placement in RDNG 0950 or above, or completion of RDNG 0900 with a grade of C or higher. COS 1000 or concurrent enrollment.

## Preclinic Nail Care COS 1010

3 Credits
This course provides an introduction to nail care including manicuring, pedicuring, and artificial nail application. Also, the safe use of products will be covered. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Assessment score placement in RDNG 0950 or above, or completion of RDNG 0900 with a grade of C or higher. COS 1000 or concurrent enrollment.

## Preclinic Chemical Control COS 1015 <br> 3 Credits

This course provides an introduction to cosmetology chemicals and their applications. This includes curl reformation, permanent waving, soft curl perming, and chemical relaxing. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Assessment score placement in RDNG 0950 or above, or completion of RDNG 0900 with a grade of C or higher. COS 1000 or concurrent enrollment

## Preclinic Skin Care COS 1020

3 Credits
This course provides an introduction to dermatology, skin analysis, facial massage, makeup application, and waxing. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Assessment score placement in RDNG 0950 or above, or completion of RDNG 0900 with a grade of C or higher. COS 1000 or concurrent enrollment.

## Preclinic Hair Color COS 1025

## 3 Credits

This course provides an understanding of temporary, semi-permanent, and permanent
hair color services as well as hair lightening and corrective color. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Assessment score placement in RDNG 0950 or above, or completion of RDNG 0900 with a grade of C or higher. COS 1000 or concurrent enrollment.

## Preclinic Haircutting COS 1035

## 3 Credits

This course provides basic and advanced skill training in haircutting on women and men using shears, razor, clipper, and texturizing techniques. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Assessment score placement in RDNG 0950 or above, or completion of RDNG 0900 with a grade of C or higher. COS 1000 or concurrent enrollment.

## Salon Preparation COS 1040

3 Credits
This course prepares students for clinical experiences including salon management, Minnesota Cosmetology laws and rules as related to the salon business. This course covers soft skills required by salons, such as communicating with clients and other salon personnel. Topics also include retail sales and planning a salon business. Students must be able to perform physical tasks to complete course requirements. Prerequisite(s): COS 1000 and 750 hours in Cosmetology or 125 hours in Nail Technician or instructor consent.

## Clinic Introduction <br> COS 1051 <br> 3 Credits

This course provides practical skill development using skills learned in preclinic courses. Students will have an initial exposure to the Century College clinic. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Completion of or concurrent enrollment in COS 1000 and one of the following: COS 1007, 1010, 1015, 1020, 1025, 1035.

## Clinic I

COS 1053
3 Credits
This is the first clinical course in an eightcourse sequence. This course provides students with a clinical experience in the Century College clinic for practical skill development. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Minimum of 240 hours in Cosmetology.

## 7 Course Descriptions

## Clinic II COS 1055 <br> 3 Credits

This is the second clinical course in an eight-course sequence. This course provides students with a clinical experience in the Century College clinic for practical skill development. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Minimum of 240 hours in Cosmetology.

## Clinic III <br> COS 1057

## 3 Credits

This is the third clinical course in an eightcourse sequence. This course provides students an opportunity in the Century College clinic to expand their knowledge and develop practical skills necessary for entry-level salon work. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Minimum of 500 hours in Cosmetology.

## Clinic IV COS 1059

This is the fourth clinical course in an eight-course sequence. This course provides students an opportunity in the Century College clinic to expand their knowledge and develop practical skills necessary for entry-level salon work. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Minimum of 500 hours in Cosmetology.

## Clinic V <br> COS 1061

## 3 Credits

This is the fifth clinical course in an eightcourse sequence. This course provides students an opportunity in the Century College clinic to expand their knowledge and develop practical skills necessary for entry-level salon work. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Minimum of 500 hours in Cosmetology or instructor consent.

## Clinic VI

COS 1063

## 3 Credits

This is the sixth clinical course in an eightcourse sequence. This course provides students the opportunity in the Century College clinic to apply theories and skills learned throughout the program. Emphasis will be placed on speed, accuracy, and proper selection of chemicals and services to prepare students for the salon. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Minimum of 750 hours in Cosmetology or instructor consent.


## Clinic VII

COS 1065

## 2 Credits

This is the seventh clinical course in an eight-course sequence. this course provides students the opportunity in the Century College clinic to apply theories and skills learned throughout the program. Emphasis will be placed on speed, accuracy, and proper selection of chemicals and services to prepare students for the salon. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Minimum of 750 hours in Cosmetology or instructor consent.

## Clinic VIII <br> COS 1067 <br> 2 Credits

This is the eighth clinical course in an eight-course sequence. This course provides students the opportunity in the Century College clinic to apply theories and skills learned throughout the program. Emphasis will be placed on speed, accuracy, and proper selection of chemicals and services to prepare students for the salon. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Minimum of 750 hours in Cosmetology or instructor consent.

## Cosmetology Capstone COS 1068

## 3 Credits

This capstone course enables students to update current skills in all areas of cosmetology. This course prepares students for the demands of a salon by using the peer teaching/learning process. This course prepares students for the state licensing exam and certification of skills. Students must be
able to perform physical tasks to complete course requirements. Prerequisite: Minimum of 900 hours in Cosmetology.

## Nail Clinic/License Preparation COS 1070 4 Credits

This course provides students the opportunity in the Century College clinic to apply theories and skills learned throughout the nail program. Emphasis will be placed on speed, accuracy, and proper selection of nail products to prepare students for the salon, the state licensing exam, and certification of skills. Students must be able to perform physical tasks to complete course requirements. Prerequisite: COS 1010, COS 1051 or concurrent enrollment.

## Salon Operations I

## COS 1081

## 1 Credit

This course gives students additional clinical experience to complete the required services and/or hours for licensure, including students desiring Wisconsin licensure and students reactivating a manicurist license. Emphasis will be placed on speed, accuracy, and proper selection of chemicals and services to prepare students for the salon. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Minimum of 1350 hours in Cosmetology or 250 hours in Nail technology or previous Minnesota Manicurist license or instructor consent.

## Salon Operations II <br> COS 1082

2 Credits
This course gives students additional clinical experience to complete the required services
and/or hours for licensure, including students desiring Wisconsin licensure. Emphasis will be placed on speed, accuracy, and proper selection of chemicals and services to prepare students for the salon. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Minimum of 1350 hours in Cosmetology or 250 hours in Nail technology or instructor consent.

## Salon Operations III COS 1083 <br> 3 Credits

This course gives students additional clinical experience to complete the required services and/or hours for licensure, including students desiring Wisconsin licensure. Emphasis will be placed on speed, accuracy, and proper selection of chemicals and services to prepare students for the salon. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Minimum of 1350 hours in Cosmetology or 250 hours in Nail technology or instructor consent.

## Salon Operations IV COS 1084

4 Credits
This course gives students additional clinical experience to complete the required services and/or hours for licensure, including students desiring Wisconsin licensure. Emphasis will be placed on speed, accuracy, and proper selection of chemicals and services to prepare students for the salon. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Minimum of 1350 hours in Cosmetology or 250 hours in Nail technology or instructor consent.

## Salon Operations V COS 1085

5 Credits
This course gives students additional clinical experience to complete the required services and/or hours for licensure, including students desiring Wisconsin licensure. Emphasis will be placed on speed, accuracy, and proper selection of chemicals and services to prepare students for the salon. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Minimum of 1350 hours in Cosmetology or 250 hours in Nail technology or instructor consent.

## Salon Operations VI COS 1086

6 Credits
This course gives students additional clinical experience to complete the required services and/or hours for licensure, including students desiring Wisconsin licensure. Emphasis will be placed on speed, accuracy, and proper selection of chemicals and services to prepare
students for the salon. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Minimum of 1350 hours in Cosmetology or 250 hours in Nail technology or instructor consent.

## Cosmetology Reactivation Course: Theory <br> COS $2011 \quad 3$ Credits

This course meets the Minnesota 155-hour Reactivation Course requirements needed for reactivating a license. This course introduces recent changes in Minnesota laws and rules and technological and product developments for stylists seeking to reactivate their license. Prerequisite: Previous Minnesota Cosmetology license.

## Cosmetology Reactivation Course: Practical <br> COS 2013 <br> 3 Credits

This course meets the practical portion of the Minnesota 155-hour Reactivation Course requirements needed for reactivating a license. This course introduces recent Minnesota law and rule changes and technological and product developments for stylists seeking to reactivate their license. Students must be able to perform physical tasks to complete course requirements. Prerequisite: COS 2011 or concurrent enrollment; previous Minnesota Cosmetology license.

## Cosmetology/Nail Technician Reactivation Course: License Preparation

 COS $2015 \quad 1$ CreditThis course prepares students for the written examination and certification of skills practical exam required for the reactivation of a license. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Previous Minnesota cosmetology license for cosmetology students, or previous Minnesota manicure license for the nail technician students.

## Criminal Justice

## Careers in Criminal Justice

CJS $1020 \quad 2$ Credits
This course is recommended as a first course for all students interested in the field of criminal justice. Students will study various career paths within the criminal justice field and will establish a course selection
pathway based on the student's intended career or education endeavors. The students will develop a portfolio to be used as an opportunity to exhibit their experience to transfer institutions or potential employers.

## Introduction to Forensic Science CJS $1070 \quad 3$ Credits

In this course, students will examine the processing of crime scenes for forensic evidence, the collection and preservation of the evidence, and the analyses performed by forensic scientists. The course instructor will utilize multi-media in a lecture format, demonstrations, and laboratory exercises, including but not limited to, forensic science disciplines such as latent prints, DNA, trace evidence, footwear impressions, proper crime scene processing, and documentation, firearms, and tool marks examinations. Students will also gain exposure to a career in forensic science. Prerequisite: Assessment score placement in RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of $C$ or higher. Assessment score placement in MATH 0070 or completion of MATH 0030 with a grade of C or higher. Assessment score placement in ENGL 0090 or completion of ENGL 0080 with a grade of $C$ or higher.

## Foundations of Intelligence \& Crime Analysis

## CJS $2010 \quad 3$ Credits

Students in law enforcement, criminal justice, and other public safety areas will study the history of the intelligence cycle and the processes and functions of an analysis unit. Students will study implementation of the intelligence cycle within an agency and community in order to develop information to support stakeholders and decision-makers. Students will study core analytical and statistical skills using data sources commonly found in public government. Prerequisite: Assessment score placement in ENGL 1021 or completion of ENGL 0090 with a grade of "C" or higher, assessment score placement in RDNG 1000, or completion of RDNG 0900 OR RDNG 0950 with a grade of $C$ or higher and assessment score placement in MATH 0030 or above or completion of MATH 0010 with a grade of " $C$ " or higher.

## Intelligence and Crime Analysis Methods I <br> CJS 2011 <br> 3 Credits

Students in law enforcement, criminal justice and other public safety areas will study critical thinking methodologies and how to apply them to case studies. Topics include how to conduct

## 7 Course Descriptions

basic and advanced research through open sources while discussing the use of closed sources of information. Students will be asked to demonstrate effective oral and written communication based on the methodologies and research techniques learned during the course. Prerequisite: CJS 2010 or instructor consent.

## Intelligence and Crime Analysis Methods II <br> CJS $2012 \quad 3$ Credits

Students in law enforcement, criminal justice, and other public safety areas will study how to apply critical thinking and analytical skills to case studies to conduct a critical review of real events. Topics will include the processes and structures of an organization and/or investigation to address deficiencies or gaps and how to address the deficiencies or gaps. The student will present a written and oral brief that demonstrates the mastery of the critical thinking and analytical skills.
Prerequisite: CJS 2011 or instructor consent.

## Portfolio of Intelligence and Crime Analysis <br> CJS $2013 \quad 1$ Credit

This course will give students an opportunity to review analysis courses successfully completed in the certificate program. Students will reflect on how these courses have enhanced their current level of knowledge and skills. In addition, students will work with the course instructor to explore future career and academic goals as related to intelligence and crime analysis. Prerequisite: CJS 2012.

## Intelligence and Crime Analysis Internship <br> CJS 2014 <br> 2-6 Credits

The internship experience provides an opportunity for students to work with intelligence and crime analyst professionals in the field and apply what they learned throughout the certificate program to the real world. Students may intern with their current employer if course objectives are met. Students may also work as interns or volunteers for organizations they wish to explore. Prerequisite: CJS 2012 and instructor consent

## Emerging Technologies in the Investigative Sciences <br> CJS 2060 <br> 2 Credits

This course provides an overview of emerging technologies as they apply to investigative sciences, criminal justice agencies, and the private sector security.

Applications include information management, identification technology, crime analysis, and crime investigation. Students will evaluate technology products and programs to determine their quality and suitability for agency applications. Recommendation: Assessment score placement in RNDG 1000 or above, or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher; assessment score placement in ENGL 1021 or completion of ENGL 0090 with a grade of " C " or higher.

## Private Sector Security and Investigations CJS 2070

3 Credits
This course covers the historical development of private sector security and investigations in American society. It considers the legal ramifications of privatization and its growing presence in the area of social control and emerging technologies. Topics include the role of private security in the private industry, retail, the judicial system, homeland security, and public safety. Recommendation: 15 college credits with a grade of " $C$ " or higher in each course prior to taking this course. Assessment score placement in RDNG 1000 or above, or completion of RDNG 0900 OR RDNG 0950 with a grade of " C " or higher and assessment score placement in ENGL 1021, or completion of ENGL 0090 with a grade of " $C$ " or higher.

## Police in the Community CJS 2081 <br> 3 Credits

This course examines the role of police in various types of communities. It considers the general and specialist approach to policecommunity relations, training, evaluation, performance, and changes in the role of the police due to homeland security, social policy, and emerging technologies. There is a 40-hour service learning requirement for this class. Recommendation: Assessment score placement in RDNG 1000 or above, or completion of RDNG 0900 OR RDNG 0950 with a grade of " C " or higher; assessment score placement in ENGL 1021 or, completion of ENGL 0090 with a grade of " C " or higher. Students should not enroll in this course concurrently with CJS 2085 because that also has a service learning requirement.

## Introduction to Corrections

CJS $2083 \quad 3$ Credits
This course will use the criminal justice perspective to explore analysis of corrections and correctional policy within the criminal and juvenile justice system in American society. Systematic organization of punishment and
incarceration will be studied according to institutional and community-based programs with regard to recurrent and chronic issues for management and officers. This course is a requirement for the criminal justice program and the investigative sciences program for criminal justice. Recommendation: Students should have completed 15 college credits prior to taking this class. Assessment score placement in RDNG 1000 or above, or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher and assessment score placement in ENGL 1021, or completion of ENGL 0090 with a grade of " $C$ " or higher.

## Community Corrections

 CJS 2084
## 3 Credits

This course introduces alternatives to traditional incarceration for convicted criminals and people on probation and parole. Topics include the history of community corrections and alternatives available, the legal framework for community corrections, the growth potential of the field, and the role of the corrections professional. This course applies to students interested in the criminal justice, law enforcement, human services, emergency medical services (EMS), and public safety fields. Prerequisite: Assessment score placement in RDNG 1000, or completion of RDNG 0090 with a grade of " C " or higher; assessment score placement in ENGL 1021, or completion of ENGL 0090 with a grade of "C" or higher; CJS 2083 with a grade of "C" or better or instructor consent. Recommendation: Completion of or concurrent enrollment in CJS 2095.

## Juvenile Justice and Delinquency CJS 2085 <br> 3 Credits

This course is an introductory survey of the juvenile justice system with specific coverage of terminology, laws, and procedures unique to the juvenile in the system. This course also covers theories of delinquency, delinquent acts, corrective actions, custody, and disposition. There is a 40 hours service learning requirement for this class. Restriction: It is advised that students not enroll in this course concurrently with CJS 2081 Police in the Community because that also has a service learning requirement. Recommendation: Fifteen college credits. Assessment score placement in RDNG 1000 or above, or completion of RDNG 0900 OR RDNG 0950 with a grade of " $C$ " or higher and assessment score placement in ENGL 1021, or completion of ENGL 0090 with a grade of "C" or higher.

## Criminal Law CJS 2089

3 Credits
This course offers students a foundation in the interpretation of criminal law. Examples of criminal cases will be used to illustrate and analyze the essence and interpretation of criminal law. Sociological theory and methods will be used to study the substantive nature and historical development of criminal law and its role in shaping society. Prerequisite: An assessment score placement in RDNG 1000, or completion of RDNG 0900 OR RDNG 0950 with a grade of " C " or higher; assessment score placement in ENGL 1021, or completion of ENGL 0090 with a grade of " C " or higher. Recommendation: Fifteen college credits prior to enrollment in this course. Any course in Criminal Justice Sciences should be among these credits.

## Crime and Incident Mapping for Public Safety I <br> CJS 2091 <br> 3 Credits

This course is designed to teach interactive usage of crime mapping techniques as well as develop an understanding of social and geographical principles and issues for crime mapping. This course will be especially helpful for people intending to work within the criminal justice system or public safety. Students will develop a theoretical and applied understanding of developing technology for the interpretation of social and geographical data. Prerequisite: An assessment score placement in RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher; assessment score placement in ENGL 1021 or completion of ENGL 0090 with a grade of " $C$ " or higher. Students must have at least 15 college credits before enrolling in this class. CAPL 1000 or equivalent computer experience is required. Recommendation: Any course in the Criminal Justice Sciences and familiarity with PowerPoint, Excel, and Access. CSCI 1020 or CAPL 1010 are recommended if students are not familiar with these computer programs.

## Crime and Incident Mapping for Public Safety CJS 2092 3 Credits

In this course, students will use criminal justice Geographic Information Systems (GIS) software for mapping information that uncovers emerging geographic and demographic patterns of crime and other events according to location and social significance. Students will query data, working with specific attributes and software features
to aggregate and analyze data. Students will create and edit spatial data and become acquainted with other types of data images and computer-aided design (CAD) drawings. Prerequisite: CJS 2091 with a grade of "C" or higher or consent of the instructor.

## Terrorist and Extremist Groups

 CJS 20933 Credits
This course examines the social trend of terrorism. Social theory and methods within the criminal justice perspective are used to analyze group dynamics and social interaction. Group leadership, social influence, social networks, group cohesion, development, group performance, and motivation of terrorism will be studied. Groups that will be considered in course material will include extremist groups prone to violence, terrorism, and anti-government sentiment. Prerequisite: Fifteen college credits and an assessment score placement in RDNG 1000, or completion of RDNG 0090 with a grade of " $C$ " or higher; assessment score placement in ENGL 1021, or completion of ENGL 0090 with a grade of " $C$ " or higher.

## Fundamentals of Criminal Investigations CJS 20943 Credits

This course will explore the fundamental principles and procedures employed in the criminal investigation process. Students will examine the various methods and techniques utilized by law enforcement to solve a variety of crimes. Areas of study will include the preliminary and follow-up investigation, crime scene analysis, evidence collection and processing, report writing and preparing a case for prosecution. Prerequisite: Assessment score placement in RDNG 1000, or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher; assessment score placement in ENGL 1021, or completion of ENGL 0090 with a grade of "C" or higher.

## Interview, Interrogation, and Investigation <br> CJS 2095

This course examines oral and nonverbal communication and collection of verbal information using criminal justice theory and methods. Students will practice the skills of interviewing and interrogation. Students will learn various methods and legal guidelines for interviewing, interrogation, and investigation. Prerequisite: Fifteen completed college credits. Assessment score placement in RDNG 1000, or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher; assessment score placement in ENGL 1021, or completion
of ENGL 0090 with a grade of "C" or higher. Recommendation: Six college credits in criminal justice sciences before enrolling in this class.

## Crime Scene Investigations <br> CJS 2096 <br> 3 Credits

This course will provide students with an in-depth look into of the topic of crime scene investigations. Students will study the search process, collection of physical evidence, and processing of evidence in the crime lab. Students will examine the equipment and methods used in the collection and processing of specific categories of physical evidence. Students will also explore the legal and ethical issues involved in collecting and processing evidence. Prerequisite: Assessment score placement in RDNG 1000, or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher; assessment score placement in ENGL 1021, or completion of ENGL 0090 with a grade of "C" or higher; CJS 2094 with a grade of "C" or better or instructor consent.

## Homeland Defense <br> CJS 2097

## 3 Credits

This course explores the concept of national defense with attention to changing issues for the criminal justice system. Students will employ scientific theories and methods to analyze the changing roles of police and military involvement in defense. Topics will include terrorism, weapons of mass destruction (WMDs), civil rights and constitutional issues related to defense. Prerequisite: Assessment score placement in RDNG 1000 or above or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher and assessment score placement in ENGL 1021 or completion of ENGL 0090 with a grade of " $C$ " or higher. Recommendation: It is recommended that students have at least 15 college credits with a grade of "C" or higher in each course.

## Criminal Justice Capstone

CJS 2099
2 Credits
This capstone course is the culmination of the criminal justice student's academic experience. It serves to synthesize the knowledge gained from each course taken within the criminal justice curriculum and better prepare the graduate to continue on to upper-division studies in the discipline or for entry-level career positions in the criminal justice system. In this course, students will identify and discuss current issues and trends in criminal justice and develop a research project based on their interests in the field. Students will prepare a written report and

## 7 Course Descriptions

present their project to the class. Prerequisite: Fifteen completed credits in criminal justice or sociology with a grade of C or higher in each course or instruct permission. Recommendation: The capstone course is designed to integrate the students learning experiences across his/her entire criminal justice studies. In order to gain the most from this class it is recommended the student take this class at or near the end of his/her program of study..

## Cybersecurity, Virtualization, and Forensics

## Introduction to Cybersecurity, Virtualization and Forensics CVF 2065 <br> 3 Credits

This introductory course presents methods to properly conduct a computer forensics investigation including ethics, tools, procedures and analysis. This course also includes introduction to Cybersecurity, and Virtualization Technology.

## Computer Investigative Law for Forensic Analysts <br> CVF 2075 <br> 3 Credits

This course presents the essential legal foundation for computer professionals managing or working in incident handling teams. Topics include: the legal constraints of information sharing, rules for voluntary disclosure, and response to government requests for information as well as the use of honey-pots, hack-back, and trace-back procedures as investigative strategies within the legal limitations of the information technology industry. Emphasis is placed on preserving and maintaining chain of custody protocols for computer evidence.

## Electronic Discovery <br> CVF 20763 Credits

This course introduces students to the role of e-discovery in the civil and criminal legal systems. Course topics will include the e-discovery process, fundamental legal concepts, and the Electronic Discovery Reference Model (EDRM) process. Students will also explore the principles of e-discovery technology, ethical best practices, and analytical thinking skills within the context of evaluating e-discovery practical issues.

Prerequisite(s): CVF 2065 and CFF 2070 with a grade of C or higher OR instructor consent

## Advance Cyber Forensics <br> CVF 2080 <br> 3 Credits

This forensic course begins with file system fundamentals but moves rapidly to using advanced open source toolkits to perform a forensic audit of suspect computer systems. Forensic analysis is performed on gathered evidence contained in "disk images." Using a disk image of a computer involved in an actual forensic case, students apply what they learn in class by investigating the incident in a hands-on setting. Prerequisite: CVF 2065 and CVF 2092 with a grade of C or higher or instructor consent.

## Advanced Windows Forensics CVF 2081 3 Credits

This course provides an in-depth examination of the forensic evidence left on Windowsbased file systems using a variety of methods and tools to investigate any event for the workplace. It covers Windows methods that ensure maximum evidence capture without poisoning key evidence residing in disk space and memory. This course aligns with the objectives of the AccessData Certified Examiner (ACE) certification. Successful completion of the course requires passing the ACE certification exam. Prerequisite(s): CVF 2065 with a grade of $C$ or higher or instructor consent.

## EnCase Forensics

CVF 20823 Credits
This course provides an in-depth study of EnCase Forensic, a commonly used tool in both corporate and law enforcement environments. Additionally, this course reviews and solidifies important concepts in forensic methodology and forensic artifacts. This course aligns with the objectives of the EnCase Certified Examiner (EnCE) certification. Successful completion of the course requires passing the EnCE written certification exam. Prerequisite: CVF 2081 with a grade of C or higher OR instructor consent

## System Security and Network Auditing CVF 20833 Credits

This course provides a technical focus on the numerous security controls and settings available on a Windows operating system, particularly in terms of compliance management and auditing. The material provides updated information on current Windows 2000, XP and .NET security issues. Additional topics include a variety of Microsoft
utilities available to secure the Microsoft Windows OS, including HFNETCHK, MBSA, URLSCAN, and IIS Lockdown. Prerequisite(s): MCST1011 and MCST1013 with a grade of C or better OR MCP Client OS, MCP Server and CCNA OR Network+ industry certification OR instructor consent.

## Drive and Data Recovery Forensics CVF 20843 Credits

This class is appropriate for any individuals who have an understanding of computer forensics and file systems. Class topics will be valuable to both forensic and data recovery professionals alike and touches on data recovery topics relating to physical and disaster data recovery. While the term hard drive has now become the catch-all term, the course material covers recovery of both traditional mechanical hard drives and touches on the latest recovery technologies for flash based devices like USB thumb drives and Solid-State Drives (SSD). Students will practice processes and methodologies to collect an image on damaged evidence where standard forensic imaging would have failed. Prerequisite: CVF 2065 with a grade of C or higher or instructor consent.

## Network Traffic Analysis: Tools \& Techniques CVF $2085 \quad 3$ Credits

This course explores the use of TCPDUMP and Wireshark to perform network analyses for communications troubleshooting and forensics investigations. Course topics include both the fundamentals of and advanced topics in TCPIP, the live capture and offline analysis of hundreds of protocols, and troubleshooting, optimizing and securing a network based on the evidence found in captured network traffic. Students will have the opportunity to engage in hands-on lab exercises using real-world scenarios that will help students put theory into practice. Certification as a Wireshark Network Analyst is part of this course. Prerequisite(s): CVF 2065 with a grade of $C$ or higher $O R$ instructor consent. System administration experience on Microsoft Windows or Linux operating systems.

## Network Pen Testing and Ethical Hacking <br> CVF 2086 <br> 4 Credits

This course covers the three major phases of penetration testing (Reconnaissance, Scanning and Exploitation) in detail. Reconnaissance is learning about a target's infrastructure by mining blogs, search engines, and social networking sites. Scanning is the process
of identifying live host or services in a given network. Exploitation involves the use of exploitation frameworks, stand-alone exploits, and other valuable tactics to conduct a vulnerability assessment. Students will also discuss and demonstrate how to prepare a final report, tailored to maximize the value of the test from both a management and technical perspective. The final portion of the class includes a comprehensive hands-on exercise, conducting a penetration test against a hypothetical target organization, following all of the steps. This course also describes the limitations of penetration testing techniques and other practices that can be used to augment penetration testing to find vulnerabilities in architecture, policies, and processes. Certified Ethical Hacker exam Certification is part of this course Prerequisite(s): CVF 2065 and CVF 2085 with a grade of C or higher OR instructor consent. System administration experience on Microsoft Windows or Linux operating systems.

## Advanced Network Pen Testing and Ethical Hacking CVF $2088 \quad 3$ Credits

This course builds on the topics covered in CVF 2086, while it briefly reviews the three major phases of penetration testing (Reconnaissance, Scanning and Exploitation), the focus of this class is on the analysis of the result and the application of the process and methodology of penetration testing. Case scenarios includes learning about a target's infrastructure by mining blogs, search engines, and social networking sites. The final portion of the class includes a comprehensive hands-on exercise, conducting a penetration test against a hypothetical target organization, following all of the steps. This course also describes the limitations of penetration testing techniques and other practices that can be used to augment penetration testing to find vulnerabilities in architecture, policies, and processes. Certified Security Analyst Certification is part of this course. Prerequisite(s): CVF 2085 and CVF 2086 with a grade of C or higher OR instructor consent. System administration experience on Microsoft Windows or Linux operating systems.

## Mobile Device Forensic Analysis CVF 2090 3 Credits

This course provides an introduction to forensic analysis of mobile devices (i.e. cell phones, tablets, smart phones). With the
increasing use of mobile devices, proper collection, and analysis complements traditional computer forensic examinations and may be used in civil and criminal investigations. Prerequisite: CVF 2065 with a grade of C or higher OR instructor consent

## Cloud Computing \& Virtualization Forensics <br> CVF $2091 \quad 3$ Credits

This course focuses on the issues surrounding cloud forensics, cloud deployment and service models, cloud infrastructure, and key considerations in migrating to cloud computing. Using the U.S. National Institute of Standards and Technology as a guide, the course addresses the technologies required to build and support classic (traditional), virtualized, and cloud data center environments. Students will explore the key considerations and steps involved in transitioning from the current model of physical data centers to the emerging cloud-computing environment. The hands-on focus of this class addresses the skills and processes involved in performing forensic investigation and analysis, migrating to a cloud-based infrastructure, and choosing the best deployment model for an organization. The EMCCIS Certification (CIS) exam is part of this course. Prerequisite(s): CVF 2065 with a grade of C or higher OR instructor consent

## Cyber Storage Management and Forensics <br> CVF 2092 <br> 3 Credits

This course explores information on cyberstorage infrastructure, including virtual environments, from a digital forensics and network penetration perspective. Additional topics include the architectures, features, and benefits of Intelligent Storage Systems, such as FC-SAN, IP-SAN, NAS, objectbased, and unified storage. The EMCISM Certification (ISM) exam is part of this course. Prerequisite(s): CVF 2065 and CVF 2084 with a grade of C or higher OR instructor consent

## VMware vSphere ICM (Install, Configure, Manage) CVF 20934 Credits

This course explores how traditional security and IT operations change with the addition of virtualization and cloud technology in the environment. It covers network defense in a cloud environment as it relates to analysis of anti-malware techniques. Topics include the installation, configuration, and management of VMware vSphere, which consists of VMware ESXi and VMware vCenter Server. The course is based on ESXi 5.0 and vCenter Server
5.0. Completion of this course satisfies the prerequisite for taking the VMware Certified Professional 5 exam. Prerequisite(s): CVF 2065, CVF 2091, CVF 2092 with a grade of C or higher OR instructor consent. System administration experience on Microsoft Windows or Linux operating systems

## Cloud Forensics and Virtualization Implementation Project CVF 2094 <br> 3 Credits

This course is designed to help students develop and demonstrate project management and industry-specific communication and technical writing skills. Students are expected to apply the knowledge and hands-on skills necessary in key areas of vCloud computing, information security, and Cyber Forensics in completing various real-life projects. Prerequisite: CVF2092 and CVF2093 with a grade of C or higher or instructor consent.

## Computer Forensics Capstone CVF $2099 \quad$ Credits

The course is designed to assure that students understand and can communicate the knowledge and skills necessary in key areas of information security and Computer Forensics. The most important characteristic that employers look for from an employee after technical ability to do the job is the ability to communicate well. This course provides an opportunity to show and demonstrate technical knowledge and the ability to communicate clearly. Prerequisite: Consent of instructor and dean Recommendation: CVF 2065

## Virtualized Data Center and CloudInfrastructure Planning, Design, Optimize and Scale CVF 21154 Credits

 This course focuses on advanced skills for configuring and maintaining a highly available and scalable virtual infrastructure. Students will explore the details and considerations for planning, designing, and migrating a traditional data center to Virtualized Data Centers (VDC) and cloud infrastructures. The course distinguishes between virtualization and cloud concepts and capabilities, including core VDC components and cloud elements. This course prepares the student for the VMware Certified Advanced Professional Datacenter Administration [V5.1] certification (VCAP5-DCA). Prerequisite(s): CVF 2091, CVF 2092 and CVF 2093 with a grade of $C$ or higher OR instructor consent. System administration experience on Microsoft Windows or Linux operating systems.
## 7 Course Descriptions

## Virtual End User Computing and Application Virtualization (VMware View: ICM) <br> CVF 2116 <br> 4 Credits

This course explores the concept and techniques associated with delivering desktop services from a cloud computing environment to enable end-user freedom from IT management and control. This course uses VMware View to demonstrate how IT can simply automate the management of thousands of desktops and securely deliver "desktop as a service" to users from a central location at levels of availability and reliability unmatched by traditional PCs. Students explore, through hands-on labs, how to deliver secure access to applications and data to any device when and where users need it, thus giving end users maximum mobility and flexibility. The VMware Certified Professional - Desktop (VCP-DT) certification is part of this course. Prerequisite(s): MCST 1013, CVF 2092, and CVF 2093 with a grade of $C$ or higher OR instructor consent. System administration experience on Microsoft Windows.

## Virtualized Application Implementation (XenApp CXA-206) <br> CVF $2117 \quad 3$ Credits

Virtualized Application Implementation provides the foundation necessary for administrators to effectively centralize and manage applications in the data center and instantly deliver them as a service to users anywhere. The course focuses on installing and configuring Citrix XenApp 6.5 for Windows Server 2008 R2, Citrix Receiver and plug-ins, as well as for using administrative consoles and tools to configure resources, policies, server and farm settings, printers, virtualized applications, and more. Citrix XenApp 6.5 Administration Certification exam is part of this course. Prerequisite(s): MCST 1013, CVF 2092 with a grade of C or higher OR instructor consent.

## Virtualized Desktop Implementation (CXD-202) <br> CVF 2118 <br> 3 Credits

This course introduces students to the foundation necessary to effectively centralize and manage desktops in the data center and deliver them as a service to users anywhere. Students will explore how to select a desktop delivery model or each user group based on their needs, build a provisioning services farm to enable single-image desktop management, modify a desktop image without impacting user productivity, and host virtual machines on the client device using tools like Citrix

XenClient. Hands-on labs will give students the opportunity to build proof-of-concept and production XenDesktop environments, assign virtual desktops to users, and customize the user experience through policies. The A19 Citrix XenDesktop 5 Administration examination, the requirement for the CCA for Citrix XenDesktop 5, is part of this course. Prerequisite(s): MCST 1013, CVF 2092 with a grade of $C$ or higher OR instructor consent. System administration experience on Microsoft Windows.

## Cloud Enterprise Site Recovery CVF 2119 2 Credits

This course explores the design and implementation of a disaster recovery framework to enable organizations to build, manage, and execute reliable disaster recovery plans for their virtual environment. Topics include the recovery of cloud-critical components such as networks, storage and compute. The associated lab in this course demonstrates how to perform recovery in the event of disaster in a cloud environment while ensuring the simplest, most affordable, and most reliable disaster protection for all virtualized applications. This course uses VMware vCenter Site Recovery Manager to demonstrate concepts in practice. Prerequisite(s): CVF 2092 and CVF 2093 with a grade of C or higher OR instructor consent. System administration experience on Microsoft Windows or Linux operating systems.

## Cloud Infrastructure: Deployment and Management CVF $2120 \quad 3$ Credits

This course explores how to orchestrate the provisioning of software-defined data center services as complete virtual datacenters that are ready for consumption in a matter of minutes. Virtual data centers provide virtualized computing, networking, storage, and security so that administrators can rapidly provision the complete set of services necessary to make workloads operational in minutes. This course uses vCloud Director and open stack throughout the hands-on labs to demonstrate how software-defined data center services and the virtual data centers fundamentally simplify infrastructure provisioning, and enable IT to move at the speed of business. The VMware Certified Professional (VCP) exam is part of this course. Prerequisite(s): CVF 2065, CVF 2091, and CVF 2092 with a grade of $C$ or higher OR instructor
consent. System administration experience on Microsoft Windows or Linux operating systems.

## Cloud Infrastructure: Design Best Practices <br> CVF 2121 <br> 3 Credits

This course is designed to guide students through the decision points and policy choices available for designing and implementing a virtual cloud environment. Students will explore the effects of design choices. Hands-on labs for this course include a complete design of cloud architecture on either the service provider model or the private enterprise model. The course culminates in a comprehensive workshop on cloud infrastructure design. The Cloud Architect (EMCCE) Expert Certification exam is part of this course. Prerequisite(s): CVF 2093, CVF 2115 with a grade of C or higher OR instructor consent. System administration experience on Microsoft Windows or Linux operating systems.

## Cloud Infrastructure Networking and Security CVF 21223 Credits

This course explores the concepts, processes, and best practices needed to successfully secure information within cloud infrastructures. Students will cover the basic cloud types and delivery models, and develop an understanding of the risk and compliance responsibilities and challenges for each cloud type and service delivery model. Hands-on labs throughout this course will demonstrate how to apply RSA's trust-based security model to real-world security problems. Through these hands-on exercises, students will practice how to implement a private cloud using a thirdparty provider's interface. Prerequisite(s): CVF 2120 and CVF 2093 with a grade of $C$ or higher OR instructor consent. System administration experience on Microsoft Windows or Linux operating systems.

## Cloud Automation Center (ICM) CVF $2123 \quad 3$ Credits

 This course explores the design, configuration, and implementation of cloud automation solutions. It explains and demonstrates how the implementation of Cloud Automation technology enables customized self-service provisioning and life-cycle management of cloud services that comply with established business policies. The course also addresses how to use automation solutions to provide a secure portal where authorized administrators, developers, or business users can request new

IT services and manage existing computer resources from predefined, user-specific menus. Prerequisite(s): CVF 2120 and CVF 2093 with a grade of C or higher OR instructor consent. System administration experience on Microsoft Windows or Linux operating systems.

## Advanced IDS Techniques Using SAMPA (Snort, Apache, MySQL, PHP, and ACID) CVF 2200 4 Credits

This course addresses the issues associated with open source LAMP (Linux, Apache, MySOL, PHP) stacks with a focus on security and Intrusion Detection Systems (IDS). Topics include the installation, configuration, management of LAMP resources, Snort IDS, ACID and Zenoss threat analytical software, and other IDS related tools as well as the practical test firing of IDS resources. Prerequisite(s): CVF 2065 and CVF 2085 with a grade of C or higher OR instructor consent. System administration experience on Microsoft Winds or Linux operating systems.

## Malware Analysis Fundamentals \& Malicious Code Analysis CVF 2201 <br> 3 Credits

This course presents the key tools and techniques malware analysts use to examine malicious programs by exploring Windows malware in two phases. Behavioral analysis focuses on the program's interactions with its environment, such as the registry, the
network and the file system. Code analysis focuses on the specimen's code and makes use of disassembler and debugger tools such as IDA Pro and OllyDbg. This course covers how to patch malicious executables to change their functionality during the analysis without recompiling them and redirect network traffic in the lab to better interact with malware. Prerequisite(s): CVF 2065 and CVF 2205 with a grade of $C$ or higher OR instructor consent. System administration experience on Microsoft Windows or Linux operating systems.

## Malicious Documents and Memory Forensics CVF 2202

 3 CreditsThis course explores several techniques malware authors commonly employ to protect malicious Windows executables from being analyzed, often with the help of packers. The course deals with how to bypass analysis defenses, such as structured error handling for execution flow, PE header corruption, fake memory breakpoints, tool detection, integrity checks and timing controls. It touches on Web browser malware, the use of additional tools and approaches for analyzing more complex malicious scripts written in VBScript and JavaScript by exploring common patterns of assembly instructions often used to gain initial access to the victim's computer, how to analyze malicious Microsoft Office documents,
covering tools such as Office MalScanner and explore steps for analyzing malicious PDF documents with utilities such as Origami and PDF Tools. Prerequisite(s): CVF 2065 and CVF 2201 with a grade of C or higher OR instructor consent. System administration experience on Microsoft Windows or Linux operating systems

## Network Forensics, Analysis and Incident Handling CVF 2203

Network forensics involves the identification, preservation, and analysis of evidence of attacks in order to identify the attackers and document their activity with sufficient reliability to justify appropriate technological, business, and legal responses. This course focuses on the technological components of the topic with emphasis on the network traffic analysis aspect. The technical aspect addresses analysis of intruder types and the intrusion process, review of network traffic logs and profiles and their types, identification of attack signatures and fingerprints, application of data mining techniques, study of various traceback methods, and the extraction of information acquired through the use of network analysis tools and techniques. Prerequisite(s): CVF 2065, CVF 2091, and CVF 2092 with a grade of C or higher OR instructor consent. System administration experience on Microsoft Windows or Linux operating systems

## Scripting and Python for Cybersecurity Professionals CVF 2205

## 3 Credits

This course is designed to appeal to a wide variety of backgrounds ranging from students without any coding experience all the way up to skilled Python developers looking to increase their expertise and map their capabilities to penetration testing. This course includes several hands-on labs designed to teach students the skills required to develop Python programs and how to apply those skills in penetration testing engagements. Topics include introduction to Linux scripting, Windows scripting, basic concept of Python and progress to advanced topics and their applications. Prerequisite(s): CVF 2065, CVF 2085 with a grade of C or higher OR instructor consent. System administration experience on Microsoft Windows or Linux operating systems

## 7 Course Descriptions

## Data Science and Big Data Analytics CVF 2206 <br> 3 Credits

This course will cover basic and advanced analytic methods and big data analytics technology and tools, including MapReduce and Hadoop. The extensive labs throughout the course provide students with the opportunity to apply these methods and tools to real world business challenges. This course takes a technology-neutral approach. In a final lab, students will address a big data analytics challenge by applying the concepts taught in the course to the context of the Data Analytics Lifecycle. Students will prepare for the Proven Professional Data Scientist Associate (EMCDSA) certification exam and establish a baseline of Data Science skills. Prerequisite(s): MATH 1025 with a grade of $C$ or higher OR instructor consent. System administration experience on Microsoft Windows or Linux operating systems..

## Dental Assisting

## Introduction to Dental Assisting DENA 1000 3 Credits

This is an introductory course that explores the role of a Certified Dental Assistant and a Licensed Dental Assistant. Topics to be covered include dental history, terminology, occupational safety, common dental emergencies, and professional development. This is a chance to explore the dental clinic and dental laboratory utilizing dental instruments and equipment. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Acceptance to the Century College Dental Assisting Program. Recommendation: Concurrent enrollment in DENA 1011 and DENA 1012

## Dental Assisting Pre-Clinic I DENA $1011 \quad 3$ Credits

This course is the first in a 2-part series that helps prepare the student for clinical activities. Topics include oral embryology/ histology, oral health, dental nutrition, general anatomy/physiology, head \& neck anatomy, and tooth morphology. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Acceptance to the Century College Dental Assisting Program. Recommendation: Concurrent enrollment in DENA 1000 and DENA 1012.

## Dental Assisting Pre-Clinic II DENA 1012 <br> 3 Credits

This course is the second in a 2-part series that helps prepare the student for clinical activities. Topics include intraoral and extraoral diseases, medical emergencies in the dental office, dental disease transmission concepts and prevention, OSHA guidelines, and dental pharmacology as it relates to dental procedures. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Acceptance to the Century College Dental Assisting Program. Recommendation: Concurrent enrollment in DENA 1000 and DENA 1011.

## Dental Materials DENA 1020

3 Credits
This course provides the basic knowledge and skills required for the Dental Assistant in the dental office. Technical and hands-on experience will be given for dental materials used in operative, restorative, specialty, and laboratory procedures. Students must be able to perform physical tasks to complete course requirements. Prerequisite: DENA 1000, DENA 1011, DENA 1012.

## Dental Radiology I DENA 1031

## 2 Credits

The course will focus on the study and practical application of the principles of radiation safety, operating and maintaining radiographic equipment, and exposing and processing diagnostically acceptable intraoral radiographs on mannequins. Students must be able to perform physical tasks to complete course requirements. Prerequisite: DENA 1000, DENA 1011, DENA 1012. Restriction: If a student is pregnant, a physicians approval is required for course attendance because of radiation exposure. Recommendation: Assessment placement score in MATH 0070 or higher or completion of MATH 0030 with a grade of $C$ or higher.

## Dental Radiology II DENA 1032

## 3 Credits

This course will focus on the study and practical applications of exposing, processing, and evaluating diagnostically acceptable intraoral radiographs on mannequins and patients. Students must be able to perform physical tasks to complete course requirements. Prerequisite: DENA 1020, DENA 1031, DENA 1041, DENA 1042, DENA 1050. Restriction: If a student is pregnant, a physicians approval is required for course attendance because of radiation exposure.

Recommendation: Assessment placement score in MATH 0070 or higher or completion of MATH 0030 with a grade of C or higher.

## Chairside Dental Assisting I DENA 1041 <br> 2 Credits

This course will focus on how to utilize and maintain a dental clinic. This course follows the American Dental Association Occupational Safety Health Act and the Centers for Disease Control guidelines in preparing, assisting with and dismissing patients. The student will utilize chairside four-handed dentistry in a variety of procedures, as well as teach personal oral hygiene to patients. Prerequisite: DENA 1020 or concurrent enrollment.

## Chairside Dental Assisting II DENA 1042 <br> 3 Credits

This course will focus on taking and recording dental and medical histories of patients, charting of the oral cavity, taking and recording vital signs, and applying topical medications and varnishes. Other topics include effects of medications on patients and techniques of operative dentistry. Students must be able to perform physical tasks to complete course requirements. Prerequisite: DENA 1000, DENA 1011, DENA 1012.

## Dental Specialties DENA 1050

3 Credits
This course provides instruction in fundamental principles, instrumentation, and procedures for the specialty areas of dentistry. These specialties include oral and maxillofacial surgery, endodontics, periodontics, fixed and removable prosthodontics, pedodontics, community dentistry, medically and physically compromised patient, and orthodontics. Students must be able to perform physical tasks to complete course requirements. Prerequisite: DENA 1000, DENA 1011, DENA 1012.

## Dental Assisting Advanced Functions I DENA 10613 Credits

This course will focus on the following Minnesota Licensed Advanced Functions: impressions and bite registrations; placement and removal of rubber dam; removal of excess cement; placement and removal of periodontal dressing (demonstration only); suture removal; pre-selection of orthodontic bands; placement of ligatures, o-rings and power chains; placement and removal of orthodontic separators; application of enamel etch; and removal of excessive orthodontic adhesive with hand and rotary instruments. Students must be able to perform physical tasks to
complete course requirements. Prerequisite(s): DENA 1020, DENA 1031, DENA 1041, DENA 1042, DENA 1050.

## Dental Assisting Advanced Functions II DENA 1062 2 Credits

This course is a continuation of the Dental Assisting Advanced Functions I. Topics include coronal polish/stain removal, fluoride application, and application of pit and fissure sealants. Students must be able to perform physical tasks to complete course requirements. Prerequisite: DENA 1020, DENA 1031, DENA 1041, DENA 1042, DENA 1050.

## Nitrous Oxide Inhalation Sedation DENA 10631 Credit

This course will focus on the utilization of nitrous oxide sedation for anxiety and pain control in dentistry. Students must be able to perform physical tasks to complete course requirements. Prerequisite: DENA 1020, DENA 1031, DENA 1041, DENA 1042, DENA 1050. Restriction: If a student is pregnant, a physicians approval is required for course attendance because of nitrous oxide exposure.

## Introduction of Dental Assisting Internships DENA 1780 <br> 3 Credits

This course is an introduction to the business aspect of a dental practice and completion of professional development activities. It includes preparation for employment and knowledge of legal and ethical standards. Students will review their prior knowledge in preparation for their clinical internships. Students must be able to perform physical tasks to complete course requirements. Prerequisite: DENA 1020, DENA 1031, DENA 1041, DENA 1042, DENA 1050.

## Dental Assisting Specialty Internship DENA 1781 3 Credits

This course focuses on the application and practice of dental assisting skills in a dental specialty practice. Students must be able to perform physical tasks to complete course requirements. Prerequisite: All dental assisting program courses must be completed. Must have HBV series of inoculations and be covered by both medical insurance and professional liability insurance. Student must complete a Minnesota Human Services background study with no restrictions.

## Dental Assisting General Office Internship DENA 17824 Credits

This course focuses on the application and practice of dental assisting skills in a
general dental practice. Students must be able to perform physical tasks to complete course requirements. Prerequisite: All dental assisting program courses must be completed. Must have HBV series of inoculations and be covered by both medical insurance and professional liability insurance. Student must complete a Minnesota Human Services background study with no restrictions..

## Dental Hygiene

## Head and Neck Anatomy DENH 1021

2 Credits
This course is the study of the hard and soft tissues of the head and neck, including the skeletal, muscular, nervous, and venous systems with particular emphasis on the masticatory system. Prerequisite: Acceptance into Century College's Dental Hygiene Program.

## Dental Embryology, Histology, and Anatomy <br> DENH 10243 Credits

This course is the study of the microscopic anatomy of the oral tissues and embryonic development of the face and oral cavity, as well as the function and morphological characteristics of the teeth with an emphasis on root morphology. Prerequisite: Acceptance into Century Colleges Dental Hygiene Program.

## Radiology for the Dental Hygienist DENH 10302 Credits

Building on the basic principles of radiology, this course prepares the dental hygiene student to use radiographs during patient care and also introduces radiographic interpretation. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Acceptance into Century Colleges Dental Hygiene Program.

## Dental Hygiene Principles I DENH 10403 Credits

This course is the first in a series of principles courses providing students with fundamental dental hygiene theory. Topics include the history, philosophy, theories, and ethics relevant to the dental hygiene discipline. Students will also study patient assessment and education, etiology and prevention of oral diseases, infection/exposure control, and hazardous materials, patients' rights, and the management of patient records. Prerequisite: Acceptance into Century College's Dental Hygiene Program and concurrent enrollment in

DENH 1045.

## Dental Hygiene Practice I DENH 1045

## 2 Credits

This is the first in a series of clinical courses introducing dental hygiene concepts and practice methods. Topics include infection control, the use and care of equipment, ergonomics, and patient record management. Clinical experiences include introduction to instrumentation, patient assessment, and care planning. Students will also discuss health promotion and disease prevention strategies. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Acceptance into Century College's Dental Hygiene Program and concurrent enrollment in DENH 1040. Restriction: Students are restricted from participating in this course if they have not first successfully passed the Minnesota Human Services background study with no restrictions and obtained a medical clearance that follow program requirements.

## Periodontology DENH 1050

## 2 Credits

This course is the study of periodontology and the role of the dental hygienist as a prevention specialist and periodontal co-therapist. Prerequisite: DENH 1021, DENH 1024, DENH 1030, DENH 1040, and DENH 1045.

## Pharmacology for the Dental Hygienist DENH 1060 2 Credits

This course provides an introduction to drug actions, mechanisms of drugs, and bodily reactions. Special emphasis will be given to the oral and systemic effects of drugs and how they my affect dental treatment. Prerequisite: DENH 1021, DENH 1024, DENH 1030, DENH 1040, and DENH 1045.

## Applied Biochemical Nutrition for the Dental Hygienist DENH 10702 Credits

This course includes the study of cellular biochemistry and general nutrition including recent advances in nutrition as it relates to oral health. It also includes the application of this knowledge to nutritional counseling and dietary analysis of dental patients within the framework of their cultural, economic, and psychosocial environment. Prerequisite: DENH 1021, DENH 1024, DENH 1030, DENH 1040, and DENH 1045.

## Dental Hygiene Principles II <br> DENH 1080 <br> 3 Credits

This is the second in a series of three DENH principles courses. Students will review

## 7 Course Descriptions

the rationale for delivery of dental hygiene services and be introduced to care and management of patients with special needs. Prerequisite: DENH 1021, DENH 1024, DENH 1030, DENH 1040, and DENH 1045 and concurrent enrollment in DENH 1085.

## Dental Hygiene Practice II DENH 1085 3 Credits

This is the second in a series of four DENH clinical courses which provides further instrumentation techniques, more advanced assessment skills, and new clinical procedures. This course also covers development of both the dental hygiene diagnosis and the dental hygiene treatment plan. Students will treat patients in the Century College dental clinic. Students must be able to perform physical tasks to complete course requirements. Prerequisite: DENH 1021, DENH 1024, DENH 1030, DENH 1040, and DENH 1045 and concurrent enrollment in DENH 1080.

## Pain Management

 DENH $2005 \quad 2$ CreditsThis course introduces students to techniques needed to assess and treat patients requiring local anesthesia and nitrous oxide sedation. Emergency procedures will be taught for all new procedures introduced. This course meets the certification requirements of the Minnesota Board of Dentistry for local anesthesia and nitrous oxide administration. Students must be able to perform physical tasks to complete course requirements. Prerequisite: DENH 1050, DENH 1060, DENH 1070, DENH 1080, and DENH 1085.

## Dental Hygiene Principles III DENH 20103 Credits

This is the third and final dental hygiene principles course. Advanced assessment techniques are covered as well as diagnosis and care planning for patients with more complex treatment needs. Prerequisite: DENH 2005 and concurrent enrollment in DENH 2015.

## Dental Hygiene Practice III DENH 2015 <br> 5 Credits

This is the third in the series of clinical courses where students treat patients in the colleges dental clinic under supervision of the dental hygiene faculty. Emphasis is placed on the development of competencies in assessment, diagnosis, documentation, treatment planning, evaluation of outcomes, and implementation of various treatment strategies for patients with moderate to
advanced periodontal disease. Students are also required to participate in off-campus rotations where they provide care for patients from diverse age and ethnic groups. Students must be able to perform physical tasks to complete course requirements. Prerequisite: DENH 2005 and concurrent enrollment in DENH 2010

## General and Oral Pathology DENH 2020 3 Credits

This course is a study of general and oral pathology with topics of special interest to the dental hygienist. It will cover the etiology and symptomatology of oral diseases and oral manifestations of systemic diseases. Special emphasis is placed on the hygienists role in educating patients about oral health and disease and modifying dental hygiene treatment plans for patients who have pathological conditions. Prerequisite: DENH 2005

## Community Dental Health and Epidemiology DENH 2030 2 Credits

This course examines the characteristics of community dental health programs with emphasis on epidemiology, program planning and delivery, scientific research, and the delivery and financing of dental care in the United States. Students examine the professional hygienist's role and responsibility in the delivery of dental hygiene care to all populations. Prerequisite: DENH 2005

## Community Dental Health Lab DENH $2035 \quad 1$ Credit

This course is the application of concepts learned in DENH 2030, Community Dental Health. Students design, implement, and evaluate dental health projects conducted in the community in collaboration with the Century College Service Learning department. Prerequisite: DENH 2010, DENH 2015, DENH 2020, and DENH 2030

## Legal Aspects of Dental Practice DENH $2040 \quad 2$ Credits

This course focuses on the ethical and legal implications of providing dental and dental hygiene care. A case study approach will be used throughout the course to provide students experience in resolving legal and ethical dilemmas in a simulated dental office setting. Prerequisite: DENH 2010, DENH 2015, DENH 2020, and DENH 2030

## Dental Hygiene Seminar DENH 2060

## 1 Credit

This course focuses on topics important to the graduating dental hygiene student. It is designed to maximize their preparedness for board exams, licensure, and employment in dental hygiene. Prerequisite: DENH 2010, DENH 2015, DENH 2020, and DENH 2030 and concurrent enrollment in DENH 2065

## Dental Hygiene Practice IV DENH 2065 <br> 5 Credits

This is the fourth and final clinical dental hygiene course in which students will refine their skills in delivering patient care services and prepare to enter the dental hygiene workforce. Students must be able to perform physical tasks to complete course requirements. Prerequisite: successful completion of DENH 2010, DENH 2015, DENH 2020, DENH 2030 and concurrent enrollment in DENH 2060.

## Independent Study

 DENH 2790
## Credits

This course is designed to provide students with the opportunity to build their knowledge in the dental hygiene profession. Students will implement a project of their design in a professional setting. Prerequisite: DENH 2005 and consent of director and dean..

## Earth Science

## Earth Science <br> ESCI 1020 <br> 4 Credits MnTC: Goals 03 \& 10

This course is a survey of the earth sciences as a broad and nonquantitative introduction to topics in geology, oceanography, meteorology, and astronomy. It views solid earth, the liquid hydrosphere, and the gaseous atmosphere in terms of continuous interactions as air comes in contact with rock, rock with water, and water with air. Laboratory investigations and hands-on experiences provide the framework for the semester's study.

## Interdisciplinary Physical and Environmental Science ESCI $1025 \quad 3$ Credits MnTC: Goals 03 \& 10

This course introduces a variety of topics in chemistry, physics, and earth science, relating each topic to real-life environmental issues and projects. Students explore the scientific method of inquiry from both historic and
present-day perspectives as they examine the relationships among chemistry, physics, and earth science in daily life. The history of science and how our view of nature has changed is discussed when appropriate. Hands-on activities provide students the opportunity to observe basic physical science principles in action. Prerequisite: Assessment score placement into Reading 1000 or successful completion of Reading 0090 with grade C or higher.

## Physical Geology ESCI 1030 MnTC: Goals 03 \& 10

This course introduces the student to rocks \& minerals, geologic time, plate tectonics, and geologic landforms. Laboratory investigations provide the framework for rock and mineral identification and map interpretation of geologic features and processes.

## Energy Concepts <br> ESCI 1040 MnTC: Goals 03 \& 10

This course introduces students to the topic of energy and examines energy production, supply, efficiency, and future needs. It also explores the potential of solar, biomass, photovoltaics, wind, and other continuous flow sources: including crude oil, natural gas, coal and nuclear. The study of these energy concepts and processes will be conducted through both conceptual analysis and lab-like experiences/analysis. The impact of our current U.S. policy is viewed from an interdisciplinary approach that includes environmental, political, economic, and ethical considerations. Recommendation: Concurrent enrollment with ESCI 1045.

## Energy Concepts Lab <br> ESCI 1045 MnTC: Goals 03 \& 10

1 Credit

This laboratory course examines various energy concepts through hands-on learning. Topics will include, but are not limited to: liquid fuels, solid fuels, biomass, wind, solar, insulation, heat storage, pollution and conservation. Prerequisite: ESCI 1040 or concurrent enrollment, and assessment score placement in MATH 0030 or above, or completion of MATH 0010 with a grade of "C" or higher.

## Introduction to Meteorology <br> ESCI $1050 \quad 3$ Credits MnTC: Goals 03 \& 10

This course introduces the basic scientific principles involved in meteorology.

Students explore the basic properties of the atmosphere, weather instruments, weather phenomena, terminology, and forecasting. Recommendation: Concurrent enrollment in ESCI 1055.

## Meteorology Lab ESCI 1055

1 Credit

## MnTC: Goals 03 \& 10

In this introductory meteorology laboratory, students construct and interpret graphs, analyze weather maps, and also gather, record, and interpret weather data. Concepts covered include structure of the atmosphere, solar and terrestrial radiation, stability of the atmosphere, atmospheric motion, severe storms, and weather map analysis. Prerequisite: ECSI 1050 or concurrent enrollment, or consent of instructor.

## Introduction to Oceanography ESCI 1060 <br> 3 Credits MnTC: Goals 03 \& 10

This course presents the principles of historical, geological, biological, chemical and physical oceanography. It explores contemporary problems related to marine pollution, resources, and Maritime Law for students wishing to become more aware of the growing importance of the sea in their lives.

## Natural Disasters ESCI 1080

3 Credits MnTC: Goals 03 \& 10
This course will investigate the physical processes, origins, as well as the human and economic impacts caused by natural disasters. Students will examine earthquakes, volcanism, severe weather, climate change, wildfires, and floods among other natural catastrophic phenomenon. They will have the opportunity to access information from government agencies and universities involved in the study of these phenomena.

## Natural Disasters Laboratory ESCI 1085 <br> 1 Credit MnTC: Goals 03 \& 10

Students will investigate the physical processes, origins, and the human and economic impacts caused by natural disasters. This lab will examine earth quakes, volcanic eruptions, severe weather, climate change, floods, wildfires, among other natural catastrophic events. Students will have the opportunity to analyze data and information from government agencies and universities involved in the study of these phenomena. Prerequisite: ESCI 1080 or concurrently enrolled.

## Earth Science for Educators ESCI 1090 <br> 4 Credits

This course is intended for education majors. It includes a survey of the Earth sciences with a broad and non-quantitative introduction to topics in geology, oceanography, meteorology, and astronomy. In addition, course will provide curriculum surveys of media and instruction models for Pre-Educators in K-8 education tracks. It will cover four major Earth event to spheres (lithosphere, hydrosphere, atmosphere, and biosphere) modeling projects with an emphasis in interrelated systems analysis that are applicable to grades K-8. Students will develop these four models working in small collaborative groups. Laboratory investigations, field work, collaborative projects and a minimum 20 hour service learning component, arranged through the Service Learning Coordinator, will provide hands on, real time individual, and group learning opportunities for this class.

## Economics

## Macroeconomics ECON 1021 <br> 3 Credits MnTC: Goal 05

This course is an introduction to macroeconomics. It emphasizes demand and supply theory, fiscal and monetary policy, national income, money and banking. Other topics include international economics, foreign exchange rates, international trade theory, and balance of trade. This course has broad general education applications but is especially appropriate for economics, accounting, and business majors.

## Microeconomics ECON 1023 MnTC: Goal 05

3 Credits

This course is an introduction to microeconomics. It emphasizes the price system, production costs, income distribution, and market structures. The impact of international economics will also be discussed. This course has broad general education applications but is especially appropriate for economics, accounting, and business majors. Prerequisite: ECON 1021.

## Statistics for Business and Economics ECON 2021 3 Credits

This course is an introduction to quantitative decision making. It will focus on probabilistic and statistical techniques as applied to

## 7 Course Descriptions

business decision-making. Topics include probability, classical statistics, expected value, and sampling. This course includes the use of a statistical software package. Prerequisite: Assessment score placement in Math 1081 or above, or completion of Math 1061 with a grade of "C" or higher..

## Education

## Education Field Experience EDUC 1000 <br> 2 Credits

The course introduces students and community volunteers to best practices in teaching while providing opportunities to test those practices in the real world. The class is open to students earning degrees in education or other degrees and to members of the community who want to work with students in local community schools. For students earning education degrees at Century College, this class will provide an opportunity to accumulate additional hours in field experience. Students will be required to spend a minimum of 30 hours in a K-12 school classroom. Students must provide their own transportation. A MN Human Services background study with no restrictions may be required. Recommendation: Assessment score placement in RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher. Assessment score placement in MATH 0030 or above, or completion of MATH 0010 with a grade of C or higher.

## Portfolios I for Educators

 EDUC $1020 \quad 1$ CreditThis course is recommended as a first semester course for all education majors. Students will document and reflect upon their competence in the act of teaching by developing an electronic, standards-based portfolio. Students will participate in field experience. Students need to arrange transportation. A Minnesota Human Service background study with no restrictions may be required. Professional material related to the teaching process, or artifacts, will be collected and reflected upon. Recommendation: CAPL 1000

## Portfolios II for Educators EDUC 1021

2 Credits
Portfolios II is designed to expand the portfolio process begun in EDUC 1020 Portfolios I for Educators. Students will be expected to add a minimum of 30 new standards or
competencies, use a rubric to evaluate their own portfolios, review and evaluate other portfolios, add artifacts, and participate in an online discussion group. Field experience is not required in this class, but students may participate in field experience if they wish. Prerequisite: EDUC 1020 Portfolios I for Educators. Recommendation: Completion of ENGL 1021 with a grade of C or higher.

## Education Standards

 EDUC $1025 \quad 3$ CreditsThis course focuses primarily on Minnesota's K-12 academic standards and the assessment tools used to determine student growth. Through reading and discussion, students will gain an understanding of the complex issue of balancing educational activities that meet the needs of a diverse student population while collecting data that keeps educators accountable for student growth. Prerequisite: Assessment score placement into RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of " $C$ " or higher.

## Orientation to Education EDUC 1045

## 3 Credits

This course is designed to introduce potential teachers/paraeducators to the foundations of the American education system. Throughout this course students will examine the teaching profession through the historical, philosophical, social, curricular, and assessment foundations of education. Students may have the opportunity to participate in field experience activities in K-12 schools. Students must provide their own transportation. A Minnesota Human Services background study with no restrictions may be required. Prerequisite: Assessment score placement in RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher.

## Reading and Study Skills Education Strategies EDUC 1050

3 Credits
This course presents the fundamentals of reading and study skills instruction. The focus is understanding the skills and strategies necessary to assist children in learning to read and comprehend text. Field experience is required to practice, reflect, and assess reading strategies learned in class. Students must provide their own transportation. A Minnesota Human Services background study with no restrictions may be required. Prerequisite: Assessment score placement in RDNG 1000 or completion of RDNG 0900

OR RDNG 0950 with a grade of $C$ or higher. Recommendation: Basic computer literacy

## Teaching English Language Learners EDUC $1060 \quad 3$ Credits

This course focuses on the basics of TESOL (teaching English to speakers of other languages) and strategies for teaching the American English language and American school culture to speakers of other languages in American schools. Students study theories and strategies for being effective educators in ESOL classrooms and with English language learners in mainstream classes. Coursework includes participating in discussions, collecting and analyzing ESOL resources, performing field experience off campus, reflecting on field experience, theories and strategies, and creating a portfolio of resources for teaching English language learners. Students must provide their own transportation. A Minnesota Human Services background study with no restrictions may be required. Prerequisite: Assessment score placement in RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of $C$ or higher. For non-native speakers of English with a college degree from their native country: oral interview and permission of the instructor or concurrent enrollment in ESOL 1035 and ESOL 1033 or completion of ESOL 1035 and ESOL 1033 with a grade of C or higher. Recommendation: basic computer literacy.

## Mathematics Education Strategies EDUC 10703 Credits

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 math. Students in the Education Program will learn instructional strategies and may observe and practice these strategies in local school districts. The class will enable students in the Associate of Science in Education to meet the expectations found in the Minnesota Standards of Effective Practice for Teachers. The class will also enable students in the Paraeducation Program to address all required competencies set forth by the Minnesota Department of Education for paraeducators in the area of math. Field experience is required to practice, reflect, and assess mathematics strategies learned in class. Students must provide their own transportation. A Minnesota Human Services background study with no restrictions may be required. Prerequisite: Assessment score placement into MATH 0070 or above, or completion of MATH 0030 with a grade of $C$ or higher.

## Creating Culturally Responsive Classrooms EDUC 2025 <br> 3 Credits

This course is designed to prepare teacher/ paraeducator students to work in culturally diverse classrooms. Students will investigate assumptions about culture, cultural backgrounds, how culture influences student motivation, and how culture impacts the learning setting. Students may have the opportunity to participate in field experience activities in K-12 schools. Prerequisite: Assessment score placement in RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher.

## Classroom Management EDUC 2040

## 3 Credits

The focus of this course is to guide future and current educators as they develop strategies for creating productive classroom environments. Fundamental principles of classroom management and discipline are presented along with ways to create positive learning environments. Prerequisite: Assessment score placement into RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher. Recommendation: Basic computer literacy.

## Legal Issues in Education EDUC 2050 <br> 3 Credits

This course presents an overview of the legal environment and legal issues in education. The course will contrast sources of regulations from federal, state, and local authorities. In addition, students will examine a variety of issues relating to the rights and obligations of both students and educators, circumstances in the education environment, and their legal consequences. Recommendation: Assessment score placement in RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher.

## Strategies for Teaching Writing EDUC 20553 Credits

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 writing. Students will study instructional strategies and may observe and practice these strategies in local school districts. The class will introduce students to the expectations found in the Minnesota Standards of Effective Practice for Teachers. Students will examine required paraeducator competencies set forth by the Minnesota Department of Education. Prerequisite: Assessment score placement in ENGL 1021 or
completion of ENGL 0090 with a grade of "C" or higher, and assessment score placement in RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of " $C$ " or higher.

## Special Education Issues for Educators EDUC 20703 Credits

This course introduces students to the foundations of special education with an emphasis on the role of the classroom teacher and the paraeducator. The course is designed to provide students with the skills and knowledge necessary to support special needs students in special education programs. Recommendation: Assessment score placement into RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a C or higher..

## Emergency <br> Medical Services

## AHA BLS for the Healthcare Provider (CPR) EMS 1010 1 Credit

The focus of this course is on basic life support of the cardiac and/or respiratory arrest victim for the healthcare provider. The course includes adult, child, and infant CPR skills, including AED, in both the out-of-hospital and in-hospital settings. An American Heart Association BLS for the Health Care Provider card provided at successful completion of course. Note: For basic level American Red Cross CPR, see HLTH 1005. Student must be physically able to do CPR skills on a manikin.

## Emergency Medical Responder (Formerly First Responder) EMS 1015 3 Credits

This course delivers the National EMS Educational Standards adopted by the state of Minnesota for Emergency Medical Responder educational requirements. This course provides the EMR student the necessary knowledge and skill to manage patient care until the arrival of ambulance personnel at a scene of a medical or trauma emergency. Obtaining AHA Healthcare Provider CPR certification is a component of this course. Students must be able to perform physical tasks to complete course requirements. Upon successful completion, a student is eligible to acquire state of Minnesota EMR certification, pending Emergency Medical Services Regulatory Board (EMSRB) verification. A student who has committed a misdemeanor,
gross misdemeanor or felony may not qualify to gain initial certification in the state of Minnesota as an Emergency Medical Responder (formerly First Responder).

## Emergency Medical Responder Refresher (Formerly First Responder Refresher) EMS 10171 Credit

This course delivers the new National EMS Educational Standards for Emergency Medical Responders adopted by the EMSRB. It is intended as an update for current Emergency Medical Responders (First Responders) seeking re-certification. Renewing AHA Healthcare Provider CPR certification is a component of this course. Successful completion will result in a renewed two-year certification as a Minnesota Emergency Medical Responder. Student must be able to perform physical tasks to complete course requirements. An Emergency Medical Responder (First Responder) who has committed a misdemeanor, gross misdemeanor, or felony may not qualify to regain certification as a Minnesota Emergency Medical Responder. Prerequisite: Must provide Minnesota Emergency Medical Responder (First Responder) number and valid expiration date. Restriction: A student whose EMR (First Responder) status has expired for greater than one year is not allowed to take the Emergency Medical Responder-Refresher course. Expiration of greater than one year will require taking a complete Emergency Medical Responder course to regain certification in Minnesota.

## EMS Interventions I

## EMS 1025

## 5 Credits

This course enhances the current EMT's basic life support (BLS) skills and prepares the student to assist in advanced procedures and assessment techniques. Under paramedic instructor guidance, the student will synthesize and apply theories and skills learned throughout the class in order to assist a paramedic. Emphasis will be placed upon team leading, critical thinking, prioritization, assessment, therapeutic communication, and life-saving interventions. Students must be able to perform physical tasks to complete course requirements. Successful completion of this class, along with EMS 1026, with a grade of " B " or higher will meet the 50 -run requirement for entrance into the Century College Paramedic Program. Prerequisite: Current state EMT certification; current American Heart Association (AHA) BLS for the Healthcare Provider certification. Recommendation: Basic word processing skills.

## 7 Course Descriptions

## EMS Interventions II <br> EMS 1026

2 Credits
This advanced practicum provides the EMT with opportunities in entry-level and advanced care with a fire department or ambulance provider. Under paramedic instructor and/or paramedic preceptor guidance, the student will synthesize and apply theories and skills learned throughout the class, to assist a paramedic. Emphasis will be placed upon team leading, critical thinking, prioritization, assessment, therapeutic communication, and life-saving interventions. Students must be able to perform physical tasks to complete course requirements. Successful completion of this class, along with EMS 1025, with a grade of " $B$ " or higher will meet the 50-run requirement for entrance into the Century College Paramedic Program. Prerequisite: Successful completion of EMS 1025 with a grade of " $B$ " or higher, or concurrent enrollment in EMS 1025; Minnesota Human Services background study with no restrictions; current State EMT certification; current AHA BLS for the Healthcare Provider certification; required immunizations; current healthcare insurance; valid driver's license; driver's license check passed according to MnSCU policy. Recommendation: Basic word processing skills.

## Paramedic Program Preparedness EMS $1201 \quad 2$ Credits

This course is to assess readiness for the EMT desiring entry into the paramedic program. Students will perform skills and demonstrate knowledge and proficiency in cognitive, psychomotor, and affective areas of basic life support required for entrance into EMSP 1205 by earning a grade of C or higher. Those who have completed EMS Interventions I and II (EMS 1025 and EMS 1026) with a $C$ or higher may use those courses in lieu of this course. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Current AHA BLS Healthcare Provider certification and current State EMT certification. Recommendation: Basic word processing skills

## Independent Study EMS 1790 1-4 Credits

This course provides the opportunity for students to enhance their learning experiences or explore a specialty area beyond the scope of the initial paramedic, emergency medical technician, or emergency medical responder coursework through an independent study project(s). Projects will be developed
cooperatively between the students and the instructor in order to help the student pursue specific areas of interest relative to emergency medical services (EMS). Projects may apply to the students discipline within EMS or may be interdisciplinary in scope. Prerequisite: Instructor and Dean consent. Student must also be state certified as an emergency medical responder (EMR), emergency medical technician (EMT), or paramedic.

## Advanced Cardiac Life Support EMS 2001 1 Credit

The American Heart Association (AHA) Advanced Cardiovascular Life Support (ACLS) course is designed for healthcare providers who either direct or participate in the resuscitation of a patient, whether in or out of hospital. Through the ACLS course, providers will practice their skills in the treatment of the adult victim of a cardiac arrest and other cardiopulmonary emergencies. Upon successful completion of this course, the student will obtain AHA ACLS certification. Students must have knowledge of cardiac medications and proficiency in obtaining vascular access, ECG interpretation, and manual defibrillator operation prior to enrolling in this course. Prerequisite: Completion of EMS 1010 with current certification or current American Heart Association (AHA) Basic Life Support Healthcare Provider or equivalent certification. Students must possess certification or licensure as a paramedic (EMT-P), registered nurse (RN), medical doctor (MD), doctor of osteopathy (DO), respiratory therapist (RT), dentist (DDS), or physician's assistant (PA).

## Pediatric Advanced Life Support EMS 2002 1 Credit

This course is designed to provide physicians, nurses, paramedics, respiratory therapists, and other healthcare providers with the skills to provide advanced life support to pediatric patients. Through the PALS course, providers will enhance their skills in the treatment of the pediatric victim of cardiac, respiratory, and other emergencies. Emphasis is placed on American Heart association PALS algorithms. Upon successful completion of this course, the student will obtain PALS certification. Students must have knowledge of cardiac medications and proficiency in obtaining vascular access, ECG interpretation, and manual defibrillator operation prior to enrolling in this course. Prerequisite: Completion of EMS 1010 with current certification or current American Heart Association (AHA) Basic Life

Support Healthcare Provider or equivalent certification. Students must possess certification or licensure as a paramedic, registered nurse (RN), medical doctor (MD), doctor of osteopathy (DO), respiratory therapist (RT), dentist (DDS), or physicians assistant (PA).

## Pediatric Education for Prehospital EMS 2003 1 Credit

This course is designed to provide emergency medical technicians (EMTs) and paramedics with the skills to administer prehospital care to pediatric patients. Through the PEPP course, providers will enhance their skills in the treatment of the pediatric victim of cardiac, respiratory, trauma, toxic, emergency childbirth, and other emergencies. Upon successful completion of this course, the student will obtain PEPP certification at the basic life support level if they are an EMT or advanced life support level if they are a paramedic. Students must hold current certification as an EMT or paramedic prior to enrollment in this course. Prerequisite(s): Completion of EMS 1010 with current certification or current American Heart Association (AHA) Basic Life Support Healthcare Provider or equivalent certification. Students must possess certification as a paramedic or emergency medical technician (EMT).

## International Trauma Life Support Provider EMS 2004

## 1 Credit

The International Trauma Life Support course (ITLS) is a comprehensive course for EMTs, paramedics, registered nurses, physicians and other EMS personnel. The ITLS course covers the skills necessary for rapid assessment, resuscitation, stabilization and transportation of trauma patients. The course emphasizes evaluation steps and sequencing and techniques for resuscitating and packaging a patient. Upon completion of this course the student will be issued either a Basic ITLS or Advanced ITLS Provider card depending on whether they are certified/licensed to provide basic or advanced life support. Prerequisite: Must possess current certification or licensure as an emergency medical technician (EMT), paramedic (EMT-P), registered nurse (RN), medical doctor (MD), doctor of osteopathy (DO), or physician's assistant (PA).

## Emergency Vehicle Operator Course EMS $2005 \quad 2$ Credits

This course provides the knowledge and skill practice necessary for EMS professionals to

learn how to safely operate an ambulance in the course of their job. The curriculum adheres to the U.S. Department of Transportation, National Highway Traffic Safety Administration National Standard Curriculum for the Emergency Vehicle Operator (Ambulance) Course. This course may also be used as a refresher for experienced EMS personnel. Please note that it is up to the discretion of the individual emergency agency as to whether they will accept this course in lieu of their own drivers training program. Prerequisite: Current state EMR, AEMT, EMT, or paramedic certification; valid driver's license; driver's license check passed according to MnSCU policy. May enroll concurrently with an Emergency Medical Services provider course at the discretion of the instructor. Recommendation: Basic word processing skills.

## Advanced Medical Life Support EMS 2007 1 Credit

This course is designed to provide physicians, nurses, paramedics, and other healthcare providers with an in-depth study of medical emergencies that builds upon the healthcare providers current knowledge and scope of practice to work as a member of a healthcare team to improve patient outcomes. Upon successful completion of this course, the student will obtain AMLS certification. Students must have knowledge of pharmacological interventions and
proficiency in obtaining vascular access, ECG interpretation, and manual defibrillator operation prior to enrolling in this course. Prerequisite: Completion of EMS 1010 with current certification or current American Heart Association (AHA) Basic Life Support Healthcare Provider or equivalent certification. Students must possess current certification or licensure as a paramedic, registered nurse (RN), medical doctor (MD), doctor of osteopathy (DO), or physicians assistant (PA).

## CPR Instructor EMS 2010

## 1 Credit

This course is designed to teach participants the fundamentals of teaching Basic Life Support (BLS) to a variety of audiences. Successful completion of this course allows the participant to teach CPR and offer American Heart Association course completion cards to lay rescuers and health professionals. Successful completion of this course will result in American Heart Association CPR Instructor certification. Prerequisite: Completion of EMS 1010 with current certification or current American Heart Association (AHA) Basic Life Support Healthcare Provider.

## Advanced Cardiac Life Support Instructor <br> EMS 2011 <br> 1 Credit

The ACLS Instructor course is designed to prepare individuals to become instructors in
advanced cardiac life support (ACLS). Upon successful completion of the ACLS Instructor course, instructor candidates will be able to teach an American Heart Association (AHA) ACLS course using the video and lesson maps in the ACLS course instructor materials and will obtain AHA ACLS Instructor certification. Prerequisite: EMS 2001 or current ACLS certification. Completion of EMS 1010 with current certification or current American Heart Association (AHA) Basic Life Support Healthcare Provider. Students must possess current certification or licensure as a paramedic (EMT-P), registered nurse (RN), medical doctor (MD), doctor of osteopathy (DO), respiratory therapist (RT), dentist (DDS), or physician's assistant (PA). Recommendation: One year as an advanced life support (ALS) provider.

## Pediatric Advanced Life Support Instructor EMS 2012 <br> 1 Credit

This course is designed to prepare individuals to become instructors in pediatric advanced life support (PALS). Upon successful completion of the PALS instructor course, instructor candidates will be able to teach a PALS course using the video and lesson maps in the PALS course instructor materials; and will obtain American Heart Association PALS Instructor certification. Prerequisite: EMS 2002 or current PALS certification. Completion of EMS 1010 with current certification or current American Heart Association (AHA) Basic Life Support Healthcare Provider. Students must possess current certification or licensure as a paramedic (EMT-P), registered nurse (RN), medical moctor (MD), doctor of osteopathy (DO), respiratory therapist (RT), dentist (DDS), or physician's assistant (PA). Recommendation: One year as an advanced life support (ALS) provider.

## International Trauma Life Support Instructor EMS 2014 <br> 1 Credit

This course is designed to prepare individuals to become instructors for the International Trauma Life Support course. Upon successful completion of the ITLS Instructor course, instructor candidates will be able to teach an ITLS course using ITLS course instructor materials and will receive ITLS Instructor certification. Prerequisite: EMS 2004 or Prehospital Trauma Life Support (PHTLS) instructor or provider certification. Must possess current certification or licensure as an emergency medical technician (EMT),

## 7 Course Descriptions

paramedic (EMT-P), registered nurse (RN), Medical Doctor (MD), Doctor of Osteopathy (DO), respiratory therapist (RT), or physician's assistant (PA). Recommendation: One year as basic or advanced life support provider.

## Emergency Medical Services-Basic

## Emergency Medical Technician EMSB $1020 \quad 9$ Credits

This course delivers the National EMS Educational Standards adopted by the state of Minnesota for Emergency Medical Technician education requirements. This course meets the needs of the entry-level Emergency Medical Technician for direct employment in an emergency ambulance service, basic transport service, an emergency department, police department, security department, or fire department. Completion of the EMT course prepares the student for the National Registry of EMT examination. Successful completion of the National Registry exam is recognized by the state of Minnesota to generate the state certification required to work and volunteer as an EMT in Minnesota. A student who has committed a misdemeanor, gross misdemeanor, or felony may not qualify to gain certification as a Minnesota or Nationally Registered EMT. Students must be able to perform physical tasks to complete course requirements. Prerequisite(s): Assessment score placement into RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher. The National Registry of EMT examination testing requires a minimum age of 18. Proof of current/ unexpired American Heart Association (AHA) Healthcare Provider CPR card required prior to the end of EMT course. The AHA Healthcare Provider CPR course may be taken concurrently with EMT course. Students must successfully pass the MN Human Services Department and Emergency Medical Services Regulatory Board (EMSRB) background studies with no restrictions to be approved to participate in required clinicals.

## Emergency Medical Technician Refresher EMSB 1022 2 Credits

This course, approved by the EMSRB, delivers the current National EMS Educational Standards adopted by the state of Minnesota. It is intended as an update for current EMTs
seeking re-certification. Additional EMT didactic objectives, emergency care skills and techniques will be covered. Completion of course requirements and a successful state of Minnesota practical test will result in a renewed two-year certification as a Minnesota certified EMT. An EMT who has committed a misdemeanor, gross misdemeanor, or felony may not qualify to regain certification as a Minnesota or Nationally Registered EMT. Student must be able to perform physical tasks to complete course requirements. Prerequisite(s): Current American Heart Association (AHA) Healthcare Provider CPR card prior to course completion; must provide Minnesota EMT number and expiration date. Restriction(s): A student whose EMT status has been expired for more than one year will need to contact the EMSRB to determine if this course will fulfill all the requirements needed to regain certification as an EMT in the state of Minnesota.

## Emergency Medical Services-Community Paramedic

## Role of the Community Paramedic EMSC 29002 Credits

This course explores the role of the Community Paramedic and how it is integrated into the primary care and public health systems. Students will explore the roles of other healthcare providers who are part of the healthcare home team. Prerequisite: Current State Paramedic certification with 2 years full-time experience or equivalent. Co-requisites: EMSP 2910; EMSP 2920; EMSP 2930. Recommendation: Basic word processing skills. Basic internet based data entry. Online course navigation.

## Community Assessment EMSC 2910

## 3 Credits

This course is designed to guide the student through the community assessment process. Students will conduct a needs gap analysis in their home community, and create a resource map designed to meet those needs. Prerequisite: Current State Paramedic certification with 2 years full time experience or equivalent. Co-requisites: EMSP 2900; EMSP 2920; EMSP 2930 Recommendation: Basic word processing skills. Basic internet based data entry. Online course navigation.

## Pathophysiology and Disease Management EMSC $2920 \quad 2$ Credits

Expands on the past knowledge and experience of a paramedic by further exploring chronic conditions commonly encountered in a primary care and public health setting. Recommendation: Basic word processing skills. Basic internet data entry. Online course navigation.

## Community Paramedic Patient Care EMSC 29305 Credits

This course is designed to provide the Community Paramedic candidate clinical experience in primary care and other specialties commonly involved in public health and chronic disease management. This course includes 16 hours of simulation time focused on advanced assessment skills and suturing. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Minnesota Human Services background study with no restrictions; current AHA BLS for the Healthcare Provider certification; current State Paramedic certification with 2 years full time experience or equivalent; current healthcare insurance; valid drivers license; required immunizations. Co-requisites: EMSP 2900; EMSP 2910; EMSP 2920. Recommendation: Basic word Processing skills.

## Emergency Medical Services-Experienced

## Experienced Paramedic Preparation EMSE 1140 <br> 1 Credit

This course is designed for experienced EMT's desiring entry into the Paramedic Program. Students will perform skills and demonstrate proficiency in areas required for entrance into EMSE 1141. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Application and acceptance into the Paramedic Program; Minnesota Human Services background study with no restrictions; current AHA BLS Healthcare Provider certification; current State EMT certification; valid driver's license; driver's license check passed according to MnSCU policy. Recommendation: Basic word processing skills

## Introduction to Paramedics EMSE 1141 <br> 3 Credits

This course introduces the student to the roles, responsibilities, and ethics of a paramedic. It integrates a comprehensive understanding of the EMS systems, medicallegal issues, and the safety and well-being of a paramedic. An overview of medical terminology, acid-base balance, and the anatomy and physiology of the human body is also emphasized. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Completion of EMSE 1140 with a grade of "C" or higher; Minnesota Human Services background study with no restrictions; current AHA BLS Healthcare Provider certification; current State EMT certification; valid driver's license; driver's license check passed according to MnSCU policy. Recommendation: Basic word processing skills.

## Advanced Assessment, Communication and Documentation EMSE 1146 2 Credits

This course introduces advanced life support patient assessment concepts, skills, and prioritization. It also provides opportunities for developing critical thinking skills and life-saving interventions in the out-of-hospital environment. Emphasis is placed upon radio communication and documentation. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Completion of EMSE 1141 with a grade of "C" or higher; Minnesota Human Services background study with no restrictions; current AHA BLS Healthcare Provider certification; current State EMT certification; valid driver's license; driver's license check passed according to MnSCU policy. Recommendation: Basic word processing skills.

## Advanced EMS Operations EMSE 1148 <br> 1 Credit

This course introduces concepts and skills in the areas of triage, resource management, and incident command during a simulated Mass Casualty Incident (MCI). Students will design and participate in a multi-station MCI tabletop exercise. Emphasis includes special considerations for patient care at the scene of a crime. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Completion of EMSE 1141 with a grade of "C" or higher; Minnesota Human Services background study with no restrictions; current AHA BLS Healthcare Provider certification; current

State EMT certification; valid driver's license; driver's license check passed according to MnSCU policy. Recommendation: Basic word processing skills.

## Advanced EMS Pharmacology EMSE 11493 Credits

This course introduces the applications and principles of pharmacological interventions and intravenous cannulation commonly used in the prehospital environment. Emphasis is placed upon drug classifications, dosage calculations, pharmacokinetics, and pharmacodynamics of medications and their administration routes and techniques. Students will practice IV/IO access, blood draws, and medication administration skills. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Completion of EMSE 1146 with a grade of C or higher; assessment score placement in MATH 0070 or above, or completion of MATH 0030 with a grade of " $B$ " or higher, or completion of MATH 1000 with a grade of " $B$ " or higher; Minnesota Human Services background study with no restrictions; current AHA BLS Healthcare Provider certification; current state EMT certification; current healthcare insurance; valid drivers license; drivers license check passed according to MnSCU policy. Recommendation: Basic word processing skills.

## Advanced Medical Emergencies I EMSE 11534 Credits

This course develops the student's ability to formulate and manage a comprehensive treatment plan for a medical emergency encountered in the prehospital setting. Emphasis is placed upon shock, advanced respiratory interventions, and renal and anaphylactic emergencies. A practicum will allow students to synthesize didactic and practical assessment skills in simulated emergency scenarios and occupational settings. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Completion of EMSE 1149 with a grade of " $C$ " or higher; Minnesota Human Services background study with no restrictions; Minnesota Human Services background study with no restrictions; current AHA BLS Healthcare Provider certification; current state EMT certification; required immunizations; current healthcare insurance; valid driver's license; driver's license check passed according to

MnSCU policy. Recommendation: Basic word processing skills.

## Advanced Medical Emergencies II EMSE 1154 4 Credits

This course provides the student with knowledge and skills to manage and formulate a comprehensive treatment plan for a medical emergency encountered in the prehospital setting. Emphasis is placed upon toxicology, environment, psychiatry, crisis management, neurology, death and dying, cultural diversity, and communicable disease, and infection. A practicum will allow students to synthesize didactic and practical assessment skills in mock scenarios and a hospital setting. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Completion of EMSE 1149 with a grade of "C" or higher; Minnesota Human Services background study with no restrictions; current state EMT certification; current AHA BLS for Healthcare Provider certification; required immunizations; current healthcare insurance; valid driver's license; driver's license check passed according to MnSCU policy. Recommendation: Basic word processing skills.

## Advanced Prehospital Cardiac Care I EMSE 1160 4 Credits

This course introduces the paramedic student to cardiac anatomy and physiology, cardiovascular diseases, and the function of the heart. Additional topics include EKG interpretation and cardiac monitoring devices. The student will apply their cardiac knowledge in classroom simulations. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Completion of EMSE 1154 with a grade of " $C$ " or higher; Minnesota Human Services background study with no restrictions; current AHA BLS Healthcare Provider certification; current state EMT certification; valid driver's license; driver's license check passed according to MnSCU policy. Recommendation: Basic word processing skills.

## Advanced Prehospital Cardiac Care II EMSE 1161 4 Credits

This course builds upon EMS 1160 and presents concepts and skills for assessing and managing the out-of-hospital cardiac patient. Emphasis will be placed upon recognition, interpretation and management of EKG rhythms, and cardiac arrest management with the use of pacemakers, defibrillators, and medications. A practicum, with occupational

## 7 Course Descriptions

experiences in a cardiac cath lab, coronary care unit, and emergency departments, will provide the student with an opportunity to provide paramedic-level interventions. Obtaining ACLS Provider certification is a component of this course. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Completion of EMSE 1160 with a grade of " $C$ " or higher; Minnesota Human Services background study with no restrictions; current state EMT certification; current AHA BLS Healthcare Provider certification; required immunizations; current healthcare insurance; valid driver's license; driver's license check passed according to MnSCU policy. Recommendation: Basic word processing skills.

## Advanced Prehospital Trauma Care EMSE 1164 1 Credit

This course provides the paramedic student with the concepts, theory, and skills to effectively assess and manage a trauma patient. Students will synthesize material learned in simulated scenarios and advanced skills evaluations. Obtaining ITLS or PHTLS Advanced certification is a component of this course. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Completion of EMSE 1161 with a grade of " $C$ " or higher; Minnesota Human Services background study with no restrictions; current AHA BLS Healthcare Provider certification; current state EMT certification; current healthcare insurance; valid driver's license; driver's license check passed according to MnSCU policy. Recommendation: Basic word processing skills.

## Pre-Hospital Special Populations EMSE 11665 Credits

This course will provide the paramedic student with the concepts, theory, and skills to assess and manage the special patient populations. Emphasis will be placed upon pediatric, gynecologic, obstetric, neonate, and geriatric patients during simulated scenarios. A practicum, with clinical experiences in obstetrics, pediatrics, and a specialty-care hospital, will provide the student with an opportunity to observe and provide paramediclevel interventions. Obtaining PALS and PEPP provider certification is a component of this course. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Completion of EMSE 1161 with a grade of " $C$ " or higher; Minnesota Human Services background
study with no restrictions; current AHA BLS Healthcare Provider certification; current state EMT certification; required immunizations; current healthcare insurance; valid driver's license; driver's license check passed according to MnSCU policy. Recommendation: Basic word processing skills.

## Paramedic Preparation and Assessment EMSE 1170 2 Credits

This course assesses the paramedic student's advanced skills in preparation for field experience and National Registry practical testing. Students will also be introduced to best practices in job seeking and career planning in the EMS profession. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Completion of EMSE 1148, EMSE 1164, EMSE 1166 with a grade of " $C$ " or higher. Minnesota Human Services background study with no restrictions; current state EMT certification; current AHA BLS Healthcare Provider certification; required immunizations; current healthcare insurance; valid driver's license; driver's license check passed according to MnSCU policy. Recommendation: Basic word processing skills.

## Advanced Life Support Practicum I EMSE $1175 \quad 3$ Credits

This practicum provides the student with opportunities for entry-level paramedic care with a high-volume metropolitan ambulance provider. Under instructor and preceptor guidance, the student will synthesize and apply theories and skills learned throughout the program. Emphasis will be placed upon team leading, critical thinking, prioritization, assessment, therapeutic communication, and life-saving interventions. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Completion of EMSE 1170 with a grade of " $C$ " or higher; Minnesota Human Services background study with no restrictions; current state EMT certification; current AHA BLS Provider certification; required immunizations; current healthcare insurance; valid driver's license; driver's license check passed according to MnSCU policy. Recommendation: Basic word processing skills.

## Advanced Life Support Practicum II EMSE 11763 Credits

This practicum provides the student with opportunities for entry-level paramedic care with a community-based ambulance provider. Under instructor and preceptor guidance, the
student will synthesize and apply theories and skills learned throughout the program. Emphasis will be placed upon team leading, critical thinking, prioritization, assessment, therapeutic communication, and life-saving interventions. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Completion of EMSE 1170 with a grade of " $C$ " or higher; Minnesota Human Services background study with no restrictions; current state EMT certification; current AHA BLS Provider certification; required immunizations; current healthcare insurance; valid driver's license; driver's license check passed according to MnSCU policy. Recommendation: Basic word processing skills.

## Advanced Life Support Practicum III EMSE 1177 3 Credits

This practicum provides the student with opportunities for entry-level paramedic care with specialty providers which may include police departments, fire departments, critical care transportation, and fixed or rotary wing air ambulances. Under instructor and preceptor guidance, the student will synthesize and apply theories and skills learned throughout the program. Emphasis will be placed upon team leading, critical thinking, prioritization, assessment, therapeutic communication, and life-saving interventions. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Completion of EMSE 1170 with a grade of " $C$ " or higher; Minnesota Human Services background study with no restrictions; current state EMT certification; current AHA BLS Provider certification; required immunizations; current healthcare insurance; valid driver's license; driver's license check passed according to MnSCU policy. Recommendation: Basic word processing skills.

## Integration and Transition to the Paramedic Role EMSE $1180 \quad 1$ Credit

This course is designed to synthesize and assess the paramedic student's hospital and ambulance experiences. Emphasis will be placed upon preparation for the National Registry Computer-Based Test (CBT) and regulatory requirements for the EMS profession. Prerequisite: Completion of EMSE 1175, EMSE 1176, and EMSE 1177 with a grade of "C" or higher; Minnesota Human Services background study with no restrictions; current state EMT certification; current AHA BLS Provider certification; current
healthcare insurance; valid driver's license; driver's license check passed according to MnSCU policy. Recommendation: basic word processing skills.

## Emergency Medical Services-Paramedic

## Advanced Life Support Practicum II EMSP 1086 3 Credits

This practicum provides the student with opportunities for entry-level paramedic care with a community-based ambulance provider. Under instructor and preceptor guidance, the student will synthesize and apply theories and skills learned throughout the program. Emphasis will be placed upon team leading, critical thinking, prioritization, assessment, therapeutic communication, and life-saving interventions. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Completion of EMSP 1070, EMSP 1081, and EMSP 1082 with a grade of " $C$ " or higher; Minnesota Human Services background study with no restrictions; current state EMT certification; current AHA BLS for the Healthcare Provider certification; required immunizations; current healthcare insurance; valid driver's license; driver's license check passed according to MnSCU policy. Recommendation: Basic word processing skills.

## Introduction to Paramedics EMSP 12051 Credit

This course introduces the student to the roles, responsibilities, and ethics of a paramedic. Students will gain a comprehensive understanding of EMS systems, medicallegal issues, ethics in medicine, and the safety and well-being of a paramedic. This course also provides students with an overview of research in EMS along with an orientation to the paramedic program and an assessment of their physical agility pertinent to EMS duties. Students must be able to perform physical tasks to complete course requirements. Prerequisite(s): Minnesota Human Services background study with no restrictions; current AHA BLS for the Healthcare Provider certification; current State EMT certification; current healthcare insurance. Recommendation(s): Basic word processing skills.

## Advanced Pathophysiology and Medical Terminology EMSP 1207

4 Credits
This course introduces the student to medical terminology, acid-base balance, and the anatomy and physiology of the human body. Students must be able to perform physical tasks to complete course requirements. Prerequisite(s): Minnesota Human Services background study with no restrictions; current AHA BLS for the Healthcare Provider certification; current State EMT certification; current healthcare insurance. Recommendation(s): Basic word processing skills.

## Advanced Assessment, Communications and Documentation EMSP 12103 Credits

This course introduces advanced life support patient assessment concepts, skills, and prioritization. It also provides opportunities for developing critical thinking skills and applying life-saving interventions in the out-of-hospital environment. Emphasis is placed upon radio communication and documentation. Students must be able to perform physical tasks to complete course requirements. Prerequisite(s): EMSP 1205 with a grade of C or higher; Minnesota Human Services background study with no restrictions; current AHA BLS for the Healthcare Provider certification; current State EMT certification; current healthcare insurance. Recommendation(s): Basic word processing skills.

## Advanced EMS Pharmacology EMSP 12153 Credits

This course introduces the applications and principles of pharmacological interventions commonly used by paramedics. Emphasis is placed upon drug classifications, dosage calculations, pharmacokinetics, and pharmacodynamics of medications and their administration routes and techniques. Students must be able to perform physical tasks to complete course requirements. Prerequisite: EMSP 1210 with a grade of C or higher; Minnesota Human Services background study with no restrictions; current AHA BLS for the Healthcare Provider certification; current state EMT certification; and current healthcare insurance. Recommendation: Basic word processing skills.

## Advanced Intravenous Cannulation and Intervention EMSP 1220 1 Credit

This course introduces the applications and principles of intravenous cannulation
commonly used by paramedics. Emphasis is placed on intravenous therapy and intervention. Students will practice IV/ IO access, blood draws, and medication administration skills. Students must be able to perform physical tasks to complete course requirements. Prerequisite: EMSP 1210 with a grade of C or higher; Minnesota Human Services background study with no restrictions; current AHA BLS for the Healthcare Provider certification; current state EMT certification; current healthcare insurance. Restriction: Basic word processing skills.

## Advanced Prehospital Cardiac Care I EMSP 1225 <br> 2 Credits

This course introduces the paramedic student to cardiac anatomy, mechanical physiology, electrophysiology, cardiovascular diseases, and the function of the heart. Additional topics include 12-lead EKG application and cardiac monitoring devices. The student will apply their cardiac knowledge in classroom simulations. Students must be able to perform physical tasks to complete course requirements. Prerequisite: EMSP 1240 and EMSP 1245 with a grade of $C$ or higher; Minnesota Human Services background study with no restrictions; current AHA BLS for the healthcare Provider certification; current State EMT certification; and current healthcare insurance. Recommendation: Basic word processing skills.

## Advanced Prehospital Cardiac Care II EMSP 1226 2 Credits

This course builds upon EMSP 1225 and presents concepts and skills for assessing and managing the out-of-hospital cardiac patient. Emphasis will be placed upon recognition, interpretation and management of EKG rhythms, and cardiac arrest management with the use of pacemakers, defibrillators, and medications. During this course students will be introduced to Advanced Cardiac Life Support (ACLS) algorithms. Students must be able to perform physical tasks to complete course requirements. Prerequisite: EMSP 1225 with a grade of C or higher; Minnesota Human Services background study with no restrictions; current AHA BLS for the Healthcare Provider certification; current State EMT certification; and current healthcare insurance. Recommendation: Basic word processing skills.

## 7 Course Descriptions

## Advanced Prehospital Cardiac Care III EMSP 1227 2 Credits

This course builds upon EMSP 1225 and EMSP 1226 and presents concepts and skills for assessing and managing the out-of-hospital cardiac patient. Emphasis will be placed upon recognition, interpretation and management of EKG rhythms, and cardiac arrest management with the use of pacemakers, defibrillators, and medications. During this course, students will be introduced to Advanced Cardiac Life Support (ACLS) megacode. Students must be able to perform physical tasks to complete course requirements. Prerequisite: EMSP 1226 with a grade of C or higher; Minnesota Human Services background study with no restrictions; current AHA BLS for the Healthcare Provider certification; current State EMT certification; and current healthcare insurance. Recommendation: Basic word processing skills

## Special Populations EMSP 1230

## 3 Credits

This course will provide the paramedic student with the concepts, theory, and skills to assess and manage special patient populations. Emphasis will be placed upon pediatric, gynecologic, obstetric, neonate, and geriatric patients during simulated scenarios. Obtaining PALS and PEPP provider certification is a component of this course. Students must be able to perform physical tasks to complete course requirements. Prerequisite(s): EMSP 1227 with a grade of C or higher; Minnesota Human Services background study with no restrictions; current AHA BLS for the Healthcare Provider certification; current State EMT certification; current healthcare insurance. Recommendation(s): Basic word processing skills.

## Advanced EMS Operations EMSP 1235 <br> 1 Credit

This course introduces special considerations for patient care at the scene of a crime as well as operational aspects of working while specialized rescue efforts are occurring such as confined space rescue. Additional emphasis includes skills in the areas of triage, resource management, incident command, Mass Casualty Incidents, emergency driving theory, weapons of mass destruction, and extrication. Students must be able to perform physical tasks to complete course requirements. Prerequisite(s): EMSP 1205 with a grade of C or higher; Minnesota Human Services background study with no restrictions; current AHA BLS for the Healthcare


Provider certification; current state EMT certification; current healthcare insurance. Recommendation(s): Basic word processing skills.

## Advanced Airway and Respiratory Emergencies EMSP 1240 <br> 2 Credits

This course addresses the paramedic students ability to formulate and manage a comprehensive treatment plan for an airway or respiratory emergency encountered in the pre-hospital setting. Emphasis is placed upon advanced airway and respiratory emergencies, assessment, and interventions. Simulations will allow students to utilize didactic and practical assessment skills in simulated emergency scenarios. Students must be able to perform physical tasks to complete course requirements. Prerequisite: EMSP 1215 and EMSP 1220 with a grade of $C$ or higher; Minnesota Human Services background study with no restrictions; current AHA BLS for the Healthcare Provider certification; current state EMT certification; required immunizations; valid driver's license; and current healthcare insurance. Recommendation: Basic word processing skills.

## Advanced Endocrine Emergencies EMSP 1245 2 Credits

This course develops the students ability to formulate and manage a comprehensive treatment plan for a medical emergency encountered in the pre-hospital setting.

Emphasis is placed upon shock, renal, anaphylactic, diabetic, and other endocrine emergencies. Simulations will allow students to utilize didactic and practical assessment skills in simulated emergency scenarios. Students must be able to perform physical tasks to complete course requirements. Prerequisite(s): EMSP 1210 with a grade of C or higher; Minnesota Human Services background study with no restrictions; current AHA BLS for the Healthcare Provider certification; current State EMT certification; current healthcare insurance. Recommendation(s): Basic word processing skills.

## Advanced Environmental and Neurological Emergencies EMSP 1250 <br> 2 Credits

This course provides the student with knowledge and skills to manage and formulate a comprehensive treatment plan for a medical emergency encountered in the pre-hospital setting. Emphasis is placed upon toxicology, environmental emergencies, infectious diseases, substance abuse, hypothermia, and near drowning. Students must be able to perform physical tasks to complete course requirements. Prerequisite(s): EMSP 1215 and EMSP 1220 with a grade of $C$ or higher; Minnesota Human Services background study with no restrictions; current state EMT certification; current AHA BLS for the Healthcare Provider certification; required immunizations; current healthcare insurance. Recommendation(s): Basic word processing skills.

## Advanced Behavioral Emergencies EMSP 1255 2 Credits

This course provides the student with knowledge and skills to manage and formulate a comprehensive treatment plan for a medical emergency encountered in the pre-hospital setting. Emphasis is placed upon behavioral emergencies, crisis management, death and dying, cultural diversity, therapeutic communications, and lifespan development. Students must be able to perform physical tasks to complete course requirements. Prerequisite(s): EMSP 1215 and EMSP 1220 with a grade of C or higher; Minnesota Human Services background study with no restrictions; current state EMT certification; current AHA BLS for the Healthcare Provider certification; required immunizations; current healthcare insurance; valid drivers license. Recommendation(s): Basic word processing skills.

## Trauma Systems

 EMSP $1260 \quad 1$ Credit This course provides the paramedic student with the concepts, theory, and skills to effectively assess and manage a trauma patient. Students will synthesize material learned in simulated scenarios and advanced skills evaluations. Obtaining ITLS or PHTLS Advanced certification is a component of this course. Students must be able to perform physical tasks to complete course requirements. Prerequisite(s): EMSP 1226 with a C or better. Minnesota Human Services background study with no restrictions; current AHA BLS for the Healthcare Provider certification; current State EMT certification; current healthcare insurance.
## Neurological Trauma EMSP 1265 <br> 1 Credit

This course provides the paramedic student with the concepts, theory, and skills to effectively assess and manage a trauma patient with a neurological injury. Students will synthesize material learned in simulated scenarios and advanced skills evaluations. Obtaining ITLS or PHTLS Advanced certification is a component of this course. Students must be able to perform physical tasks to complete course requirements. Prerequisite(s): EMSP 1260 with a grade of C or better; Minnesota Human Services background study with no restrictions; current AHA BLS for the Healthcare Provider certification; current State EMT certification; current healthcare insurance. Recommendation(s): Basic word processing skills.

## Paramedic Practicum Theory and Application EMSP 1270 <br> 2 Credits

This course introduces the role of the paramedic with a focus on the health and health needs of a patient. Classroom experiences will focus on integrating and synthesizing multiple determinants of health and clinical care. Students will integrate prior didactic and skills coursework for preparation for hospital and field internship practicums, job seeking, and career planning. Students must be able to perform physical tasks to complete course requirements. Prerequisite: EMSP 1230 and EMSP 1265 with a grade of C or higher; Minnesota Human Services background study with no restrictions; current state EMT certification; current AHA BLS for the Healthcare Provider certification; required immunizations; current healthcare insurance. Recommendation: Basic word processing skills

## Advanced Hospital Practicum I EMSP 12712 Credits

This practicum provides the student with opportunities for entry-level paramedic care with occupational experiences in labor and delivery, pediatric, and special care units. Under instructor and preceptor guidance, the student will synthesize and apply theories and skills learned throughout the program. Emphasis will be placed upon team leading, critical thinking, prioritization, assessment, therapeutic communication, and life-saving interventions. Students must be able to perform physical tasks to complete course requirements. Prerequisite(s): EMSP 1230 and EMSP 1270 with a grade of C or higher; Minnesota Human Services background study with no restrictions; current state EMT certification; current AHA BLS for the Healthcare Provider certification; required immunizations; current healthcare insurance. Recommendation(s): Basic word processing skills.

## Advanced Hospital Practicum II EMSP 12721 Credit

This practicum provides the student with opportunities for entry-level paramedic care with occupational experiences in the anesthesia department. Under instructor and preceptor guidance, the student will synthesize and apply theories and skills learned throughout the program. Emphasis will be placed upon team leading, critical thinking, prioritization, assessment, therapeutic
communication, and life-saving interventions. Students must be able to perform physical tasks to complete course requirements. Prerequisite(s): EMSP 1240 and EMSP 1270 with a grade of C or higher; Minnesota Human Services background study with no restrictions; current state EMT certification; current AHA BLS for the Healthcare Provider certification; required immunizations; current healthcare insurance. Recommendation(s): Basic word processing skills.

## Advanced Hospital Practicum III EMSP 1273 1 Credit

This practicum provides the student with opportunities for entry-level paramedic care with occupational experiences in behavioral, neurological, and special care units. Under instructor and preceptor guidance, the student will synthesize and apply theories and skills learned throughout the program. Emphasis will be placed upon team leading, critical thinking, prioritization, assessment, therapeutic communication, and life-saving interventions. Students must be able to perform physical tasks to complete course requirements. Prerequisite(s): EMSP 1230, EMSP 1255, and EMSP 1270 with a grade of $C$ or higher; Minnesota Human Services background study with no restrictions; current state EMT certification; current AHA BLS for the Healthcare Provider certification; required immunizations; current healthcare insurance. Recommendation(s): Basic word processing skills.

## Advanced Hospital Practicum IV EMSP 12742 Credits

This practicum provides the student with opportunities for entry-level paramedic care with occupational experiences in a cardiac cath lab, coronary care unit, and emergency department. Under instructor and preceptor guidance, the student will synthesize and apply theories and skills learned throughout the program. Emphasis will be placed upon team leading, critical thinking, prioritization, assessment, therapeutic communication, and life-saving interventions. Students must be able to perform physical tasks to complete course requirements. Prerequisite(s): EMSP 1227 and EMSP 1270 with a grade of $C$ or higher; Minnesota Human Services background study with no restrictions; current state EMT certification; current AHA BLS for the Healthcare Provider certification; required immunizations; current healthcare insurance. Recommendation(s): Basic word processing skills.

## 7 Course Descriptions

## Advanced Life Support Practicum I EMSP 1275 <br> 4 Credits

This practicum provides the student with opportunities for entry-level paramedic care with a high-volume metropolitan ambulance provider. Under instructor and precepr guidance, the student will synthesize and apply theories and skills learned throughout the program. Emphasis will be placed upon team leading, critical thinking, prioritization, assessment, therapeutic communication, and life-saving interventions. Students must be able to perform physical tasks to complete course requirements. Prerequisite(s): EMSP 1270, EMSP 1271, EMSP 1272, EMSP 1273, and EMSP 1274 with a grade of C or higher; Minnesota Human Services background study with no restrictions; current state EMT certification; current AHA BLS for the Healthcare Provider certification; required immunizations; current healthcare insurance. Recommendation(s): Basic word processing skills.

## Advanced Life Support Practicum II EMSP 12763 Credits

This practicum provides the student with opportunities for entry-level paramedic care with a community-based ambulance provider. Under instructor and preceptor guidance, the student will synthesize and apply theories and skills learned throughout the program. Emphasis will be placed upon team leading, critical thinking, prioritization, assessment, therapeutic communication, and life-saving interventions. Students must be able to perform physical tasks to complete course requirements. Prerequisite(s): EMSP 1270, EMSP 1271, EMSP 1272, EMSP 1273, and EMSP 1274 with a grade of C or higher; Minnesota Human Services background study with no restrictions; current state EMT certification; current AHA BLS for the Healthcare Provider certification; required immunizations; current healthcare insurance. Recommendation(s): Basic word processing skills.

## Advanced Life Support Practicum III EMSP 12713 Credits

This practicum provides the student with opportunities for entry-level paramedic care with specialty providers that may include police departments, fire departments, critical care transportation, and fixed or rotary wing air ambulances. Under instructor and preceptor guidance, the student will synthesize and apply theories and skills learned throughout the program. Emphasis will
be placed upon team leading, critical thinking, prioritization, assessment, therapeutic communication, and life-saving interventions. Students must be able to perform physical tasks to complete course requirements. Prerequisite(s): EMSP 1270, EMSP 1271, EMSP 1272, EMSP 1273, and EMSP 1274 with a grade of C or higher; Minnesota Human Services background study with no restrictions; current state EMT certification; current AHA BLS for the Healthcare Provider certification; required immunizations; current healthcare insurance. Recommendation(s): Basic word processing skills.

## Integration and Transition to the Paramedic Role EMSP 1280 <br> 3 Credits

This course is designed to synthesize and assess the paramedic students hospital and ambulance experiences, and advanced skills in preparation for National Registry practical and Computer-Based Test (CBT) testing. Emphasis will also be placed on transition into and regulatory requirements for the EMS profession. Students must be able to perform physical tasks to complete course requirements. Prerequisite: EMSP 1070, 1071, $1072,1075,1076$, and 1077 with a grade of $C$ or higher; Minnesota Human Services background study with no restrictions; current state EMT certification; current AHA BLS for the Healthcare Provider certification; valid drivers license. Recommendation: Basic word processing skills.

## Engineering

## Introduction to Engineering ENGR 10204 Credits

This course presents the art and practice of engineering. Topics include an overview of the engineering profession, engineering design, fabrication, prototyping, use of computer packages, and visual, oral, and written communication. Engineering graphics will be presented including the use of CAD software. Team and individual project work includes reverse engineering of existing products and creative design and fabrication of new ideas and products. Speakers from industry will discuss engineering career options. The Century engineering curriculum and transfer options will be presented. Prerequisite(s): Assessment score placement in RDNG 1000,
or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher.

## Statics <br> ENGR 1080 <br> 3 Credits

This course examines rigid body mechanics where bodies are in equilibrium. Topics include force and moment vectors, principles of statics, and equilibrium analysis. In addition, the course covers static analysis of simple trusses, frames, and machines. Also distributed loads, centroids, moments of inertia, and principles of friction will be presented. Design of simple structures in equilibrium is integrated throughout the course. Prerequisite: PHYS 1081 and concurrent enrollment in MATH 1082.

## Independent Study ENGR 1790

 1-3 CreditsThis course is an opportunity for an additional, in-depth study of engineering concepts. Prerequisite: Consent of instructor and dean. Completion of at least one Engineering course with a grade of " $B$ " or above.

## Robotics <br> ENGR 2020

## 4 Credits

This hands-on course will introduce students to mechatronics, which is the fusion of electronics, mechanical systems, and software. A robot is an example of mechatronics as are the intelligent machines and products that we see all around us. The course begins with microcontroller concepts, BASIC programming, electronics concepts, various types of sensors, motors and other actuators, and then proceeds to more advanced topics such as analog to digital conversion, serial communication, signal conditioning, and various methods of process control. Hands on, team based design projects will be integrated throughout the course. Prerequisite: ENGR 1020 or ENGR 2091 or ENGR 2095 or consent of instructor.

## Thermodynamics ENGR 2070

## 3 Credits

This course covers thermodynamics systems and their equilibrium. Topics include work, heat and the first law of thermodynamics; the properties of pure substances and their equation of state; ideal and real gases and gaseous mixtures. Entropy, reversibility and the second law of thermodynamics are presented. The Carnot cycle is covered along with other engineering cycles, process equations and their efficiencies. Prerequisite: PHYS 1081 and MATH 1081 with a grade of C or higher.

## Dynamics ENGR 2080

This course is a study of rigid body motion and the forces that cause motion. Topics include particle dynamics, planar kinematics, kinetics of a rigid body, and mechanical vibrations. Design of elementary dynamic systems is integrated throughout this engineering course. Prerequisite: ENGR 1080.

## Deformable Body Mechanics ENGR 2085 <br> 3 Credits

This engineering course examines the internal effects and deformations that are caused by applied loads on a body. Topics include stress and strain, material behavior and linear elasticity, uniaxially loaded members, shafts in torsion, beams in bending, shear and moment diagrams, stress and strain transformation, and design of shafts and beams. Prerequisite: ENGR 1080.

## Circuits I ENGR 2091

## 4 Credits

This first course in engineering circuits introduces circuit theorems and analysis techniques and includes an introduction to elementary semiconductor devices. Topics include Kirchoff's Laws, mesh analysis, nodal analysis, source transformations, superposition, Thevenin's theorem, operational amplifiers, bipolar junction transistors, MOSFETs, and RLC circuits. Circuits analysis software is introduced. Design of simple electrical circuits is integrated throughout this course. This course includes a two-hour lab each week. Prerequisite: PHYS 1082; concurrent enrollment in MATH 2081.

## Circuits II ENGR 2092

## 4 Credits

This course builds on information and skills developed in Circuits I and focuses on AC circuit theory. Topics include sinusoidal analysis, phasors, frequency response, two-port networks, Laplace transforms, and frequency response. The frequency response of BJT and MOSFET amplifiers is presented. Design of AC circuits is integrated throughout the course. This course includes a two-hour lab each week. Prerequisite: ENGR 2091; concurrent enrollment in MATH 2082.

## Digital Fundamentals ENGR 2094

## 2 Credits

This course provides an introduction to digital circuits and is intended primarily for mechanical engineering students.
Topics include Boolean algebra, logic gates, Karnaugh mapping, and analysis of
combinational circuits. The course includes a two-hour lab each week for eight weeks. Prerequisite: MATH 1081. Restriction: Credit will not be granted for both ENGR 2094 and ENGR 2095.

## Introduction to Digital Design ENGR 2095 <br> 4 Credits

This course presents important digital design concepts for students studying electrical or computer engineering. A variety of analysis and design techniques applicable to digital circuits is introduced. Topics include Boolean algebra, logic gates, Karnaugh mapping, combinational circuits, sequential circuits, and computer simulation of digital circuits. This course includes a two-hour lab each week. Prerequisite: MATH 1081. Restriction: Credit will not be granted for both ENGR 2094 and ENGR 2095.

## Engineering CAD Technology

## Interpreting Engineering Drawings ECAD 10202 Credits

This course is designed to give students an understanding of the concepts required to read industrial blueprints. Topics include sketching, multi-view drawing, symbols, scaling, dimensioning, finishes, screw threads, auxiliary and assembly drawings. Also covered is an introduction to Geometric Tolerancing. Restriction: Closed to students who have already earned credit for ECAD 1023 Blueprint Reading for Renewable Energy. Recommendation: MATH 0010.

## Blueprint Reading for Renewable Energy ECAD $1023 \quad 3$ Credits

This course is designed to give students an understanding of the concepts required to read industrial blueprints in the Renewable Energy fields. Topics include sketching, multiview drawing, symbols to include welding and electrical, scaling, dimensioning, finishes, screw threads, auxiliary and assembly drawings, an introduction to Geometric Dimensioning and Tolerancing. Also covered is an introduction to Autodesk Design Review software. Restriction: Closed to students who have already earned credit for ECAD 1020 Interpreting Engineering Drawings. Recommendation: MATH 0010.

## How to Make Almost Anything ECAD $1025 \quad 3$ Credits

This course is an introduction to "personal digital fabrication" using the Century College Fab Lab modeled after the Fab Lab at MIT. It is designed for "garage inventors", entrepreneurs, artists, or individuals with new business ideas needing to create prototypes. Students will use laser cutters, 3-D printers, vinyl cutters, ShopBot CNC routers, and desktop milling machines to fabricate and test their design projects. The Lab is designed to allow students to explore their interests in a variety of fields including graphic design, art, business, computer-assisted design (CAD), physical and natural science, mathematics, and engineering.

## Engineering Drafting I ECAD 1040

## 4 Credits

In this course students will use CAD software to create various geometric constructions, multiview drawings, 1st \& 3rd angle projections, and simple dimensioning. Detail drawings will be created that incorporate auxiliary and section views, tolerancing, and finishes. Other topics include an overview of the drafting profession, drafting office practices, revisions, and standard parts. Prerequisite: ECAD 1020, 1070; an assessment score placement in MATH 0030 or above, or completion of MATH 0010 with a grade of "C" or higher. Recommendation: MATH 0030.

## Materials and Manufacturing Process ECAD $1060 \quad 3$ Credits

This is a survey course of the manufacturing processes, materials and properties as pertaining to drafting and design. Materials processes such as casting, forging, machining, welding, forming and molding and how they affect a design or drawing will be explored. Students will be exposed to these processes and how the results of these processes affect drawings through fieldtrips, demonstrations and videos. Recommendation: Assessment score placement in MATH 0030 or completion of MATH 0010 with a grade of C or higher.

## Introduction to AutoCAD ECAD 1070

## 3 Credits

This course covers the fundamental concepts, tools, and commands of AutoCAD software. AutoCAD skills that will be practiced include drawing, editing, annotating, and plotting of two-dimensional (2D) drawings. Students are encouraged to bring drawing projects from their major, industry, or hobby as a possible final project. Recommendation(s): Previous

## 7 Course Descriptions

experience with drawings in your chosen field or completion of any the following courses: ECAD 1020, INTD 1020 or KBD 1010. Assessment score placement in MATH 0030 or completion of MATH 0010 with a grade of C or higher.

## ECAD Independent Study ECAD 1790

## 1-4 Credits

This variable-credit elective course emphasizes the student's independent search for advanced knowledge as well as additional hands-on skills beyond current ECAD course offerings. The student and instructor will devise a formal plan of study to satisfy credit workload requirements within the semester timeline. Prerequisite: Consent of instructor and dean. ECAD 1070 or ECAD 2050 or ECAD 2055 or its equivalent with a grade of "B" or higher.

## Geometric Dimensioning and Tolerancing ECAD 20203 Credits

This course provides in-depth coverage of form, orientation, runout, profile, and location tolerances. Topics include analyzing production drawings, investigating inspection procedures, and calculating and specifying tolerances. In the lab portion of this course, students will investigate tooling, machining and inspection aspects of GDT and use CAD to apply symbols to drawings. Prerequisite: Assessment score placement in MATH 0030 or above, or completion of MATH 0010 with a grade of "C" or higher. ECAD 1020 and ECAD 1070 or consent of instructor. Recommendation: Assessment score placement in MATH 0070 or MATH 1015 or completion of MATH 0030 with a grade of "C" or higher.

## Descriptive Geometry and Applications ECAD 2030 2 Credits

Students will graphically solve problems dealing with true lengths, sizes, distances, angles and intersections of various points, lines and planes. Other topics include vectors, sheet metal development and detail drawings and bend allowance calculations. Prerequisite: ECAD 1040; assessment score placement in MATH 0070 or above, or completion of MATH 0030 with a grade of " C " or higher. Recommendation: ECAD 2050, MATH 1015 strongly recommended.

## Engineering Drafting II

ECAD 20404 Credits
This course covers assembly, production and pictorial drawings. CAD models and drawings will be created based on various
manufacturing processes such as casting, forging, molding, machining, and welding. Other topics include joining methods using threaded and non-threaded fasteners. Prerequisite: ECAD 1040, ECAD 1060; completion of or concurrent enrollment in the following courses: ECAD 2020, MATH 1015. Recommendation: ECAD 2050 or ECAD 2055.

## Introduction to Inventor ECAD 2050

## 3 Credits

Students will use Autodesk's Inventor software to sketch, create,edit, and dimension 3D solid models, as well as create 2 D drawings from these models. Assembly modeling and 2D \& 3D printing are also covered. These skills are necessary for job qualification in many areas such as mechanical design and engineering. The class uses a hands-on approach in order to build a foundation for continued training or self-instruction. Prerequisite: ECAD 1070 or ENGR 1020 or instructor consent.

## Introduction to SolidWorks ECAD 2053 <br> 3 Credits

Students will use SolidWorks software to sketch, create, edit, and dimension 3D solid models, as well as create 2D drawings from these models. Assembly modeling and 2D \& 3D printing are also covered. A hands-on approach is used in this class in an effort to build a foundation for continued training and self-instruction. Prerequisite: ECAD 1070 or ENGR 1020 or instructor consent. Recommendation: Previous experience with drawings in your chosen field or completion of ECAD 1020, and assessment score placement in MATH 0070 or MATH 1015 or completion of MATH 0030 with a grade of $C$ or higher.

## Introduction to CREO Elements/Pro ECAD 20553 Credits

Students will use CREO Elements/Pro (formerly Pro/Engineer-Wildfire) software by Parametric Technology Corporation. Activities include sketching, creating, editing, and dimensioning of 3D solid models. From these models, students will create 2D drawings and make assemblies. 2D \& 3D printing are also covered. The class uses a hands-on approach in order to build a foundation for continued training or self-instruction. Prerequisite(s): ECAD 1020 or ENGR 1020 or instructor consent. Recommendation(s): ECAD 2050

## Basic Tooling Fixtures ECAD 2060

 3 CreditsThis course will introduce students to tool design. Topics include workholding theory,
standard tooling components, drill jigs, milling fixtures, and inspection gages. Prerequisite: ECAD 1060, ECAD 2040. Recommendation: ECAD 2050 or ECAD 2055.

## Power Transmission Devices ECAD 2070 <br> 4 Credits

This course introduces students to the many devices that transmit power from one component to another. Topics covered include calculating dimensions, loads, and stresses. Sizes of gears, cams, bearings, seals, clutches, belt and chain drives are also determined to create detail and assembly drawings. Job seeking and keeping skills will also be discussed. Prerequisite: ECAD 2040, MATH 1015, PHYS 1041.

## Advanced CAD Software ECAD 2075

3 Credits
Topics will cover advanced applications such as assemblies, product design and more advanced modeling commands. Students will choose between AutoCAD, Inventor, SolidWorks or CREO Elements/Pro CAD software packages. Other topics that could be explored depending on which software the student chooses may include FEA, Flow, Sheetmetal, and animation. Students may receive academic credit for this course up to four times, once for each software package. Prerequisite(s): ECAD 1070 or ECAD 2050 or ECAD 2053 or ECAD 2055 or instructor consent. Recommendation(s): Assessment score placement in MATH 1061 or higher or completion of MATH 1015 with a grade of $C$ or higher.

## Design Project ECAD 2080

## 2 Credits

This course introduces students to various design methodologies such as Concurrent Engineering, Design for Manufacture (DFM), Design for Assembly (DFA), Green Design, and others. Students apply these methodologies to a design project of their own by creating a CAD model and prototype of the design. Prerequisite: ECAD 1025 or ECAD 1060, ECAD 2040 or ENGR 1020, MATH 1015 or higher, PHYS 1041 or higher. Recommendation: Concurrent enrollment in ECAD 2070.

## ECAD Internship ECAD 2780

## 1-3 Credits

This course is designed to provide students the opportunity to apply knowledge and skills learned in the Engineering CAD program in a real life job environment. Students will work in a professional atmosphere while applying and learning a variety of communication, business
and technical skills. This may be a paid or unpaid experience. Prerequisite: Completion of at least 15 ECAD credits and consent of instructor.

## Special Topics in Engineering CAD ECAD 2790 1-3 Credits

This course will explore one of a variety of contemporary topics of interest that would be selected as the focus for study. The specific topic will be announced in advance, and published at the time of registration.

## English

## Basic Writing and Grammar ENGL 0080 <br> 4 Credits

This composition course emphasizes development and enhanced use of English sentences and paragraphs in short writing assignments. Students will study basic grammar, mechanics, and usage. Students will practice writing as a process and thinking critically about language, especially sentences, in context. Special emphasis will be placed on recognizing and eliminating common sentence errors. Instructor-supervised use of the Writing Center, equivalent to one credit, is required for students enrolled in ENGL 0080 sections meeting fewer than four hours per week. Prerequisite: Assessment score placement in ENGL 0080 or above and assessment score placement in RDNG 0900 or above. Recommendation: Basic computer skills

## Introduction to Writing ENGL 0090

## 4 Credits

This composition course emphasizes foundational principles of writing, including focus, development, organization, clarity, unity, and coherence in paragraphs and brief essays. Students will practice how to generate documents that are understandable for audiences, including how to identify and correct common errors. Emphasis will be placed on increasing written fluency and responding to texts. Instructor-supervised use of the Writing Center, equivalent to one credit, is required for students enrolled in ENGL 0090 sections meeting fewer than four hours per week. Prerequisite: Assessment score placement in ENGL 0090 or above or completion of ENGL 0080 with a grade of $C$ or higher, and assessment score placement in RDNG 0950 or above or completion of RDNG 0900 with a grade of $C$ or higher.

Recommendation: Basic computer skills

## Composition I ENGL 1021 <br> MnTC: Goal 01

This college composition course emphasizes academic writing, persuasive writing, and the expository essay. Students will apply rhetorical principles, such as purpose, audience, and style, throughout the writing process. Students will also compose sourcebased and claim-based writing by selecting, evaluating, organizing, and documenting sources. Instructor-supervised use of the Writing Center, equivalent to one credit, is required for students enrolled in ENGL 1021 sections meeting fewer than four hours per week. Prerequisite: Assessment score placement in ENGL1021 or completion of ENGL 0090 with a grade of $C$ or higher, and assessment score placement in RDNG 1000 or completion of RDNG 0900 or RDNG 0950 with a grade of C or higher. Recommendation: Word processing proficiency and basic computer skills

## Composition II <br> ENGL 1022 <br> MnTC: Goal 01

This college composition course emphasizes sustained interpretive and analytical writing as well as the techniques of academic research using literature and other texts as the basis for composition. Students will apply critical thinking and practice evaluating and integrating primary and secondary sources in their writing. Prerequisite: ENGL 1021 with a grade of $C$ or higher. Recommendation: Word processing proficiency and basic computer skills

## Technical and Professional Writing ENGL 10253 Credits

This college-level writing course emphasizes principles, techniques, and skills needed to construct technical and professional writing, using primary research and current technology, that meets professional ethical standards. Typical assignments include instructions, research reports, brochures, abstracts, proposals, and written projects. The course includes consideration of research techniques, technical format, information design, and effective visuals. This writing course assumes familiarity with a word processing program. Prerequisite: ENGL 1021 with a grade of C or higher. Recommendation: CAPL 1010 or equivalent

## Creative Writing: Introduction to Creative Writing ENGL 1027 MnTC: Goal 06 <br> This creative writing class intended for

 all students introduces the major genres: poetry, short fiction, creative nonfiction, and screenwriting/scriptwriting as selected by the instructor. Because creative writing involves both creativity and scholarship, coursework includes an introduction to reading and critical analysis in a variety of genres; developing and practicing a creative process; and writing, revising, critiquing, and sharing original work in a variety of genres. This course does not fulfill the Literature requirement for the Associate of Arts degree at Century College. Prerequisite: Assessment score placement in ENGL 1021 or completion of ENGL 0090 with a grade of C or higher. Assessment score placement in RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher. Recommendation: Completion of ENGL 1021. Basic word processing and computer skills.
## American Literature: Colonial to Civil War ENGL 2011 3 Credits MnTC: Goal 06

This college literature course intended for all students will analyze and explore American Literature from the Colonial Period to the Civil War. Typical writers may include Bradstreet, Edwards, Franklin, Emerson, Thoreau, Fuller, Hawthorne, Douglass, Melville, Poe, Dickinson, and Whitman. Prerequisite: Assessment score placement in RDNG 1000 or above, or completion of RDNG 0900 OR RDNG 0950 with a grade of " $C$ " or higher. Recommendation: Completion of ENGL 1021 with a grade of "C" or higher.

## American Literature: Civil War to Present <br> ENGL 2012 <br> 3 Credits MnTC: Goals 06 \& 07

This college literature course intended for all students will analyze and explore American Literature from the Civil War to the present. Typical writers may include Clemens, Crane, Chopin, James, Cather, Fitzgerald, Hughes, Faulkner, Thurston, Hemingway, and Frost. Prerequisite: Assessment score placement in RDNG 1000 or above, or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher. Recommendation: Completion of ENGL 1021 with a grade of " $C$ " or higher.

## 7 Course Descriptions

## African American Literature ENGL 2013 MnTC: Goals 06 \& 07

This college course intended for all students will analyze and explore literature by African American authors. Authors may include Alice Walker, Frederick Douglass, Ida B. WellsBarnett, Langston Hughes, Richard Wright, Zora Neal Hurston, and Dr. Martin Luther King, Jr. Prerequisite: Assessment score placement in RDNG 1000, or completion of RDNG 0900 OR RDNG 0950 with a grade of " $C$ " or higher. Recommendation: Completion of ENGL 1021 with a grade of " $C$ " or higher.

## Minnesota Writers <br> ENGL 2014 MnTC: Goal 06

This college course intended for all students will explore literature by Minnesota writers. Selections may include poetry, novels, short stories, and non-fiction by such writers as Sinclair Lewis, F. Scott Fitzgerald, Jim Northrup, Allison McGee, Connie Wanek, and Bill Holm. Prerequisite: Assessment score placement in RDNG 1000 or above, or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher. Recommendation: Completion of ENGL 1021 with a grade of "C" or higher.

## American Indian Literature ENGL $2015 \quad 3$ Credits MnTC: Goals 06 \& 07

This college literature course intended for all students will analyze and explore an introductory survey of major literary works written by and/or attributed to American Indian authors, from the oral tradition to contemporary literature. Selections may include works by Sherman Alexie, Black Elk, Ella Vine Deloria, Louise Erdrich, Linda Hogan, N. Scott Momaday, and Leslie Marmon Silko. Prerequisite: Assessment score placement in RDNG 1000 or above, or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher. Recommendation: Completion of ENGL 1021 with a grade of " C " or higher.

## Introduction to Folklore ENGL 2018 <br> 3 Credits MnTC: Goals 06 \& 07

In this course, students will be introduced to the study of folklore. They will learn to critically analyze traditional folk literature and customary texts through literary, comparative, structural, functional, and contextual methods.

Texts may include myths, legends, folktales, riddles, proverbs, and material folklore. Prerequisite: Assessment score placement in RDNG 1000 or above, or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher. Recommendation: Completion of ENGL 1021 with a grade of " C " or higher.

## Creative Writing: Fiction ENGL 2024 MnTC: Goal 06

This creative writing class intended for all students focuses on the writing and close reading of fiction. Because creative writing involves both creativity and scholarship, coursework includes critical analysis of student and published writing; forming aesthetic judgments about fiction; writing and revising short fiction; form and technique in fiction; and responding to the creative work of classmates in a writing community. This course does not fulfill the Literature requirement for the Associate of Arts degree at Century College. Prerequisite: Assessment score placement in ENGL 1021 or completion of ENGL 0090 with a grade of C or higher. Assessment score placement in RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher. Recommendation: Completion of ENGL 1021 and ENGL 1027. Basic word processing and computer skills.

## Creative Writing: Media Writing ENGL $2025 \quad 3$ Credits MnTC: Goal 09

This creative writing class intended for all students covers the study and practice of various forms of media writing including personality profiles, event stories, and opinion pieces. Writing suitable for publication in popular newspapers, magazines, journals, and electronic media is emphasized. This type of writing is fundamental to the free exchange of ideas in society, a necessary mechanism for understanding a variety of viewpoints required by well-informed citizens. Because creative writing involves both creativity and scholarship, coursework includes critical analysis of student and published writing; forming aesthetic judgments about media writing; writing and revising stories; form and technique in media writing; and responding to the creative work of classmates in a writing community. This course does not fulfill the Literature requirement for the Associate of Arts degree at Century College. Prerequisite: Assessment score placement in ENGL 1021 or completion of ENGL 0090 with a grade of C or higher. Assessment score placement
in RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher. Recommendation: Completion of ENGL 1021. Basic word processing and computer skills.

## Creative Writing: Creative Nonfiction ENGL $2026 \quad 3$ Credits MnTC: Goal 06

This creative writing class intended for all students focuses on the writing and close reading of creative nonfiction. This evolving genre uses the literary techniques often found in fiction and poetry to tell true stories about real people and events. Texts may include memoir, nonfiction shorts, the personal essay, and other blended forms. Because creative writing involves both creativity and scholarship, coursework includes critical analysis of student and published writing; forming aesthetic judgments about creative nonfiction; writing and revising creative nonfiction; form and technique in creative nonfiction; and responding to the creative work of classmates in a writing community. This course does not fulfill the Literature requirement for the Associate of Arts degree at Century College. Prerequisite: Assessment score placement in ENGL 1021 or completion of ENGL 0090 with a grade of C or higher. Assessment score placement in RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher. Recommendation: Completion of ENGL 1021 and ENGL 1027. Basic word processing and computer skills.

## Newspaper Practicum ENGL 2027

## Credits

This course offers academic credit for work involved as a staff member of the campus student newspaper, The Century Times. Two options are available. One Credit Contributor: Staff member will attend staff meetings, contribute story ideas, and collaborate with other staff members to produce issues. Staff member will contribute to each issue by writing an article and/or taking photographs, editing stories, designing and laying out pages, managing advertisements, and other duties as assigned. Two Credit Major Contributor: In addition to the duties of the One Credit Contributor, staff member will make a major contribution to each issue by serving a leadership role. Duties will include: assigning stories, photos, editing, and other tasks to staff members; making editorial decisions on final content and layout of all issues; organizing staff meetings and workshops; and promoting the newspaper at campus activity fairs and events. NOTE:

This course may be taken in multiple semesters up to a maximum of eight credits. Recommendation: Concurrent enrollment in or completion of ENGL 2025.

## Creative Writing: Poetry ENGL 2028 <br> 3 Credits MnTC: Goal 06

This creative writing class focuses on the writing and close reading of poetry. Because creative writing involves both creativity and scholarship, coursework includes: critical analysis of student and published writing; forming aesthetic judgments about poetry; writing and revising poems; and responding to the creative work of classmates in a writing community. This course does not fulfill the Literature requirement for the Associate of Arts degree at Century College. Prerequisite: Assessment score placement in ENGL 1021 or completion of ENGL 0090 with a grade of C or higher. Assessment score placement in RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of $C$ or higher. Recommendation: Completion of ENGL 1021 and ENGL 1027. Basic word processing and computer skills.

## British Literature: Medieval to Romantic ENGL 2031 3 Credits MnTC: Goals 06 \& 08

This college literature course intended for all students will analyze early British Literature. Typical authors may include Chaucer, Shakespeare, Donne, Milton, and Pope.
Prerequisite: Assessment score placement in RDNG 1000 or above, or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher. Recommendation: Completion of ENGL 1021 with a grade of "C" or higher.

## British Literature: Romantic to Present ENGL 2032 3 Credits MnTC: Goals 06 \& 08

This college literature course intended for all students will analyze and explore British Literature from 1800 to the present. Typical authors may include works by Mary Shelley, Austen, Dickens, Woolf, Shaw, and Eliot. Prerequisite: Assessment score placement in RDNG 1000 or above, or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher. Recommendation: Completion of ENGL 1021 with a grade of " $C$ " or higher.

## Shakespeare <br> ENGL 2035

3 Credits MnTC: Goals 06 \& 08
This college literature course intended for all students will analyze a representative
selection of works by William Shakespeare. The course will consider what the plays reveal about Elizabethan societies as well as what they suggest about the human condition in general. Prerequisite: Assessment score placement in RDNG 1000 or above, or completion of RDNG 0900 OR RDNG 0950 with a grade of " $C$ " or higher. Recommendation: Completion of ENGL 1021 with a grade of "C" or higher.

## Literature and Film ENGL 2043 MnTC: Goal 06

3 Credits
This college literature course intended for all students will analyze and explore Literature and Film. Students will explore written and visual texts in order to understand the scope and variety of the human experience. Students will read, discuss, and analyze narrative texts as expressions of the human experience. Some attention will be given to film terminology and techniques. Prerequisite: Assessment score placement in RDNG 1000 or above, or completion of RDNG 0900 OR RDNG 0950 with a grade of " $C$ " or higher. Recommendation: Completion of ENGL 1021 with a grade of "C" or higher.

## Modern World Literature ENGL 2051 MnTC: Goals 06 \& 08

3 Credits
This college literature course intended for all students will introduce and explore Modern World Literature from the first half of the 20th century. Course offerings may include poetry, fiction, and/or drama with a global perspective. Prerequisite: Assessment score placement in RDNG 1000 or above, or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher. Recommendation: Completion of ENGL 1021 with a grade of "C" or higher.

## Contemporary World Literature ENGL 20523 Credits MnTC: Goals 06 \& 08

This college literature course intended for all students will analyze and explore Contemporary World Literature from 1945 to the present. Course offerings may include poetry, fiction, and/or drama with a global perspective. Prerequisite: Assessment score placement in RDNG 1000 or above, or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher. Recommendation: Completion of ENGL 1021 with a grade of "C" or higher.
Mythology
ENGL 2055
MnTC: Goals 06 \& 08

## 3 Credits

This college literature course intended for all students will analyze and explore several major works of classical and world mythology and relate the works and ideas to modern thought and world literature. Prerequisite: Assessment score placement in RDNG 1000 or above, or completion of RDNG 0900 OR RDNG 0950 with a grade of ' $C$ ' or higher. Recommendation: Completion of ENGL 1021 with a grade of ' $C$ ' or higher.

## An Introduction to African Literature ENGL 2057 3 Credits MnTC: Goals 06 \& 08

Africa's literary backdrop is as vibrant and varied as the gamut of peoples, cultures, languages, and histories that make up the world's second largest continent. In this course students will retrace the major developments of African literature from the oral to the written, thereby exploring the different themes and the diversely rich approaches used by the practitioners of these different forms. From the epic of Shaka Zulu to the enthralling novels of Linus Asong, African literature offers exciting insights to the interplays of orality and literacy, of the ancient and the modern. Prerequisite: Assessment score placement in RDNG 1000 or above, or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher. Recommendation: Completion of ENGL 1021 with a grade of "C" or higher.

## Middle Eastern Literature ENGL 2058 <br> 3 Credits MnTC: Goals 06 \& 08

This course, intended for all students, will analyze and explore Middle Eastern literature in the post-colonial era. It will examine major representative works of poetry, fiction and drama written by well-known Middle Eastern authors representing a variety of Middle Eastern countries, such as Egypt, Saudi Arabia, Algeria, Sudan, Lebanon, Palestine and Israel. Prerequisite: Assessment score placement in RDNG 1000 or above or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher. Recommendation: Completion of ENGL 1021 with a grade of "C" or higher.

## Women in Literature: British \& Colonial ENGL $2061 \quad 3$ Credits MnTC: Goals 06 \& 08

This college literature course intended for all students will discuss, analyze, and interpret

## 7 Course Descriptions

works written in English by women in England and the British Empire. Prerequisite: Completion of ENGL 1021 with a grade of "C" or higher.

## Women in Literature: American ENGL 2062 3 Credits MnTC: Goals 06 \& 09

This college literature course intended for all students will explore literature written by American women in their own distinct literary tradition, perspectives, and themes. Works are considered as a reflection of their times, including social, ethical, political, and economic conditions. Prerequisite: Completion of ENGL 1021 with a grade of " $C$ " or higher.

## Women in Literature: World Voices ENGL 2063 3 Credits MnTC: Goals 06 \& 08

This college literature course intended for all students will analyze and explore literary works by contemporary women writers from six major regions of the non-Western world such as the Caribbean, Latin America, Sub-Saharan Africa, the Middle East, South Asia, and East Asia. Readings include translated short stories, poems, plays, and novels. Students are encouraged to better understand an increasingly interdependent world and be exposed to some intellectual and psychological challenges posed by values and ways of life that are very different from their own. Prerequisite: Completion of ENGL 1021 with a grade of " $C$ " or higher.

## GLBTO Literature

ENGL 2065
3 Credits MnTC: Goals 06 \& 07
This course, intended for all students, examines Gay, Lesbian, Bisexual, Transgender, Queer (GLBTO) literature. This course welcomes students of all genders and sexual orientations. Students will engage in critical analysis, form aesthetic judgments, and develop an informed personal reaction to GLBTQ literature. Readings and course materials will focus on the following: GLBTO issues, GLBTO writers and readers, and GLBTO audiences as fundamental to an understanding of the diverse human condition. Emphasis will be placed on a wide range of literature, including historical texts, multiple and diverse genres, and cross-cultural literature. Prerequisite: Assessment score placement in RDNG 1000, or completion of RDNG 0900 OR RDNG 0950 with a grade of $C$ or higher. Recommendation: Completion of ENGL 1021 with a grade of C or higher.

## Children's Literature ENGL 2071 MnTC: Goal 06

3 Credits
This college course intended for all students will analyze and explore the literature written for children. Students will explore the history of children's literature, children's poetry, picture books, realistic and fantasy novels as well as criteria for evaluating these works. Selections may include works by E. B. White, J. K. Rowling, Mildred Taylor, and Christopher Paul Curtis. Prerequisite: Assessment score placement in RDNG 1000 or above, or completion of RDNG 0900 OR RDNG 0950 with a grade of " $C$ " or higher. Recommendation: Completion of ENGL 1021 with a grade of "C" or higher.

## Graphic Narratives: Comics as Literature ENGL 20723 Credits MnTC: Goal 06

This college literature course intended for all students will analyze and explore selected graphic novels and other comics. Students will study the literary and formal design elements of the works selected and consider the unique features of this medium. Selections may include works by Lynda Barry, Daniel Clowes, Will Eisner, Neil Gaiman, Scott McCloud, Alan Moore, Marjane Satrapi, and Art SpiegeIman. Prerequisite: Assessment score placement in RDNG 1000 or higher, or completion of RDNG 0900 OR RDNG 0950 with a grade of " $C$ " or higher. Recommendation: Completion of ENGL 1021 with a grade of " $C$ " or higher.

## Short Novel <br> ENGL 2073

MnTC: Goal 06

## 3 Credits

This college literature course intended for all students will analyze and explore selected short novels. Authors may include Henry James, Conrad, Chopin, Wharton, James Joyce, or Faulkner. Prerequisite: Assessment score placement in RDNG 1000 or above, or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher. Recommendation: Completion of ENGL 1021 with a grade of "C" or higher.

## Science Fiction and Fantasy ENGL $2075 \quad 3$ Credits MnTC: Goal 06

This college literature course intended for all students will analyze and explore science fiction and fantasy literature. Authors may include Mary Shelley, H.G. Wells, Aldous Huxley, Tolkien, and LeGuin. Prerequisite: Assessment score placement in RDNG 1000
or above, or completion of RDNG 0900 OR RDNG 0950 with a grade of " $C$ " or higher. Recommendation: Completion of ENGL 1021 with a grade of "C" or higher.

## Mystery <br> ENGL 2077 <br> 3 Credits MnTC: Goal 06

This college literature course intended for all students will explore mystery literature. The mystery story may include works by Poe, Conan Doyle, Sayers, Chandler, and Hillerman. Prerequisite: Assessment score placement in RDNG 1000 or above, or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher. Recommendation: Completion of ENGL 1021 with a grade of " $C$ " or higher.

## Latin American Literature <br> ENGL 2083 <br> 3 Credits MnTC: Goals 06 \& 08

This college literature course intended for all students will analyze and explore poetry, short stories, and novels by authors such as Marquez, Neruda, Borges, Allende, Lispector, Cortazar, Paz, and others. Prerequisite: Assessment score placement in RDNG 1000 or above, or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher. Recommendation: Completion of ENGL 1021 with a grade of " $C$ " or higher.
Bible As Literature ENGL 2085

3 Credits MnTC: Goal 06
This college literature course intended for all students will analyze and explore Biblical Literature. It may include Old Testament literature that demonstrates the genres of short story, biography, tragedy, philosophy, and epic narratives. The course does not study theology or doctrine, but rather focuses on events, characters, and literary techniques. Prerequisite: Assessment score placement in RDNG 1000 or above, or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher. Recommendation: Completion of ENGL 1021 with a grade of " $C$ " or higher.

## Ethics and Environments:

The Literature of Place ENGL 2095

3 Credits MnTC: Goals 06 \& 10
This college literature course intended for all students will analyze writing about the relationships between humans and their environments. The literature will include historical, philosophical, scientific, and literary perspectives in both fiction and non-fiction writing. Authors will be chosen from a variety
of traditions and cultures. Prerequisite: Assessment score placement in RDNG 1000 or above, or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher. Recommendation: Completion of ENGL 1021 with a grade of " $C$ " or higher.

## English for Speakers of Other Languages

## English for Speakers of Other Languages Grammar and Writing II ESOL 0021 <br> 5 Credits

This course focuses on basic writing skills. You will improve your grammar, writing fluency, editing skills, and ability to write short paragraphs. You will also learn to use the computer to improve your writing and editing skills. Prerequisite: Appropriate scores on the language proficiency test with background information, oral interview, and writing sample. Recommendation: Students should take advantage of community based $\mathrm{ABE} / \mathrm{ESL}$ programs and have some previous English reading, writing and speaking experience, along with some previous formal educational experiences to build basic academic skills.

## Reading II <br> ESOL 0022

5 Credits
This course focuses on increasing your ability to comprehend a variety of written material. You will learn to skim for main ideas and scan for specific information. You will also develop your ability to understand vocabulary through context clues and a dictionary. Prerequisite: Appropriate scores on the language proficiency test with background information, oral interview, and writing sample. Recommendation: Students should take advantage of community based $\mathrm{ABE} / \mathrm{ESL}$ programs and have some previous English reading, writing and speaking experience, along with some previous formal educational experiences to build basic academic skills.

## Listening and Speaking II ESOL 0023

5 Credits
This course focuses on self-expression and listening abilities using American English. Students practice clear speech and discover strategies for interacting in real-life speaking situations. Coursework includes listening to lectures and media programs, beginning to take notes, conducting interviews, participating in group work, and giving short
oral presentations. Prerequisite: Assessment score placement in ESOL 0023, background information, oral interview, and writing sample. Recommendation: Students should take advantage of community based $\mathrm{ABE} / \mathrm{ESL}$ programs and have some previous English reading, writing and speaking experience, along with some previous formal educational experiences to build basic academic skills.

## Grammar and Writing III ESOL 0031

 5 CreditsThis course focuses on practicing and developing basic writing skills by applying them to a variety of situations. You will improve your grammar, writing fluency, self-editing skills, and ability to write short essays. You will also learn to follow a writing process that will include using the computer to edit and revise your essays. Prerequisite: ESOL 0021 and ESOL 0022 with grades of "C" or higher, or appropriate scores on the language proficiency test with background information, oral interview, and writing sample.

## Reading III ESOL 0032

## 5 Credits

This course continues to introduce the skills and strategies necessary for understanding a variety of written materials. You will begin to identify main and supporting details in non-fiction, increase your reading rate and comprehension, and analyze features of fiction. You will also learn about resources in the college library. In addition, you will build vocabulary using a variety of strategies. Prerequisite: ESOL 0022 with a grade of "C" or higher, or appropriate scores on the language proficiency test with background information, oral interview, and writing sample. Recommendation: ESOL 0021 with a grade of "C" or higher.

## Listening and Speaking III ESOL 0033

5 Credits
This course provides an introduction to and practice of the oral communication skills necessary in informal, formal and academic contexts. Coursework includes listening to short lectures, conversations, and media programs in order to improve understanding of oral American English. It also includes an introduction to note-taking styles and presentation styles. Students will give short presentations and practice clear speech. Prerequisite: ESOL 0023 with a grade of C or higher, or assessment score placement in ESOL 0033, background information, oral interview, and writing sample.

## Grammar and Writing IV ESOL 0041

4 Credits
This course develops higher level writing skills for a variety of situations. You will improve your grammar, writing fluency, self-editing skills, and ability to write essays of varying lengths and genres. You will also practice and improve your writing skills through extensive writing and word processing, follow a writing process to edit and revise your essays. Prerequisite: ESOL 0031 and ESOL 0032 with grades of "C" or higher, or appropriate scores on the language proficiency test with background information, oral interview, and writing sample.

## Reading IV <br> ESOL 0042

## 4 Credits

This course develops your ability to understand a variety of written materials. You will learn to identify main ideas and supporting details in non-fiction, increase your reading rate and comprehension, and analyze features of fiction. Summary writing and how to make use of library resources are also included. In addition, you will increase your vocabulary using a variety of strategies. Prerequisite: ESOL 0032 with a grade of "C" or higher, or appropriate scores on the language proficiency test with background information, oral interview, and writing sample. Recommendation: ESOL 0031 with a grade of "C" or higher.

## Listening and Speaking IV ESOL 0043

4 Credits
This course provides students with knowledge and practice of listening, speaking and note-taking skills in American English that are necessary in order to be successful in future academic courses. Coursework includes listening to lectures and media programs, participating in discussions, conducting interviews, giving presentations and practicing clear speech. Prerequisite: ESOL 0033 with a grade of C or higher, or assessment score placement in ESOL 0043, background information, oral interview, and writing sample.

## Pronunciation and Articulation of American English ESOL 0044

## 2 Credits

This course, intended for intermediate and advanced students, focuses on and provides practice in articulating the sounds of American English. Classroom and computer-based activities will show how to produce more precise consonants, consonant clusters and

## 7 Course Descriptions

vowels. Students will also practice intonation and stress patterns of American English. Students will use the IPA (International Phonetic Alphabet) to better understand the differences between written and spoken language. This course requires two hours of additional practice in the language lab plus two hours of homework per week. Recommendation: Prior or concurrent enrollment in ESOL 0033 or ESOL 0043.

## Grammar and Writing V

 ESOL 00515 CreditsThis course focuses on developing advanced English language skills. By using a draft and revision process, the student will produce essays containing sophisticated and native-like grammar, sentence structures, and expressions. Special emphasis will be placed on increasing independent editing skills. Supervised use of the Writing Center, equivalent to 1 credit, is required for students enrolled in ESOL 0051 sections meeting fewer than five hours per week. Prerequisite: Instructor consent and completion of ESOL 0041, ESOL 0042, and ESOL 0043 with grades of $C$ or higher, or appropriate scores on the language proficiency test with background information, oral interview, and writing sample, or instructor consent.

## Reading V <br> ESOL 0052

## 3 Credits

This course focuses on developing advanced reading skills by reading and analyzing college-level texts of different genres. Students will learn and use reading skills and strategies, new vocabulary and vocabulary strategies, and academic skills needed for success in college. Special emphasis will be placed on developing the background knowledge and critical thinking skills necessary for comprehension of academic texts typical to higher education in the United States. Prerequisite: ESOL 0042 with a grade of C or higher, or appropriate scores on the language proficiency test with background information, oral interview, and writing sample, or instructor consent. Recommendation: ESOL 0041 and ESOL 0043 with a grade of C or higher.

## English for Speakers of Other Languages - Individualized Study ESOL 07901 Credit

This course provides an opportunity for students to work in any area of ESOL—for example, grammar, listening, reading, pronunciation, vocabulary-which can improve
their basic skills. Programs are designed for the individual student. Prerequisite: Appropriate scores on the language proficiency tests, background information, oral interview and writing sample; or grades of $C$ or higher in other of $E S O L$ classes. Recommendation: Concurrent or prior registration in another ESOL course.

## Occupational English for Speakers of Other Languages - Grammar ESOL $0791 \quad 1-3$ Credits

This course provides program support for eligible students who have been accepted into their major programs but still need ESOL support. Goals of the course are contentbased and focus on the individual student's needs. Prerequisite: Minimum completion of ESOL 0030s level courses with grades of "C" or higher, or assessment score placement in to ESOL O040s level or above, or instructor approval.

## Occupational English for Speakers of Other Languages - Writing ESOL 0792 1-3 Credits

This course provides program support for eligible students who have been accepted into their major programs but still need ESOL support. Goals of the course are contentbased and focus on the individual student's needs. Prerequisite: Minimum completion of ESOL 0030s level courses with grades of "C" or higher, or assessment score placement in to ESOL O040s level or above, or instructor approval.

## Occupational English for Speakers of Other Languages - Reading ESOL 0793 1-3 Credits

This course provides program support for eligible students who have been accepted into their major programs but still need ESOL support. Goals of the course are contentbased and focus on the individual student's needs. Prerequisite: Minimum completion of ESOL 0030s level courses with grades of "C" or higher, or assessment score placement in to ESOL 0040s level or above, or instructor approval.

## Directed Grammar Study ESOL 0796

1 Credit
In this course, students will choose 1-3 grammar points for focused study. Students will develop and implement their own study plans and will learn new strategies for studying grammar. Students will practice using computers and the internet to help with grammar. Typically, this class will meet
in the classroom some weeks; other weeks, students will complete their assignments online. At the end of the course, students will demonstrate that their grammar has improved. Prerequisite: ESOL 0031 with a grade of " C " or higher, or a score at the ESOL 0041 level on the language proficiency test (including background information, oral interview, and writing sample). Instructor's signature required for registration. Recommendation: Readiness for online learning.

## American English: Advanced Listening and Speaking ESOL 1033 <br> 3 Credits

This course focuses on effective communication in American English through speaking and listening. Students focus on developing more effective verbal and nonverbal skills, improving listening comprehension, and developing the ability to participate effectively in small and whole group processes. The skills and strategies covered in this course emphasize educational and professional contexts. Prerequisite: ESOL 0043 with a grade of C or higher, or oral interview and permission of the instructor.

## ESOL for College

 ESOL 1035
## 3 Credits

This course focuses on college reading, writing, and the use of library resources. You will practice the types of writing projects and oral presentations typical of college courses. You will review the grammar of complex sentences and improve your computer skills for research and writing. Prerequisite: Appropriate score on the language proficiency test with background information, oral interview and writing sample, or grades of " C " or higher in developmental levels of ESOL.

## Enterprise Computing Technology

## PC Hardware and Software ECT $1001 \quad 4$ Credits

This course covers the fundamentals of computer hardware and software as well as advanced concepts. The course will focus on describing the internal components of a computer, assembling a computer system, installing an operating system, and troubleshooting using system tools and diagnostic software.

## Virtual Computing Technology and Mobile Device Support <br> ECT $1003 \quad 4$ Credits

This course will cover the skills needed to effectively design, deploy, and manage virtual computers utilizing a variety of virtual computing technology products that are currently being used in the IT industry. Students work with various virtualization products in order to compare and contrast the features of each product. Students will use functions and utilities, manage security, and deploy both virtual computers and virtual networks. Prerequisite: MCST 1001 or concurrent enrollment or instructor consent.

## Supporting Microsoft <br> Windows 7 Professional <br> ECT 1011

## 3 Credits

Students will study the skills needed to effectively manage and configure the Windows 7 Professional client operating environment. Topics include how to use functions and utilities, manage user interface properties, manage hardware devices, and install the Windows 7 Professional operating system. This course will help prepare students for the Microsoft Certified Professional (MCP) industry certification. Prerequisite(s): ECT 1001 with a grade of C or higher, or concurrent enrollment in ECT 1001, or proof of current A+ certification

## Installing and Configuring Windows Server 2012 ECT 1013 <br> 3 Credits

This course will cover the skills needed to effectively manage the Microsoft Server operating system environment. Students will study how to use functions and utilities, manage program properties, manage hardware devices, and install operating system and applications. This course will help prepare students for the Microsoft Certified Professional (MCP) industry certification. Prerequisite: ECT 1011 or concurrent enrollment or instructor consent.

## Linux Operating System

 ECT 10303 Credits
This course introduces the student to the Linux operating system. Topics include basic/intermediate commands, file/directory structure and management, file/directory security, redirection, pipes, variables and aliases. In this class, students will study the necessary core Linux concepts and practical usage in order to work effectively in this operating system environment. Prerequisite(s):

ECT 1001 with a grade of C or higher, or concurrent enrollment in ECT 1001, or proof of current A+ certification

## Introduction to PowerShell Scripting ECT $1070 \quad 3$ Credits

This course introduces the student to the Microsoft PowerShell scripting language. Topics include cmdlets, remoting, objects, wildcards, and variables. PowerShell programming (scripting) is covered in introductory and intermediate levels. In this class, students will study the necessary PowerShell scripting concepts and practical usage within the Microsoft operating system environment. Prerequisite(s): ECT 1013 and ECT 1030 with a grade of C or higher

## Administering Windows Server 2012 ECT 2015 <br> 3 Credits

This course covers the administration tasks necessary to maintain a Windows Server 2012 infrastructure. Topics include implementing server images, user and group management with Active Directory Domain Services (AD DS) and group policy, remote access and network policies, data security, monitoring and update management. This course prepares students to take the Microsoft Certified Solutions Associate (MCSA): Windows Server 2012 exam "70-411: Administering Windows Server 2012". Prerequisite: ECT 1013 with a grade of C or higher or instructor consent.

## Configuring Advanced Windows Server 2012 Services ECT 20173 Credits

 This course covers advanced configuration of services necessary to deploy, manage and maintain a Windows Server 2012 infrastructure. Topics include advanced networking services, Active Directory Domain Services (AD DS), identity management, rights management, Federated services, network load balancing, failover clustering, business continuity and disaster recovery. This course prepares the student to take the Microsoft Certified Solutions Associate (MCSA): Windows Server 2012 exam "70-412: Configuring Advanced Windows Server 2012 Services". Prerequisite: ECT1013 with a grade of $C$ or higher or instructor consent.
## Administering Microsoft Exchange Server ECT 2018

## 3 Credits

This course will cover the skills needed to effectively design, deploy, and manage a unified messaging solution through the
application of Microsoft Exchange Server. Students work with the industry predominant version of Microsoft Exchange Server in order to plan and deploy the product as well as use functions and utilities, manage security, and optimize its operations. Prerequisite: ECT 1013 with a grade of C or higher Recommendation: ECT 2015 or ECT 2017

## User Support Services <br> ECT 2021 <br> 3 Credits

This course will cover the skills needed to effectively assist enterprise computing clients. Topics include the tools, techniques, technologies, and customer service skills the student will need to successfully integrate their technical knowledge into a customerfocused enterprise user support environment. Prerequisite(s): ECT 1001 with a grade of $C$ or higher or proof of current A+ certification or instructor consent.

## Linux/UNIX Shells and Scripting ECT 2031 <br> 3 Credits

This course introduces the student to the Linux/UNIX shell. Topics include its uses, types of shells, login profiles, special characters, processes and variables. Shell programming (scripting) is covered in introductory and intermediate levels. In this class, students will study the necessary UNIX scripting concepts and practical usage within the Linux/UNIX operating system environment. Prerequisite(s): ECT 1030 with a grade of C or higher or instructor consent

## Linux/UNIX Network System Administration ECT 20323 Credits

This course presents intermediate and advanced Linux/UNIX operating system concepts and commands from a user and system administrator viewpoint. Traditional system management topics covered include security, software product installation, startup and shutdown, backups, performance and disk management. Prerequisite(s): ECT 1030 with a grade of C or higher or instructor consent.

## Linux/UNIX Network Administration, Security and Troubleshooting ECT $2033 \quad 3$ Credits

This course continues advanced UNIX operating system concepts and commands from an administrative perspective. Topics include critical areas of network administration, security, and troubleshooting. Prerequisite(s): ECT 1030 with a grade of C or higher or instructor consent

## 7 Course Descriptions

## Internship

ECT 2780 1-6 Credits
This course is designed to provide students with the opportunity to apply skills learned in the Enterprise Computing Technology program in their career field. Students will learn to work in a professional environment while honing their technical skills. Prerequisite(s): Last semester before graduation or instructor consent.

## Facility Systems <br> Technology

## Construction Technology FST 1000

## 4 Credits

This course covers building repairs including safety and building emergency systems, hand and power tools, fasteners, wall patching, wall construction, roof repairs, water damage repairs, blueprint reading, and concrete repairs. Students must be able to perform physical tasks to complete course requirements.

## Facility Workplace Safety <br> FST 1001 <br> 2 Credits

This course covers safe practices in the facilities workplace as per OSHA. Topics include Material Safety Data Sheets (MSDS), labeling, handling, storage, removal, disposal, and recycling of hazardous toxic materials. Other topics include safety in the workplace (confined space, falls, hearing, etc.) the MN Right to Know Act; and the National Fire Protection Association (NFPA). Students must be able to perform physical tasks to complete course requirements.

## Plumbing Basics <br> FST 1020

## 3 Credits

This course is intended to introduce students to the repair, maintenance, and installation of various plumbing fixtures and piping systems in a facility. Students must be able to perform physical tasks to complete course requirements. Prerequisite: FST 1000 or concurrent enrollment or consent of instructor.

## Basic Electricity

 FST $1030 \quad 3$ CreditsThis is an introductory course in basic electrical theory and practices. This course covers electrical safety, electrical terms, Ohms Law, AC/DC circuits, series/parallel circuit layout, electric meter operation, and repairs in
both the HVAC and FST fields. Students must be able to perform physical tasks to complete course requirements.

## Electric Motors and Electric Controls FST 1033 3 Credits

This course deals with electrical fundamentals including types of electric motors, capacitors, AC terminology, transformers, wire sizing, codes and motors. The students will practice proper use of analog and digital meters and wiring diagrams to diagnose and repair electric motors and control circuits. Students must be able to perform physical tasks to complete course requirements. Prerequisite: FST 1030 or consent of instructor.

Locks, Keys, and Security FST 1060

2 Credits
This course covers cutting keys, re-keying, master keying, mounting locks, lubricating locks and operating security systems. Students must be able to perform physical tasks to complete course requirements. Prerequisite: FST 1000 or concurrent enrollment.

## Independent Study

 FST $1790 \quad 1-3$ CreditsAn opportunity for an in-depth study of a particular topic. Prerequisite: Consent of instructor and dean.

## Commercial Electric Controls And Wiring Methods FST $2020 \quad 3$ Credits

This course introduces the concepts and principles of three-phase commercial electric controls. Topics include building wiring systems, basic electrical circuits, service panels, switches, and receptacles. Students must be able to perform physical tasks to complete course requirements. Prerequisite: FST 1033 with a grade of "C" or higher or consent of instructor.

## Computerized Maintenance and Energy Management Systems FST $2050 \quad 3$ Credits

This course covers the basics of commercial building operation. Topics covered will include air handlers, pneumatic control systems, DDC, and analog control systems. Also included will be instruction on how energy management computers are utilized to monitor and control HVAC equipment. Instruction will also include the operation of a computerized energy management program. Students must be able to perform physical tasks to complete course requirements. Prerequisite: HVAC 1042 and CAPL 1000 or consent of instructor.

## High Pressure Boiler Operation and Maintenance <br> FST $2052 \quad 3$ Credits

This course is intended to advance students in operation and maintenance of high pressure boilers and to help them meet state of Minnesota requirements for best practices in operation and maintenance of high pressure boilers. The student must have two thousand hours of operation or equivalent class room training established by the Minnesota Chief Boiler Inspector. Students will also need to accumulate additional hours to meet state requirements to sit for the Minnesota 2A boiler license exam. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Minnesota's Special Engineers License to meet state boiler division requirements

## Steam Turbine Operation and Maintenance FST 2054

 3 CreditsThis course is intended to advance students in the operation and maintenance of steam turbines and related equipment through classroom and hands-on training. Students will need to accumulate additional hours to meet state requirements to sit for the Minnesota 2A boiler license exam. Students must be able to perform physical tasks to complete course requirements. Prerequisite: Minnesotas Special Engineers License to meet state boiler division requirements.

## Firefighter

## Firefighter I <br> FRTA 1091

## 5 Credits

Firefighter I is an introduction to fire science. It is intended to provide the skills and knowledge necessary to take the Minnesota Firefighter I certification test and function in an entry level position on a fire department or service. The course will emphasize Self Contained Breathing Apparatus (SCBA) use and care, forcible entry, search and rescue in a structure, ladder use and care, fire hose and appliance use and care, fire streams, ventilation, fire prevention and public education, fire extinguishers, salvage and overhaul, fire control, safety, ropes and knots, and communications. Prerequisite: Medical clearance by a physician verifying that the student is fit to perform the sometimes physically demanding tasks of firefighter training and is approved for respirator

use. Restriction: This course is limited to individuals affiliated with fire services that are able to procure fire gear to use in training. This includes complete turnout gear, helmet, and self contained breathing apparatus (SCBA) with a mask.

## Firefighter II FRTA 1092 <br> 2 Credits

Firefighter II is a continuation to Firefighter I, and along with EMS 1095 (Hazardous Materials Operations), is intended to provide the skills and knowledge necessary to take the Minnesota Firefighter II certification test and function in a more advanced capacity on a fire department or service. The course will emphasize Incident report writing, fire suppression-flammable liquids, fire suppression-flammable gases, fire ground command, evidence preservation, vehicle extrication, assisting the rescue team, pre-incident survey, equipment maintenance, fire hose testing, and fire hydrant testing. Prerequisite: FRTA 1091 (Firefighter I). Medical clearance by a physician verifying that the student is fit to perform the sometimes physically demanding tasks of firefighter training and is approved for respirator use. Restriction: This course is limited to individuals affiliated with fire services that are able to procure fire gear to use in training. This includes complete turnout gear, helmet, and self contained breathing apparatus (SCBA) with a mask.

## Hazardous Materials Operations FRTA 1095 <br> 3 Credits

Hazardous Materials Operations is an introduction to hazardous materials intended to provide the skills and knowledge necessary to recognize, identify, and remain safe in potentially hazardous environments. The course will emphasize hazardous materials recognition, hazardous materials identification, effects of hazardous materials on people and the environment, material safety data sheets (MSDS) and safety precautions. This course must be completed to receive Minnesota Firefighter I certification.

## Building Construction for the Fire Service FRTA 2011

 3 CreditsThis course is designed to provide emergency responders with an understanding of building construction. Topics include various types of construction, hazards associate with each type, and the impact of live and dead loads while a building is involved with fire. The course will also explore risk associated with performing fire suppression activities inside and around buildings involved with the fire. Prerequisite: FRTA 1091, FRTA 1092

## Fire Instructor

## FRTA 2021

## 2 Credits

This course focuses on skills necessary to become a Fire Instructor for the fire service. It is designed to provide emergency responders with an understanding of instructional
skills: program management, instructional development, instructional delivery, and evaluation/examination process. Prerequisite: FRTA 1091, FRTA 1092

## Fire Officer I

FRTA $2031 \quad 2$ Credits
This course focuses on skills necessary to become a fire officer for the fire service. It is designed to provide emergency responders with an understanding of administrative skills, leadership principles, human resources functions, incident management, risk management, basic budgeting principles and delegation of duty functions as a company officer. Prerequisite: FRTA 1091, FRTA 1092 \& FRTA 2021

## Fire Apparatus Operator FRTA 2071

## 3 Credits

This course focuses on the safe operations of fire apparatus. It is designed to provide emergency responders with an understanding of operating a fire apparatus. This class is designed to meet the National Fire Protection Agency (NFPA) 1002, Chapters 1, 4, 5, 8 and 10, Standard for Fire Apparatus Driver/Operator Professional Qualifications. Prerequisite: FRTA 1091 \& FRTA 1092

## Structural Firefighting: Strategies and Tactics FRTA 20812 Credits

This course focuses on skills necessary to achieve maximum productivity under adverse fire ground conditions. Fire officers will be prepared to take command at structure fires, fully utilizing available resources in a safe manner. Prerequisite: FRTA 2011, FRTA 2031 Recommendation: Assessment score placement in MATH 0030 or above or completion of MATH 0010 with a grade of "C" or higher.

## Hazardous Materials Technician FRTA 2096 3 Credits

This course focuses on hazardous materials incident response. It is designed to provide public and private sector emergency response personnel with a logical, building-block system for managing hazardous materials emergencies. It begins at the point where first responders recognize that they are, in fact, dealing with a hazardous materials emergency event when the specific hazardous materials have not been identified. Prerequisite: FRTA 1091, 1092, 1095 or equivalent state certification.

## 7 Course Descriptions

## Gender Studies

## Foundations of Women and Gender Studies <br> GNDR 10613 Credits MnTC: Goals 05 \& 09

Foundations of Women's Studies is an interdisciplinary course in which we examine the diversity of women's experiences throughout history and across cultures, races, ethnic groups and religions. The course introduces the theories and methodologies of the field of Women's Studies with a focus on factors such as gender, sexuality, sexual orientation, age, and life course. This course is required for the Gender Studies Certificate. Prerequisite(s): Assessment score placement in ENGL 1021 or completion of ENGL 0090 with a grade of C or higher. Assessment score placement in RDNG 1000, or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher.

## Introduction to GLBT Studies <br> GNDR 10713 Credits MnTC: Goals 05 \& 07

This course familiarizes students with the debates and history surrounding sexual orientation, identity, and experience, particularly recent court decisions on the GLBT (gay, lesbian, bisexual, and transgender) community. Students will learn the factors that frame social, cultural, and political discourses on GLBT topics and develop a deeper understanding of how the GLBT community is portrayed in the popular media. Students of all genders and sexual orientations are welcome. Prerequisite: Assessment score placement in ENGL 1021 or completion of ENGL 0090 with a grade of "C" or higher. Assessment score placement in RDNG 1000, or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher.

## Gender in Global Perspective GNDR $2061 \quad 3$ Credits MnTC: Goals 05 \& 08

This course focuses on contemporary issues in a gendered world. It takes a global perspective, looking for interconnections between different regions and cultures. Students will use current theories of globalization and development to analyze cross-cultural social, economic, and political aspects of women's and men's lives and the multiple ways diverse groups take action to improve their condition. Prerequisite: ENGL 1021 with a grade of C or higher.

## Gender and Public Power GNDR 2081 MnTC: Goals 05 \& 09

This course will apply a gendered analysis to three sites of public power the business, governmental, and non-profit sectors as well as grassroots initiatives. We will look at historical change in womens and mens relative status, as well as changes in ideas about masculinity and femininity. Specific issues, such as gender-based violence, reproductive rights, gender and work, education, the family, and poverty will serve as case studies to illustrate and delve more deeply into the workings of public power. Differences among women and among men will guide our inquiry. Prerequisite: ENGL 1021 with a grade of C or higher. Recommendations: GNDR 1061 and POLS 1020 or POLS 1031

## Gender Studies Certificate Capstone GNDR 2099 <br> 1 Credit

This course will give students an opportunity to reflect on and synthesize the material completed for the Women and Gender Studies Certificate. Students will complete a portfolio demonstrating their proficiency in the common learning outcomes recommended by the National Women's Studies Association for the field of Women and Gender Studies. Prerequisite: Completion of at least three courses toward the WGST Certificate and consent of instructor. ENGL 1021 with a grade of " $C$ " or higher.

## Special Topics in Gender Studies GNDR $2790 \quad$ Credits

 Topics of special interest which may vary. Recommendation: Assessment score placement in RDNG 1000 or above, or completion of RDNG 0900 OR RDNG 0950 with a grade of " C " or higher; assessment score placement in ENGL 1021 or above, or completion of ENGL 0090 with a grade of "C" or higher.
## Geography

## Physical Geography <br> GEOG $1021 \quad 3$ Credits MnTC: Goals 03 \& 05 \& 10

Students are introduced to the physical and environmental systems of the Earth, the dynamic processes that shape and characterize our planet, and to the geography of the natural world. Hands-on activities are used throughout the course to help students
learn and apply concepts. Processes of and scientific terminology related to the Earth's atmosphere (weather and climate), hydrosphere (water on Earth), biosphere (geography of ecological systems), and lithosphere (materials and processes of the Earth's crust) are studied. This course also examines the powerful influences people and the environment have upon each other (e.g. storms and other natural disasters; human modification of the Earth). Prerequisite: Assessment score placement in RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher. Recommendation: Assessment score placement in MATH 0030, or completion of MATH 0010 with a grade of " $C$ " or higher.

## Human Geography GEOG 1023 MnTC: Goals 05 \& 08

## 3 Credits

In this course students study and compare characteristics of human populations and societies. The processes underlying and explaining the geographic patterns of human activities are also examined, as are real world examples from many disciplines and diverse world regions. Study areas include human population dynamics (population growth and distribution, migrations, settlement patterns, urbanization), cultural geography (world languages and religions, folk and popular cultures), political and economic geography (political organization of the world, territorial issues, the global economy, and comparing more and less developed world regions), and land use (agriculture and industry). Prerequisite(s): Assessment score placement in RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of " $C$ " or higher.

## World Geography <br> GEOG 1031 MnTC: Goals 05 \& 08

3 Credits
This course introduces students to world regions including: U.S. and Canada, Latin America, Europe, Russia and former Soviet states, East and Southeast Asia, the Indian subcontinent, the Middle East and North Africa, Sub-Sahara Africa, and Oceania. Emphasis is on the environmental, cultural, political, and economic characteristics of each region, as well as differences and similarities from one region to another and how each is impacted by globalization. Prerequisite: Assessment score placement in RDNG 1000 or above, or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher, or concurrent enrollment in RDNG 0900 OR RDNG 0950.

## Minnesota Geography GEOG 1041 <br> MnTC: Goals 05 \& 07

## 3 Credits

In this course students explore the characteristics of Minnesota from a geographic perspective. Study areas include Minnesota's physical environment and natural features, population dynamics, migrations, settlement history and patterns, cultural, political, and economic characteristics, land use (e.g. agriculture and industry), and Minnesota's regions. Recommendation: Assessment score placement in RDNG 1000 or above, or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher, or concurrent enrollment in RDNG 0900 or RDNG 0950.

## Introduction to Mapping and GIS GEOG 10713 Credits

This course introduces students to geographic inquiry and map making through the application of cartographic principles and GIS software. GIS (Geographic Information Systems) knowledge and skills are a critical part of many majors and are in demand in many fields in the environmental and social sciences, government, and business. Class activities include importing, organizing, and analyzing geographic information, and designing, developing, and presenting maps. Students gain practical experience working with GIS software. Prerequisite: Assessment score placement in RDNG 1000, or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher. Recommendation: Interest in and basic familiarity with computers is important. Completion of CAPL 1000 is recommended for those lacking basic computing skills.

## Geography of the World Economy <br> GEOG 2010 3 Credits <br> MnTC: Goals 05 \& 08

This course introduces students to the global organization of economic activities and the driving forces explaining these patterns. The evolution, structure, and trade dynamics of the global economy are studied. Geographic patterns in what people do for a living and in levels of development are examined as well. Prerequisite: Assessment score placement in RDNG 1000, or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher and assessment score placement in ENGL 1021 or completion of ENGL 0090 with a grade of C or higher. Recommendation: Completion of 15 college-level credits with a grade of C or higher.

## Global Studies

## Introduction to Global Studies GST $2010 \quad 3$ Credits MnTC: Goals 05 \& 08

This course introduces students to the basic concepts and various trends, perspectives and interconnections of a global society. Students will examine the growing interdependence of nations and peoples and the global issues that affect these relationships. Students will explore global and regional perspectives through such topics as politics, economics, medicine, technology, history, sociology, the arts, or ethics. Prerequisite: ENGL 1021 with a grade of "C" or higher.

## Health

## Medical Terminology HLTH 10012 Credits

The course includes a study of the structure of medical words/terms including the spelling, definition, pronunciation, common prefixes, suffixes, word roots, and how to combine them to form medical words. Learning strategies for dealing with new terminology as students' progress in the health care field are included. Prerequisite: Assessment score placement in RDNG 0950 or completion of RDNG 0900 with a grade of " $B$ " or higher.

## Sleep, Eat, Exercise

 HLTH $1002 \quad 1$ Credit Looking for more energy and healthier habits? Discover how to create a healthy lifestyle balance in this course designed to provide you with the knowledge and skills needed to live a balanced life in college. This lecture course covers basic concepts in nutrition, sleep, and physical activity incorporating a variety of techniques to promote self-awareness and reflection, goal-setting, and action towards wellness.
## Basic CPR, Red Cross HLTH 10051 Credit

This course is a study of Cardio Pulmonary Resuscitation (CPR) and the use of an Automatic External Defibrillator (AED). This is a hands-on course involving adult, child, and infant situations. For certification, students must be able to perform physical tasks to complete course requirements by being physically able to do CPR skills on a manikin. Upon successful completion, students will
receive the American Red Cross certification in Adult CPR/AED and Infant /Child CPR. Students will also learn basic first aid skills for pets. Note: HLTH 1005 is intended for the general population. For the AHA BLS for the Health Care Provider (CPR), see EMS 1010 which fulfills the requirements for Century Colleges Allied Health and Nursing programs.

## Standard First Aid and CPR, Red Cross HLTH 1010 2 Credits

This course is a study of basic first aid concepts along with Cardio Pulmonary Resuscitation (CPR) and the use of an Automatic External Defibrillator (AED). This is a hands-on course involving adult, child, and infant situations. For certification, students must be able to perform physical tasks to complete course requirements by being physically able to do CPR skills on a manikin. Upon successful completion, students will receive the American Red Cross certification in Standard First Aid, Adult CPR/AED and Infant /Child CPR. Students will also learn basic first aid skills for pets. Note: HLTH 1010 is intended for the general population. For the AHA BLS for the Health Care Provider (CPR), see EMS 1010 which fulfills the requirements for Century Colleges Allied Health and Nursing programs.

## Personal and Community Health HLTH 1020 <br> 3 Credits

This course explores contemporary health and wellness and implications for the individual, family, and community. The course emphasizes general health topics designed to stimulate critical thinking and awareness of where responsibility lies in the promotion of health in the home and community.

## Women's Health HLTH 1035

## 3 Credits

This course examines health issues affecting women throughout their life span. Current guidelines for maintaining health and promoting wellness will be included. The course will examine the impact of factors such as race, class, gender, and sexuality on women's health. Prerequisite: Assessment score placement into RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 or higher with a grade of "C" or higher.

## Success over Stress HLTH 1040

## 2 Credits

This course covers how to conquer stress, increase happiness, and improve your resilience by understanding stress and improving your coping skills. Empower

## 7 Course Descriptions

yourself to manage stress in your college life and help others cope with stress. This course dissects the topic of stress in order to provide a clear understanding of its causes, effects, and consequences and provide resources to manage stress more effectively. The topic of stress will be approached from a holistic health perspective with the impact of stress on all aspects of life considered.

## Human Sexuality

HLTH $1050 \quad 3$ Credits
This course introduces students to multiple facets of human sexuality throughout the lifespan. It will cover the dynamics of human sexuality from many perspectives: physical, psychological, socio-cultural and legal.

## Consumer Health HLTH 10553 Credits

This course focuses on the knowledge and skills needed to be an effective health consumer. A major emphasis of the course is critically evaluating health issues and information using scientific principles, which provide a framework for making informed decisions when selecting healthcare, products and services.

## Drug Education HLTH 1060

## 3 Credits

This course explores the physical, mental, and social aspects of the use and abuse of drugs. Topics include history of use, classifications of drugs, and the effects of drug use on the family and society. Emphasis is placed on the role drugs have in our society and our responsibility in preventing abuse.

## Nutrition

HLTH $1070 \quad 3$ Credits
This course explores the basic principles of nutrition throughout the individual lifecycle. Nutritional choices as they relate to health and wellness will be emphasized. Personal dietary analysis is included in this course.

## T'ai Chi Chih HLTH 1075

## 2 Credits

This course explores Tai Chi Chih, as a way to develop ones physical, mental, and emotional health regardless of age, physical condition, or ability. Tai Chi Chih focuses on circulating, developing, and balancing Chi through moving meditation.

## Health Science

## Introduction to Healthcare Careers HSCI 1000 <br> 3 Credits

This course is designed for students interested in exploring various careers in the healthcare industry, e.g., dental assisting/hygiene, diagnostic imaging, emergency medical services, medical assisting, medical office careers, orthotics and prosthetics, nursing, and other allied health fields. It is an overview of how healthcare is delivered in the United States. This course will give students an opportunity to explore their future in the healthcare industry. Prerequisite: Assessment score placement in RDNG 0950 or above, or completion of RDNG 0900 with a grade of "C" or higher, or concurrent enrollment.

## Nursing Assistant

 HSCI 10014 CreditsThis course introduces concepts of basic human needs, health/illness continuum, and basic nursing skills in long-term care, acute care, and/or home care environments. Skills are taught in a simulated laboratory setting utilizing demonstration and role-playing. Upon successful completion of classroom studies, students will participate in a minimum of 16 hours of supervised clinical experience in a long-term care facility. This course meets the state and federal requirements as detailed for educating the nursing assistant. Upon completion of this course, students will be eligible to take the examination for placement on the Minnesota Department of Health Nursing Assistant Registry. Prerequisite: Must be 16 years of age or older. Placement into RDNG 0900 or ESOL 0032. MN Human Services Study with no restrictions.

## Acute Care Skills for the Nursing Assistant HSCI 10053 Credits

This course builds on skills and concepts learned in the basic Nursing Assistant curriculum. More complex theories and procedures are introduced as they pertain to nursing assistants' role with patients in acute care settings. Students will participate in classroom, skills lab, and attend a supervised clinical in an acute care environment. Prerequisite: Registered Nursing Assistant.

## Phlebotomy Technician

HSCI $1010 \quad 4$ Credits
This course provides the student with the comprehensive skills pertinent to the role of
the phlebotomist in the laboratory setting. There are both lecture and laboratory components to this class. Students will be instructed on performing a variety of blood collection methods competently and safely. These methods include venipuncture, utilizing the vacuum tube collection system, syringe and butterfly needle, and capillary skin puncture. Emphasis is placed on safety, infection control, and quality control. Other topics that will be discussed in class include the circulatory system, other body systems, blood components and their functions. Upon successful completion of this course, the student will be eligible to complete the national certification exam for phlebotomy technicians through NCCT (National Center for Competency Testing). Prerequisite: Assessment score placement in RDNG 0950 or above, or completion of RDNG 0900 with a " $C$ " or higher and placement in ENGL 0090 or above, or completion of ENGL 0080 with a "C" or higher. MN Human Services Study with no restrictions. Students must provide proof of immunization for Rubella, Mumps, Rubeola, DT or DtaP, TB screening and the Hepatitis B series. Recommendation: Completion of HLTH 1001 and BIOL 1024 with a grade of " C " or higher.

## Introduction to the Health Support Specialist HSCI 1021

3 Credits
This course will provide students with an orientation to the role of Health Support Specialist (HSS). Topics will include history of aging services, culture change, implementing person-directed living in the health care setting, and participation in a mentorship and apprenticeship model of training. Effective communication skills needed to work with individuals, families, and other healthcare workers will be explored. Prerequisite: Nursing Assistant Registered (NA/R)Acceptance within three months of starting classes into the HSS program with approved contract with chosen organization for apprenticeship.

## Health Support Specialist in Meaningful Activities HSCI 1022

1 Credit
This course provides direct caregivers with the fundamental knowledge, skills, and resources for engaging individuals in activities designed to meet their needs and interests that enhance meaningful quality of life. This course will also focus on opportunities for planning and leading activities in small and large group programs and through one-to-one encounters in daily life in the neighborhood.

Prerequisite: Nursing Assistant Registered (NA/R)Acceptance within three months of starting classes into the HSS program with approved contract with chosen organization for apprenticeship.

## Health Support Specialist in Memeory Care HSCI 1023

1 Credit
This course will explore the aging process as it relates to an individual who has memory loss and/or a dementia related diagnosis. Topics will include changes affecting communication skills and daily routines, recognizing common behaviors associated with memory loss, and implementing behavior interventions. The course will also introduce the student to methods for involving the family in decisions that provide purposeful living for the individual. Prerequisite: Nursing Assistant Registered (NA/R) Acceptance within three months of starting classes into the HSS program with approved contract with chosen organization for apprenticeship.

## Health Support Specialist in Culinary Care HSCI 1024

## 1 Credit

This course will provide the student with basic culinary information that will help them plan for and meet individuals $i$ nutritional needs in a person-directed environment. Basic nutritional concepts, food safety, and leadership skills will be covered. Prerequisite: Nursing Assistant Registered (NA/R) Acceptance within three months of starting classes into the HSS program with approved contract with chosen organization for apprenticeship.

## Health Support Specialist in Physiological Care HSCI 1025

1 Credit
This course introduces the student to the basic body systems and changes that occur as the body ages. Body systems are explored for the influences and implications of aging, prevalent disorders and diseases, and common alterations in function. Recognizing the impact that physiological changes have on an individual is highlighted to address persondirected living. Strategies and rationale for managing physiological alterations and promoting prevention and healthy aging within the scope of the Health Support Specialist will be addressed. Prerequisite: Nursing Assistant Registered (NA/R) Acceptance within three months of starting classes into the HSS program with approved contract with chosen organization for apprenticeship.

## Health Support Specialist in Psychosocial Care HSCI 10261 Credit

In this course students will explore the psychosocial dimensions of aging to promote quality of life and person-directed living. Loss and transition, end-of-life care, and advanced care planning will be addressed. Students will examine the emotional, social, and spiritual dimensions of holistic psychosocial care, including strategies to recognize and support individual and family needs and wishes. Prerequisite: Nursing Assistant Registered (NA/R) Acceptance within three months of starting classes into the HSS program with approved contract with chosen organization for apprenticeship.

## Health Support Specialist in Environmental <br> HSCI 1027 <br> 1 Credit

This course will cover the basics in providing a clean and safe environment in a care facility. Topics include basic housekeeping practices, laundering procedures, and simple maintenance tasks required within the guidelines of organization policies and procedures and comply with Occupational Safety and Health Administration (OSHA), state, and federal regulations. Prerequisite: Nursing Assistant Registered (NA/R) Acceptance within three months of starting classes into the HSS program with approved contract with chosen organization for apprenticeship.

## Introduction to Epidemiology HSCI $2020 \quad 3$ Credits

This course introduces epidemiology and epidemiological concepts. The student will study the history and evolution of the epidemiology discipline, common epidemiological terminology, review related health policy and cover ethical considerations. Topics also include specific infectious and non-infectious diseases as well as epidemiological prevention, mitigation, surveillance, and research techniques. Lab-like simulations based on case studies, which students will critically evaluate complex problems from a scientific perspective, are included as a component of the course. This course is intended for anyone interested in regional and global science perspectives in relation to the prevention of disease in human populations. Prerequisite(s): Assessment score placement in MATH 0030 or completion of MATH 0010 with a "C" or higher. Assessment
score placement into RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a "C" or higher. Recommendation(s): Entrylevel computer skills.

> Heating, Ventilation, and Air Conditioning Technology

## Sheet Metal and Metal Brazing Practices <br> HVAC 1000 <br> 2 Credits

In this course, students will solder and braze copper tubing and will make basic sheet metal fittings. This course also introduces the student to sheet metal fabrication common to the HVAC industry. Students must be able to perform physical tasks to complete course requirements.

## Load Calculating HVAC 1020

## 2 Credits

In this course, students will study the psychrometric chart and its uses in determining a proper residential heating and cooling load. Topics include properties of air and air measurements. Students must be able to perform physical tasks to complete course requirements.

## Basic Refrigeration I HVAC 1041 <br> 3 Credits

This course covers the basic physical laws relating to refrigeration systems components, refrigeration theory, the refrigeration cycle, system operation, and accessories. Students must be able to perform physical tasks to complete course requirements. Prerequisite: FST 1030 or concurrent enrollment or consent of instructor.

## Basic Refrigeration II HVAC 1042

## 3 Credits

This course covers the following areas of refrigeration: applications and properties, refrigerant oils, piping, dehydration, charging and recovery, recycling, reclaiming, installations, heat pumps, part load and troubleshooting. The government EPA CFC Certification Test will be administered as part of this course. Students must be able to perform physical tasks to complete course requirements. Prerequisite: HVAC 1041 with a grade of "C" or higher.

## 7 Course Descriptions

## Fundamentals of Heating HVAC $1060 \quad 2$ Credits

In this course, students will study the history of heating. They will be introduced to the different types of heating systems, various fuels, and types of accessories. Students will also practice service procedures on accessories. Students must be able to perform physical tasks to complete course requirements.

## Oil Heating Service and Troubleshooting HVAC 1065 3 Credits

This course covers the theory and operation of oil-burning heating systems, service, repair practices, combustion testing, and maintenance. Procedures for logically troubleshooting oil-fired heating systems will also be covered. Students must be able to perform physical tasks to complete course requirements. Prerequisite: FST 1030 or concurrent enrollment.

## Gas Heat <br> HVAC 1067

4 Credits
This course covers the fundamentals of gas heat. Topics include gas burners, gas controls, gas ignition, safety, operating controls, service and maintenance on gas furnaces, and combustion efficiency testing procedures. Proper procedures and performance skills for logically troubleshooting a gas heating system will also be covered. Students must be able to perform physical tasks to complete course requirements. Prerequisite: FST 1030 or concurrent enrollment.

## Heat Pumps, Chillers and Electric Heat HVAC 1069 <br> 2 Credits

This course covers alternate systems used to heat and cool a residence. Topics covered include installation, function, performance, and limitations of these systems. Students will perform basic tests on heating and cooling systems and controls. Commercial chiller and heat pump operations will also be covered. Students must be able to perform physical tasks to complete course requirements. Prerequisite: HVAC 1042 or consent of instructor.

## Electronic Ignition and Condensing Furnaces HVAC 1070

2 Credits
This course covers the different types of ignition systems and how to service these systems. Topics include flame rectification and how to diagnose flame rectification problems. High efficiency condensing furnaces and their installation, maintenance, and troubleshooting
procedures will also be covered. Students must be able to perform physical tasks to complete course requirements. Prerequisite: HVAC 1067 or concurrent enrollment.

## Hydronic and Low-Pressure Steam Boilers HVAC 1073 3 Credits

This course is intended to introduce students to the safe, efficient operation of low-pressure steam and hot water boilers and related equipment. The Minnesota State Special Engineer License and its requirements will also be covered. Students must be able to perform physical tasks to complete course requirements.

## Residential Energy Auditing and Conservation HVAC $1080 \quad 3$ Credits

This course provides an introduction to assessing housing for energy improvements. Students will explore ways of collecting information and using it to develop a practical plan for reducing energy use. Home diagnostics, air sealing, insulation, HVAC equipment and electric appliances are covered. Completion of this course will qualify students to sit for a competency examination to demonstrate they meet the state of Minnesota's minimum qualifications for residential energy auditors. Students will also be required to volunteer a minimum of 10 hours to perform weatherization and insulation work for a community organization. Prerequisite: Assessment score placement in MATH 1061 or above or completion of MATH 1015 with grade of "C" or higher.

## Independent Study <br> HVAC 1790 <br> 1-4 Credits

An opportunity for an in-depth study of a particular topic. Prerequisite: Consent of instructor and dean.

## Advanced Refrigeration I HVAC 2051

4 Credits
This course covers light commercial refrigeration and air conditioning equipment. Service and maintenance practices will be performed on various systems. Students must be able to perform physical tasks to complete course requirements. Prerequisite: HVAC 1042 with a grade of "C" or higher and EPA CFC certification or consent of instructor.

## Advanced Refrigeration II HVAC 2052

 4 CreditsIn this course, students will be required to complete standard maintenance on
malfunctioning units. This troubleshooting and repair process will be either on school equipment, customer equipment, or students' own refrigeration equipment. Students must be able to perform physical tasks to complete course requirements. Prerequisite: HVAC 2051 with a grade of "C" or higher or concurrent enrollment or consent of instructor.

## History

## Western Civilization: Antiquity to the 18th Century <br> HIST 1021 <br> 3 Credits MnTC: Goals 05 \& 08

This first-year course is a survey of human experience in the western world from ancient civilizations to the 18th Century. The focus is on the west and its relation to the rest of the world. Major social, cultural, political, and economic developments, as well as critical factors such as class, gender and race, will be integrated into the course. Prerequisite: Assessment score placement in RDNG 1000, or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher; assessment score placement in ENGL 1021 or completion of ENGL 0090 with a grade of C or higher.

## Western Civilization: 18th Century to the Present <br> HIST 1022 <br> 3 Credits

MnTC: Goals 05 \& 08
This first-year course is a survey of human experience in the western world from the 18th Century to the present. The focus is on the west and its relation to the rest of the world. Major social, cultural, political, and economic developments, as well as critical factors such as class, gender, and race, will be integrated into the course. Prerequisite: Assessment score placement in RDNG 1000, or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher; assessment score placement in ENGL 1021 or completion of ENGL 0090 with a grade of $C$ or higher.

## United States to 1877 <br> HIST 1031 MnTC: Goals 05 \& 07

## 3 Credits

This first-year course is a survey of American economic, political, and social history from pre-European contact through the aftermath of the Civil War. Topics include Colonial America and the Revolution, the creation of an American national identity, and the Civil War and Reconstruction. Students will focus
on the contributions of men and women from different ethnic and racial backgrounds. Recommendation: Assessment score placement in RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of " $C$ " or higher; assessment score placement in ENGL 1021 or completion of ENGL 0090 with a grade of " C " or higher.

## United States Since 1877 <br> HIST $1032 \quad 3$ Credits MnTC: Goals 05 \& 07

This first-year course is a survey of the American experience since the end of Reconstruction. Major social, cultural, political, and economic developments, as well as critical factors such as class, gender, and race, will be integrated into the course. Prerequisite: Assessment score placement in RDNG 1000, or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher; assessment score placement in ENGL 1021, or completion of ENGL 0090 with a grade of C or higher.

## Minnesota History HIST 1035 MnTC: Goals 05 \& 09

3 Credits

This first-year course is a survey of the social, political and economic history of Minnesota from its origins to the present. Minnesotans like to think their home is unique among the 50 states, and this course will examine the validity of that. Topics studied include the role of Native Americans, European immigration, economic and political development, the growth of the Twin Cities, and the changing nature of the state's diverse people and environment. Prerequisite: Assessment score placement in RDNG 1000, or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher; assessment score placement in ENGL 1021, or completion of ENGL 0090 with a grade of C or higher.

## East Asia Since 1600 MnTC: Goals 05 \& 08

HIST $1051 \quad 3$ Credits

This first-year course is a survey of the human history of one of the world's most important geographical regions. Focusing on China, Japan, Korea, and their neighbors, students will have the opportunity to learn their social, political, economic, and intellectual history since 1600. Prerequisite: Assessment score placement in RDNG 1000, or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher and assessment score placement in ENGL 1021, or completion of ENGL 0090 with a grade of C or higher.

## World History: To 1500 HIST 1060 MnTC: Goals 05 \& 08

This course explores the ancient world in all its global diversity, including global themes and regional variations. Class lectures, readings, and discussions will stress intellectual and social developments which provide the foundation for the emergence of the modern world. Prerequisite: Assessment score placement in RDNG 1000, or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher and assessment score placement in ENGL 1021, or completion of ENGL 0090 with a grade of C or higher.

## World History: 1400 to the Present HIST $1061 \quad 3$ Credits MnTC: Goals 05 \& 08

This first-year course explores global connections and disconnections, studying both global themes and regional variations. Topics include issues of diversity, power imbalances, and interactive factors such as race, ethnicity, class, and gender. Students will also explore intended and unexpected consequences as regions and peoples confronted connection and change. Prerequisite: Assessment score placement in RDNG 1000, or completion of RDNG 0900 OR RDNG 0950 with a grade of $C$ or higher and assessment score placement in ENGL 1021, or completion of ENGL 0090 with a grade of C or higher.

## Myths in American History

 HIST $2041 \quad 3$ Credits MnTC: Goals 05 \& 09This second-year course is a survey of American history from the alternative perspective of popular myths (the stories that we tell about ourselves). Students will explore the symbols, stereotypes, and distortions which contribute to their sense of American history. Myths to be examined will vary, but may include such broad topics as race and gender, war and peace, common ideals or American heroes. Prerequisite: Completion of ENGL 1021 with a grade of " $C$ " or higher.

## United States Since 1945

HIST 2043
3 Credits

## MnTC: Goals 05 \& 09

This second-year course is an in-depth study of the social, political, and economic history of the United States since the end of World War II. Focusing on the immediate origins of the world they live in, students will investigate a range of topics including American involvement in international affairs, attitudes
towards national institutions, civil rights and multiculturalism, and the development of a modern consumer society. Prerequisite: Completion of ENGL 1021 with a grade of C or higher.

## The American West: An Environmental History HIST 2045 <br> 3 Credits MnTC: Goals 05 \& 10

This second-year course is an in-depth study of the American West since 1500. Students will examine the historical intersection between human history and the western environment, focusing on the region's dependence on the exploitation of natural resources, its ethnic and cultural diversity, and the ways the modern environmental movement affects the modern West. Prerequisite: Assessment score placement in RDNG 1000, or completion of RDNG 0090 with a grade of "C" or higher; assessment score placement in ENGL 1021, or completion of ENGL 0090 with a grade of "C" or higher.

## 20th Century Global Conflicts and Crises HIST 2051 3 Credits MnTC: Goals 05 \& 09

This second-year course is an in-depth study of the major conflicts of the 20th century. It investigates international social, political, economic, and intellectual questions from an historical and ethical perspective. Emphasis will vary, but topics may include the effects of colonial imperialism, world war, human rights, genocide and disease. Students will explore the complex causes of the century's conflicts and analyze the success or failure of attempted resolutions. Prerequisite: Completion of ENGL 1021 with a grade of "C" or higher.

## Southeast Asia and the Vietnam War HIST 2053 3 Credit MnTC: Goals 05 \& 08

This second-year course is an in-depth study of Southeast Asia history with an emphasis on the period of the Vietnam War between 1945 and 1975. Emphasizing the different perspectives of the peoples involved in the war, students will examine the colonial period, independence movements, the conflict between the Southeast Asians and Americans, and Southeast Asia today. Prerequisite: Assessment score placement in RDNG 1000, or completion of RDNG 0090 with a grade of "C" or higher; and assessment score placement in ENGL 1021, or completion of ENGL 0090 with a grade of " $C$ " or higher.

## 7 Course Descriptions

## Gender, Health and Medicine HIST $2063 \quad 3$ Credits MnTC: Goals 05 \& 07

This course is a social history of medicine focused on the intersection of cultural norms and medical practice and theory. In particular, it examines the impact of gender, as well as race and class, in creating medical professions, developing medical theories, and experiencing medical treatment as a patient. Students will examine topics such as sexuality and health, historical perspectives on mental health, and the professionalization of healthcare. Prerequisite: ENGL 1021 with a grade of C or higher

## Women in America to 1890 <br> HIST 2065 <br> 3 Credits MnTC: Goals 05 \& 07

This course explores the complex experiences of women in American history. It includes a strong focus on the lives of Native American, African American, and Hispanic women in the early years of the nation and the experiences of new immigrants from Asia and Eastern Europe in the 19th century. In addition, the course will cover the interactions of women and men from multiple classes and locations as the country expands to the West, argues about slavery, fights a bloody Civil War, and emerges to struggle with key issues of race, class, and gender. Prerequisite: Completion of ENGL 1021 with a grade of "C" or higher. Recommendation: HIST 1031

## Women in America Since 1890 HIST $2066 \quad 3$ Credits MnTC: Goals 05 \& 07

This course explores the history of women in the United States from the end of the 19th century to the present. With a strong focus on diversity, students will examine the differences and power relationships between groups of women as well as their common experiences. For example, students will examine women's leadership roles in the Civil Rights movement, changing work and family roles in the 1960s, race and class divisions in the Women's Rights movements, and the defeat of the Equal Rights Amendment. Other topics include social and political activism, changing definitions of sexuality and gender, and women in a globalized world. Perequisite: Completion of ENGL 1021 with a grade of "C" or higher. Recommendation: HIST 1032.

## Internship: History

HIST 2780
2-3 Credits
This internship provides a hands-on experience with a historical society under the direction of the curator/archivist. Students have the opportunity to work on a specific project such as organizing a set of family papers or city records or working with a set of artifacts. Students will provide their own transportation to the site. Students must meet with the archivist prior to beginning an internship. This internship may be repeated once for credit. Prerequisite(s): Minimum 3 credits of college-level history, completion of ENGL 1021 with a grade of C or higher, consent of instructor Prerequisite: Minimum 3 credits of college-level history, completion of ENGL 1021 with a grade of C or higher, consent of instructor.

## Special Topics <br> HIST 2790

## 1-3 Credits

This course covers topics of specific interest in history. Recommendation: Assessment score placement in ENGL 1021.

## Hmong

## Beginning Hmong I

## HMG $1011 \quad 5$ Credits

This course introduces students to basic Hmong language and aspects of Hmong culture and tradition. This course will set the foundation of learning the Hmong language for any student with limited language/literacy background in Hmong. Coursework includes introductory grammar, oral-expression, aural comprehension, and reading. Course topics include Hmong Romanized Popular Alphabet (RPA), Hmong history and culture, and Hmong grammar.

## Beginning Hmong II HMG 1012

 5 CreditsThis course is a continuation of HMG 1011. It stresses continued development of speaking, listening comprehension, writing and reading. Students will analyze and compare patterns of behavior and increase their ability to understand perspectives of Hmong speaking world. Coursework and topics include listening and practicing Hmong speaking from different parts of the world, exploring Hmong communities in the Twin Cities, and observing Hmong news and videos. Prerequisite: HMG 1011 or equivalent, or consent of instructor.

## Horticulture

## Introduction to Horticulture HORT 1000 <br> 3 Credits

This course will introduce students to horticulture and the horticulture industry. Topics covered include the plant kingdom, basic plant identification, soils and fertilizers, greenhouse operations, the nursery industry, landscape design and installation, landscape maintenance and turf, interior foliage plants, and fruit and vegetable growing.

## Horticultural Plant Biology HORT $1021 \quad 3$ Credits

This course provides an essential understanding of the structure and function of a wide variety of horticultural plants. In this course students will study plant classification and identification principles. Plant functions introduced include activities of the plant cell, photosynthesis, respiration, transpiration, plant genetics and breeding.

## Soil Science HORT 1023 <br> 3 Credits

In this course, students will study soil profiles, soils of the world, nutrients and fertilizers, soil testing, soils for container growing and greenhouse potting, soil-working equipment, and hydroponics. Recommendation:
Concurrent enrollment in HORT 1021.

## Plant Propagation HORT 1024

## 3 Credits

This course covers current commercial methods of propagating annual and perennial herbaceous plants, woody plants, and tropical indoor plants. Methods covered include propagation by seed, division, cuttings, layering, grafting, and tissue culture. Students will propagate a wide variety of plants and in many cases bring them to the final production stage.

## Pest Management HORT 1025

## 3 Credits

Pests can cause a great deal of aesthetic and economic damage to plants. Students will identify pests that affect the quality and production of horticultural plants and examine ways to manage the pests by chemical means or natural methods. Students will examine weeds, diseases, insects and other pests. This course will help prepare students for the state commercial pesticide applicator examination.

## Organic and Environmentally Friendly Horticulture HORT 1027 <br> 3 Credits

This course focuses on ways to effectively practice smaller-scale domestic gardening as well as commercial production based on environmentally-friendly methods. Students will apply organic best practices in plant and crop production in the campus greenhouses. They will study current guidelines to become a United States Department of Agriculture (USDA) certified organic grower.

## Greenhouse Crops I

 HORT 10323 CreditsIn this course students study crops produced in greenhouses. Topics covered include herbaceous plants that are intended for outdoor use, interior foliage plants, potted indoor flowering plants, greenhouse cut flowers, greenhouse food production, and greenhouse applications for woody plant production. Students will produce an assortment of greenhouse crops.

## Woody Plants <br> HORT 1041 <br> 3 Credits

Woody plants make up the backbone of the landscape. In this course, students will identify over 100 varieties of woody plants including the common and botanical names, site preference, landscape use, and special features of each.

## Landscape Installation I HORT 10493 Credits

In this course students will study the practices of sustainable site development and the construction of concrete and paving brick patios and sidewalks. The installation of herbaceous and woody landscape plantings and the selection and installation of a variety of edgings and mulches will be covered. Recommendation: HORT 1041 and HORT 1051.

## Herbaceous Plants <br> HORT 1051

3 Credits
In this course, students will identify and determine the growing requirements for 150 herbaceous plants. The herbaceous plants covered include annual, biennial, and perennial ornamental plants. Students will study light, soil, and water requirements as well as bloom time, pest problems, and suggested varieties of herbaceous plants.

## Horticulture Internship I HORT 1781 <br> 1-3 Credits

The Horticulture Internship is designed to enhance the student's learning by putting to
use the knowledge and skills that the student has already attained and then building on them. Students will get experience working in the field and will be evaluated by employers and the instructor on a variety of skills. Prerequisite: Consent of instructor. Restriction: This course may be repeated a maximum of three times.

## Greenhouse Operations HORT 2031

3 Credits
In this course, students will explore the greenhouse industry, greenhouse structures and equipment and maintenance of a proper growing environment. Greenhouse crops will be studied as to their marketability and cost of production.

## Greenhouse Crops II HORT 20323 Credits

This course covers advanced techniques in greenhouse crop production and management. Topics covered include advanced greenhouse production methods for bedding plants, foliage plants, flowering indoor plants, cut flowers, edible plants and nursery stock. Students will produce an assortment of greenhouse crops. Prerequisite: HORT 1032 or instructor consent.

## Tropical Indoor Plants and Interiorscaping HORT 2033 <br> 3 Credits

Tropical indoor plants are common in homes, offices and commercial locations. They add aesthetic qualities and are increasingly used to clean the air we breathe indoors. Interiorscaping offers year round employment and business opportunities for horticulturists in temperate climates. In this course, students will study over 100 tropical indoor plants and their water, light, temperature and media preferences. Students will explore the commercial production of tropical indoor plants and their use in interiorscaping. Recommendation: HORT 1021 and HORT 1032.

## Nursery Operations HORT $2041 \quad 3$ Credits

In this course students will examine the various types of nurseries, and will explore field growing vs. container production. Students will study licensing and grading standards. Topics include propagation, planting, cultural practices, digging, storage and handling, as well as examine specialized nursery industry equipment.

## Grounds Maintenance

 HORT $2043 \quad 3$ CreditsMaintenance of grounds offers many exciting employment opportunities. All landscapes
require maintenance throughout the seasons whether they are residential, commercial or public grounds. This course will acquaint students with commercially accepted practices of turf grass, woody plants, flowerbeds, and hardscape maintenance.

## Landscape Maintenance and Management

HORT 20443 Credits
This course prepares students to handle the complex task of developing maintenance schedules and directing employees in grounds keeping for residential and commercial properties, parks and recreational facilities. Horticultural techniques for the care for herbaceous and woody plants and turf will be studied. The course focuses on management strategies, problem-solving and current issues in landscape management.

## Turfgrass Science and Management HORT 20453 Credits

Turf grass plays an important role in horticulture for ornamental, functional, and recreational purposes. In this course students examine varieties of turf grasses used in home, commercial and public landscapes. Cultural practices such as establishment, mowing, fertility, irrigation and pest management are covered.

## Horticulture Equipment and Technology HORT 20463 Credits

The horticulture industry is becoming more mechanized as labor availability decreases and the sophistication of equipment and technology increases. In this course, students will explore, examine, operate, and maintain equipment and technologies used in horticultural practices. GPS and GIS applications will be covered.

## Landscape Design HORT 2047

## 3 Credits

In this course students will examine the elements of residential and commercial landscape design and develop drawing and drafting skills in the preparation of several landscape designs. Using design theory and technical skill students will develop landscape plans that meet the needs of clients and their sites. Prerequisite: HORT 1049 or instructor's consent. Recommendation: HORT 1041 and HORT 1051.

## Landscape Installation HORT 2048 3 Credits <br> Installing landscapes offers many exciting and challenging opportunities. In this class,

## 7 Course Descriptions

students will examine the construction and installation of retaining walls, patios, sidewalks, fences, week barriers, edging, mulches, low voltage lighting, in addition to proper installation of plants, sod, and irrigation systems.

## Landscape Installation II HORT 2049

## 3 Credits

This course covers the design and construction of segmental and natural stone retaining walls, fence and deck construction, low voltage lighting and irrigation systems. Landscape contracting practices, including plan reading and proposal development, are introduced. Prerequisite: HORT 1049 or instructor's consent. Recommendation: HORT 1041 and HORT 1051.

## Urban and Local Food Systems HORT 20513 Credits

Producing fruits, vegetables, herbs and other specialty crops locally and in urban areas offers the advantages of freshness, lower transportation costs and increased sustainability. In this course students will study the growing requirements, processing options and the marketing potential of these crops. Crops covered include small fruits, tree and vine fruits, vegetables, herbs, cut flowers and other niche crops. This course provides background in processing and marketing opportunities for these crops.

## Creating Native Landscapes HORT 2052 <br> 3 Credits

This course is designed to introduce students to native plant species and their utilization. Topics include plant identification, production methods of native plants and sustainable landscaping practices for special purposes including wildlife habitats, rainwater gardens, butterfly gardens and shoreline landscaping.

## Sports and Golf Turf Grass Management HORT 2055 3 Credits

The management of high quality sports turf grass requires knowledge and skill. In this class students will learn about turf grasses used in sports fields and golf courses and their management including: establishment, fertility, irrigation, pests, mowing, aeration, and other maintenance procedures.

## Computer Assisted Landscape Design HORT 2057 3 Credits

This course covers the three major areas of computer-assisted landscape design: editing images of existing landscapes, designing landscapes in the plan view, and preparing
proposals from those images and plans. It is intended for students planning careers in landscape design and construction as well as current employees in the landscape industry. Prerequisite: HORT 2047 or instructor consent. Recommendation: CAPL 1010, CSCI 1020 or equivalent computer competency.

## Human Services

## The Role of the Human <br> Services Technician

HSER $1001 \quad 3$ Credits
This course provides an overview of the roles and responsibilities of an eligibility or financial worker. People in this role process information for individuals or families applying to counties in MN for services. Models of service delivery and ethical considerations are included in this course. Communication in a multicultural environment in human services will be discussed.

## Introduction to Human Services HSER 1020 3 Credits

This course provides a survey of the human services field which will include history of human service; education and training; worker roles; agencies, programs, and community resources; career and job opportunities; skills, knowledge, and values of the human service worker.

## Helping Skills <br> HSER 1030

3 Credits
This course provides a basic introduction to helping and interviewing concepts with a focus on individual skill development. Emphasis will be placed on the application of skills and knowledge to human service settings and situations. Self-awareness and its impact on helping others will also be discussed.

## Helping Clients with Disabilities HSER 1070 <br> 3 Credits

The students will explore the impact of disability on clients, their families, and the community. Helper interventions with a focus on client empowerment and advocacy will be applied through a
skills approach.

## Techniques of Working With Groups HSER 20003 Credits

This course is designed to teach students the dynamics of working in groups. Lecture,
discussion, participation in and facilitation/ co-facilitation of classroom training groups will be used. Students will practice basic group facilitation/co-facilitation skills used with special populations, as well as demonstrate practical application of theory to the group process.

## Working with the Mentally III in Human Service Settings <br> HSER 2030 <br> 3 Credits

This course will provide an overview of mental illnesses likely to be encountered in human service settings. Students will study the impact of mental illness on the individual, the family, and the community and the necessary skills to work effectively in a variety of human service settings. The goal of this class is not to teach diagnosis and treatment; rather, it is to prepare students to be sensitive to the needs of the mentally ill.

## Crisis Assessment and Intervention HSER 2040 3 Credits

This course is designed to present basic concepts of crisis assessment, intervention, and referral. The application of strategies and techniques of intervention, assessment, and referral models is included. Topics include an overview of community resources and assessment models for making appropriate referrals with emphasis on individual skill development.

## Seminar: Current Issues and Topics HSER 20503 Credits

This course examines current topics and issues specific to the field of Human Services. Students will take an active role in the research and presentation of topics in this seminar course.

## Case Management

HSER 20603 Credits
This course introduces the theory and practice of casework from a multidisciplinary perspective. Students have the opportunity to practice skills specific to case management, including the development of care plans, record keeping, intake procedures, assessment methods, and interviewing techniques. In addition, this course will address the importance of cultural sensitivity and diversity as they relate to case management.

## Human Services Internship I <br> HSER 2780 <br> 3 Credits

This course is for students to gain work experience in a human service agency. This internship provides an opportunity to further develop skills and gain additional knowledge
of human services practices and concepts. Students may take both HSER 2780 \& 2781 in the same term. Students should be aware that a MN human services background study may be required. Prerequisite: Consent of instructor.

## Human Services Internship II HSER $2781 \quad 3$ Credits

This course emphasizes development of skills and knowledge beyond that provided in HSER 2780. Supervised work experience in a human services agency/organization providing an opportunity to further develop skills and gain additional knowledge of human services .practices and concepts will prepare students for employment in the field. Students should be aware that a MN human services background study may be required. Prerequisite: Consent of Instructor

## Humanities

## Introduction to the Humanities: <br> Europe and the U.S. <br> HUM $1021 \quad 4$ Credits MnTC: Goals 06 \& 08

This course concentrates on the creative works from the areas of Europe and the United States. Topics covered include visual art, music, theatre, film, literature, mythology, philosophy and religion. This broad survey focuses on the value of the arts in understanding human experience and popular culture. The artistic contributions from other cultural areas are considered as points of contrast. Note: Attendance at an art gallery, play and/or concert outside of class time may be required. Recommendation: Assessment score placement in RDNG 1000 or above, or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher; assessment score placement in ENGL 1021 or completion of ENGL 0090 with a grade of " $C$ " or higher.

## Introduction to the Humanities:

A World View
HUM $1025 \quad 4$ Credits MnTC: Goals 06 \& 08
This course concentrates on creative works from the areas of Africa, the Americas, Asia and the Middle East. Topics covered include visual art, music, theatre, film, literature, mythology, philosophy and religion. This broad survey focuses on the value of the arts in understanding human experience and popular culture. The artistic contributions from Europe
and the United States are considered as points of contrast. Note: Attendance at an art gallery, play and/or concert outside of class time may be required. Recommendation: Assessment score placement in RDNG 1000 or above, or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher; assessment score placement in ENGL 1021 or completion of ENGL 0090 with a grade of " $C$ " or higher.

## Culture and Civilization of Spanish Speaking Peoples <br> HUM $1030 \quad 3$ Credits

MnTC: Goals 06 \& 08
Taught in English, this course introduces students to the culture and civilization of Spain and Spanish-speaking peoples of the Americas. Students study geography, history, politics, economics, arts, and literature to develop an awareness of the cultural, religious and social values of other cultures. Students will also examine interconnections with Spanish-speaking peoples and nations to develop an understanding of the responsibility world citizens share for our common global future.

## Culture and Civilization of French Speaking Peoples HUM $1035 \quad 3$ Credits MnTC: Goals 06 \& 08

This course is an introduction to the cultures of France and the French-speaking regions of the world: Europe, North America, the Caribbean, North Africa, Sub-Saharan Africa, parts of Asia, and various islands. The study of geography, history, arts, and literature will help students develop awareness of the cultural, religious, and social values of other peoples. Students will also explore the responsibility that world citizens share for their common global future, by comparing and contrasting their own culture with that of French-speaking cultures. The course is taught in English.

## Culture and Civilization of Chinese Speaking Peoples <br> HUM $1040 \quad 3$ Credits MnTC: Goals 06 \& 08

This course serves as an introduction to the various cultures of Chinese-speaking people around the world. The study of geography, history, literature, and arts will foster interest in the traditional, religious and social values of other cultures. Students will explore the responsibility world citizens share for our common global future by examining interconnections with Chinese-speaking peoples.

The Art of Film HUM 1041 3 Credits MnTC: Goals 06 \& 08
This course is an introduction to film as an art form. This course presents the study of film as a medium for portraying ideas, myths, human concerns, and aesthetic principles. Included in the course are an examination of film techniques, film theories, and artistic styles of film such as formalism, surrealism, expressionism, and neorealism.

## International Film

HUM 1043
3 Credits MnTC: Goals 06 \& 08
This course presents a study of film as an art form and as a means of cultural communication from an international point of view. The course is designed to cultivate an ability to think about film in a critical way, as well as to broaden understanding of film and cultures in a global context. Each semester a variety of national cinematic traditions are examined, including film works from Russia, Eastern Europe, Germany, France, Scandinavia, the United Kingdom, Italy, the Middle East, Asia, and Latin and South America.

## American Film <br> HUM 1045 <br> MnTC: Goals 06 \& 07

3 Credits

Film is not only for entertainment, it is also an art form, a technology, an industry, and a medium of communication and expression. This course presents a survey of the history of film in the United States, and is intended to improve visual literacy so that students will understand and think about film in an intelligent and critical way. The entire history of American films is studied, from the early moving-picture inventions up to the digital revolution. Included in this course are representative examples of major American filmmakers, film genres, film theories, film techniques, and the historical and cultural events that were related to production, exhibition, styles, and the content of films in the United States from 1895 to the present.

## African American Cultural Perspectives <br> HUM 1051 3 Credits MnTC: Goals 06 \& 07

This course surveys broad elements of humanities that comprise the culture of African Americans from slavery to present day. Its aim is to show how elements such as literature, science, politics, history, religion, music, theater, language, art, television, and motion pictures have contributed to the

## 7 Course Descriptions


formation and some current appreciations and interpretations of African American culture. These elements are studied in the context of how white culture, though the institution of slavery, sharply influenced these elements, and therefore, African American culture itself. The course also focuses on how African American, European American, and other non-African Americans respond to overall characteristics of African American culture, and how African American culture has influenced the dominant American culture.

## Independent Study HUM 1790

## 1-3 Credits

This course offers students an opportunity for a further in-depth exploration of (an) aspect(s) of culture. This may include art, literature, film, music, theater, philosophy, etc. Prerequisite: Approval of instructor and dean, and completion of a HUM course, with a grade of $B$ or above.

## Women in the Arts <br> HUM 2061 <br> MnTC: Goals 06 \& 07

This course is an introduction to the history of womens involvement in the creative fields of visual art, design, architecture, film, dance, theater and music. It focuses on Western Civilization and covers artistic issues for women from the Classical Greek to contemporary times both chronologically and thematically. Creative works by women will be examined within social and historical contexts. Significant creative works representing women will be evaluated from a feminist perspective. The course explores the cultural assumptions about
gender that have influenced artistic choice and interpretation. Prerequisite: ENGL 1021 with a grade of C or higher.

## Individualized Studies

## Independent Study <br> INDV 1790 1-4 Credits

This variable-credit elective course emphasizes the student's independent search for advanced knowledge as well as additional hands-on skills beyond current course offerings. This course will be an option for students in the Individualized Studies program. It is designed especially for students pursuing programs we do not offer at Century or those seeking an Independent Study option in a discipline which does not currently offer such a course. The student and instructor will devise a formal plan of study to satisfy credit workload requirements within a one-semester timeframe. Course may be repeated up to a total of 8 credits. Prerequisite: Consent of instructor and Dean.

## Individualized Studies Internship INDV 2780 1-4 Credits

This course is designed to provide students with the opportunity to apply knowledge and skills in a real-life job environment. It is designed especially for students pursuing programs not offered at Century or those seeking an internship option in a program or discipline which does not currently offer such a course. Students will work in a professional environment while applying and learning
a variety of communication, business, and technical skills. Course may be repeated up to a total of 8 credits. Prerequisite: Consent of administrator of Individualized Studies and the instructor.

# Information and Telecommunications Technology 

## Introduction to Information and Telecommunications Technology ITT $1020 \quad 3$ Credits

This course provides an orientation for students enrolled in the Information and Telecommunication Technology and Microcomputer Support Technology A.A.S. degree programs. This course focuses on terminology and industry IT acronyms associated with data, voice, and multi-media based technologies. Students will investigate career directions and job opportunities with respect to current and emerging industry directions.

## Principles of Information Security ITT $1021 \quad 3$ Credits

This course is designed to investigate the analysis and implementation of network security policies, procedures, and guidelines for establishing, monitoring, and controlling methodologies for local and wide area networks.

## Network Fundamentals (CCNA-1) ITT $1031 \quad 3$ Credits

This course provides an introduction to the OSI 7 and TCP/IP models used in data communication and computer networks with emphasis on network infrastructure design, configuration, and implementation. This course is the first in a four-course sequence designed to prepare students to take the Cisco Certified Network Associate (CCNA) examination.

## Routing Protocols and Concepts

 (CCNA-2)
## ITT 1032 <br> 3 Credits

This course provides instruction on the selection of appropriate routing protocols and the configuration of internetworks. Topics include static and dynamic routing, Variable Length Subnetmasking (VLSM), Classless Inter-Domain Routing (CIDR), Distance-Vector and Link-State routing, as well as close examination of the routing table
used by routers. This course is the second in a four-course sequence designed to prepare students to take the Cisco Certified Network Associate (CCNA) examination. Prerequisite: ITT 1031 or Instructor consent.

## Network Infrastructures and Data Center Designs (BICSI) ITT $1033 \quad 3$ Credits

This course focuses on structured cabling and design issues related to data, voice, video connections, and provides an understanding of the networking industry and its worldwide standards. Types of media and cabling, physical and logical networks, as well as signal transmission will be examined. This course stresses documentation, design, and installation, laboratory safety, on-the-job safety, and working effectively within groups. This course prepares students to take the Level 1-Installer Building Industry Consulting Service International (BICSI) certification.

## Telephony Systems <br> ITT $1070 \quad 3$ Credits

This course introduces student to voice, data and video network integration and convergence technologies. The course focuses on developing a fundamental understanding of analog and digital telecommunications including VoIP technologies and VoIP configuration.

## Independent Study

ITT $1790 \quad$ 1-4 Credits
This variable-credit elective course emphasizes the student's independent search for advanced knowledge as well as additional hands-on skills beyond current Information and Telecommunication Technology course offerings. The student and instructor will devise a formal plan of study to satisfy credit workload requirements within a one semester timeframe. Prerequisite: Consent of instructor and Dean. Recommendation: ITT 1020.

## Network Security Fundamentals ITT $2020 \quad 3$ Credits

This course covers the overall security process based on security policy design and management, with an emphasis on security technologies, products, and solutions. The course covers authentication, authorization, and accounting (AAA) implementation using routers and security appliances and securing the network at both Layer 2 and Layer 3 of the OSI reference model. Prerequisite: ITT 1021 and ITT 1031 or instructor consent. Recommendation: MCST 2011 and MCST 2013.

## Firewalls and Network Security ITT $2025 \quad 3$ Credits

This course is designed for the network administrator who needs to learn the basics of network firewalls and VPN security. It covers basic installation techniques, discusses how to make an intelligent choice of firewall technology, and presents basic firewall troubleshooting. Prerequisite: CCNA industry certification or ITT 2020 or instructor consent.

## LAN Switching and Wireless (CCNA-3) ITT 20313 Credits

This course provides instruction on the selection of appropriate routing protocols and the configuration of internetworks. Topics include static and dynamic switching, Virtual Local Area Networks (VLANs), VLAN Trunking Protocol (VTP), Spanning Tree Protocol (STP), inter-VLAN routing, as well as providing an introduction to wireless LANs. This course is the third in a four-course sequence designed to prepare students to take the Cisco Certified Network Associate (CCNA) examination. Prerequisite: ITT 1031 or instructor consent.

## Accessing the WAN (CCNA-4) ITT 20323 Credits

This course provides instruction on the selection of appropriate routing protocols and the configuration of internetworks. Topics include Wide Area Network (WAN) connectivity and protocols, network security, Access Control Lists (ACLs), providing remote users network access, IP address conservation and assignment, and network troubleshooting. This course is the fourth in a four-course sequence designed to prepare students to take the Cisco Certified Network Associate (CCNA) examination. Prerequisite: ITT1031, ITT 1032, and ITT 2031 or instructor consent.

## CCNA Capstone

 ITT $2033 \quad 1$ CreditThis course will prepare students to take the CCNA industry certification by applying critical thinking skills associated with designing and constructing complex networks. Network performance metrics and troubleshooting techniques will be integrated into case study or lab scenarios. Prerequisite: ITT 2032 or instructor consent.

## Network Attached Storage

ITT $2036 \quad 3$ Credits
This course will be focused on implementing Network Attached Storage (NAS) appliances in a local area network. Students will plan, install, operate, and troubleshoot NAS
appliances in an Ethernet environment. Prerequisite: ITT 2031 or instructor consent.

## Storage Area Network Management ITT 2038 <br> 3 Credits

This course focuses on integrating a Storage Area Network (SAN) into a Local Area Network (LAN). Students will plan, install, configure, secure, and troubleshoot a SAN. Prerequisite: ITT 2036 or instructor consent.

## Building Scalable Cisco Internetworks (CCNP-1) <br> ITT 20413 Credits

This course provides instruction on the knowledge and skills necessary to use advanced IP addressing and routing in implementing scalability for Cisco ISR routers connected to LANs and WANs. The course also covers topics on routing principles, multicast routing, IPv6, manipulating routing updates, configuring basic BGP, configuring EIGRP, OSPF, and IS-IS. In addition, this course prepares students to take the Cisco Certified Networking Professional (CCNP) Building Scalable Cisco Internetworks Exam. Prerequisite: ITT 2032 or current CCNA certification or instructor consent.

## Implementing Secure Converged WANs (CCNP-2) <br> ITT 20423 Credits

This course provides instruction on the knowledge and skills necessary to secure and expand the reach of an enterprise network to teleworkers and remote sites with a focus on securing remote access and VPN client configuration. The course covers topics on Cisco hierarchical network model as it pertains to the WAN, teleworker configuration and access, frame mode MPLS, site-to-site IPSEC VPN, Cisco EZVPN, strategies used to mitigate network attacks, Cisco device hardening, and IOS firewall features. In addition, this course prepares students to take the Cisco Certified Networking Professional (CCNP) Secure Converged Wide Area Networks exam. Prerequisite: ITT 2032 or instructor consent.

## Building Converged Cisco Multilayer Switched Networks (CCNP-3) ITT $2043 \quad 3$ Credits

 This course provides instruction on the knowledge and skills necessary to implement scalable multilayer switched networks. The course includes topics on campus networks, describing and implementing advanced Spanning Tree concepts, VLANs and InterVLAN routing, High Availability, Wireless Client Access, Access Layer Voice concepts,
## 7 Course Descriptions

and minimizing service Loss and Data Theft in a Campus Network. In addition, this course prepares students to take the Cisco Certified Networking Professional (CCNP) Building Converged Multilayer Switched Networks exam. Prerequisite: ITT 2032 or current CCNA certification or instructor consent.

## Optimizing Converged Networks (CCNP-4) <br> ITT 2044

## 3 Credits

This course provides instruction on the knowledge and skills in optimizing and providing effective Quality of Service ( O S ) techniques for converged networks. The topics include implementing a VolP network, implementing QoS on converged networks, specific IP OoS mechanisms for implementing the DiffServ OoS model, AutoQoS, wireless security and basic wireless management. In addition, this course prepares students to take the Cisco Certified Networking Professional (CCNP) Optimizing Converged Cisco Networks exam. Prerequisite: ITT 2041 and ITT 2043 or instructor consent.

## Enterprise Computing Virtualization ITT 2051 <br> 3 Credits

This course focuses on integrating a virtual computing environment into a local area network. Students will plan, install, configure, secure, and troubleshoot a virtual crossplatform computing environment. Prerequisite: MCST 1030 or instructor consent.

## Network Management <br> ITT $2055 \quad 3$ Credits

This course is designed to provide students with a working knowledge of local and wide area network management techniques and tools. Emphasis is on troubleshooting and diagnostic hardware and software tools and approaches including proactive and reactive management methods. Prerequisite: ITT 1032.

## Computer Telephony Integration ITT $2060 \quad 3$ Credits

This course covers voice and data network integration and convergence technology issues and constraints. The course focuses on VoIP design, configuration and implementation. Prerequisite: ITT 1070 and ITT 1032 or instructor consent.

## Information Security Management ITT 20653 Credits

This course is designed for individuals responsible for the overall design and management of information security for an enterprise. It is intended for those wanting to

work in the Information Security Management field and covers a broad range of management oriented issues including ethics, establishing policies, developing procedures, principles, and strategies designed to allow for controlled access and efficient network administration. Prerequisite: ITT 2025.

## Video Integration <br> ITT 2070

## 3 Credits

This course addresses video and data network integration in Local and Wide Area Networks as well as convergence technology issues. The course focuses on Internet Protocol (IP) video network design, configuration, and optimization issues. Prerequisite: ITT 1070 and ITT 1032 or instructor consent.

## Wireless Network Security <br> ITT 2075 <br> 3 Credits

This course will focus on learning using the latest enterprise wireless LAN security and auditing equipment. Topics include wireless LAN intrusion, security policies and solutions for wireless LANs, and risk management analysis using auditing tools. Prerequisite: ITT 1021 or CWNA certification.

## Technology Planning and Architecture ITT 2080 <br> 3 Credits

This is an advanced course designed to integrate technology architecture, planning, and business process. Content includes development and implementation of a standardized process framework necessary to design, construct and manage complex technology-based systems in order to support business functions within an organization.

Focus is on design and management of complex technical information based business systems. Additional emphasis will be on life-cycle development and project management. Recommendation: Should be taken in the student's second year.

## Internship ITT 2780

## 1-6 Credits

This course is designed to provide students with the opportunity to apply knowledge and skills learned in the Information and Telecommunication Technology program in a real life job environment. Students will work in a professional environment while applying and learning a variety of communication, business, and technical skills. Prerequisite: Consent of instructor.

## Information Studies

## Research Skills \& Information Literacy INFS 1020 <br> 2 Credits

This course explores how information shapes our lives. It introduces practical, step-by-step techniques to effectively locate, evaluate, use, and accurately cite information related to a chosen field of study or area of personal interest. Coursework includes the use of online and print library resources, as well as Web resources. Prerequisite: Assessment score placement in RDNG 1000, or completion of RDNG 0900 OR RDNG 0950 with a grade of $C$ or higher. Recommendation: Basic word processing skills or OFFT 1001

# Interior Design 

## Drafting for Interior Design INTD 1020

3 Credits
This introductory course focuses on hand drafting (architectural drawing) skills necessary to design any given space. It covers reading and drawing a set of floor plans, using drafting tools and drafting appropriate architectural symbols, dimensioning, lettering, elevations, sections, and detailing. This course provides the foundation for all other Interior Design courses

## Design and Color INTD 1030

3 Credits
This course identifies the fundamental elements and principles of design and demonstrates how they relate to home and commercial interiors. Students explore applied color theory, light theory, color harmonies, and color relationships as well as color psychology through extensive experiential projects.

## Elements of Interior Design INTD 10403 Credits

This course focuses on "sourcing"-locating and using professional design resources that demonstrate a systematic approach for specifying fabrics, furniture, finishes, and fixtures in students' own design work. This course requires off campus site visits to a variety of "trade only" showrooms during regular business hours. Prerequisite: Assessment score placement in MATH 0030 or completion of MATH 0010 with a grade of "C" or higher and assessment score placement in ENGL 1021 or completion of ENGL 0090 with a grade of " $C$ " or higher. INTD 1020 with a grade of "C" or higher or concurrent enrollment or consent of instructor. Recommendations: ENGL 1021.

## Lighting Fundamentals INTD 1050

## 3 Credits

This course focuses on lighting fundamentals for residential and commercial interiors. It covers the four functions of light: task, accent, decorative, and ambient. Students apply problem-solving techniques to a variety of lighting scenarios. This course requires field trips to the "trade only" vendors during regular business hours. Prerequisite: INTD 1020 with a grade of "C" or higher.

## AutoCAD for Interior Design INTD 1055 3 Credits

This course focuses on presentation skills and drawing production. Topics will include drafting Existing Floor Plans, New Construction Floor Plans, Furniture Plans, Lighting and Electrical Plans, Reflected Ceiling Plans, Elevations and Details. Students must provide a personal laptop with AutoCADArchitecture, which may be downloaded from Autodesk prior to the first class meeting. Prerequisite: INTD 1020 with a grade of C or higher. Recommendation: Concurrent enrollment in INTD 1050 and INTD 2001

## Furniture Styles and Periods

 INTD 10603 CreditsThis course focuses on the historical aspects of architecture, interiors, and furniture. It explores historic styles of the home and its furnishings as a reflection of peoples' needs and values. It provides a foundation of knowledge useful for subsequent studio courses.

## Textile Applications INTD 1080

## 3 Credits

This introductory course examines textile fibers, yarns, fabric construction, dyeing, printing, and finishing used in residential and commercial interior design applications. It covers safety and wear testing codes as well as recommended care for textiles, carpeting, and leather products. Students focus on selection of appropriate materials to meet client specifications.

## Sustainable Design

 INTD $1090 \quad 3$ CreditsThis course introduces students to the principles and practices of sustainable design. They will be introduced to environmental concerns, challenges, and processes associated with employing sustainable materials for design. This class requires field trips to trade only vendors during regular business hours. Prerequisite(s): INTD 1020 with a grade of C or higher or consent of instructor, INTD 1040 with a grade of $C$ or higher or consent of instructor.

## Independent Study INTD 1790 Credits

This variable-credit elective course emphasizes the student's independent search for advanced knowledge as well as additional hands-on skills beyond current Interior Design course offerings. The student and instructor will devise a formal plan of study to satisfy credit workload requirements within the semester timeline. Prerequisite: Consent of
instructor and Dean. Recommendation: INTD 1020, INTD 1030 and INTD 1040 with a grade of "C" or higher.

## Residential Studio I <br> INTD 2001

## 3 Credits

This course builds on INTD 1020 Drafting for Interior Design. Students prepare a full set of working drawings to design a residential space and incorporates order processing, client invoicing, writing purchase orders, and reviewing vendor acknowledgements. This more advanced course is designed to enhance students' estimating and drafting skills and refine their written, verbal, and visual communication skills when working with clients and contractors. Prerequisite: INTD 1020 and INTD 1040 with a grade of "C" or higher. Recommendation: INTD 1030.

## Residential Studio II INTD 2002

## 3 Credits

This course builds on Residential Studio I. It focuses on planning a space that meets programming requirements, residential code requirements and Americans with Disabilities Act (ADA) guidelines. This course is modeled after the National Council for Interior Design Qualification (NCIDQ) practicum exam. Prerequisite: INTD 2001 with a grade of " C " or higher. Recommendation: ECAD 1070 and INTD 1020.

## Professional Practice for Interior Design INTD 2020 3 Credits

This course covers the basic principles of operating an Interior Design business, planning for profit and growth, writing contracts, marketing, selling, and project management. These principles are applied through interactive role plays of increasing complexity. Prerequisite: INTD 1020 and INTD 1040 with a grade of "C" or higher.

## Design Sales INTD 2030

## 3 Credits

This course explores specific relationship selling skills and techniques to assure success in this highly competitive industry. Coursework includes business etiquette, entrepreneurship, self marketing strategies, effective written and oral communication, and customer service skills. Prerequisite: INTD 1020 with a grade of "C" or higher.

## Dimensional Drawing INTD 2040

## 3 Credits

This course focuses on dimensional design drawings of interior spaces. Students will

## 7 Course Descriptions

render floor plans, elevations, and draft one and two point perspectives of interior spaces. This course builds upon all interior design studio classes. Prerequisite: INTD 2001 with a grade of "C" or higher. Recommendation: Concurrent enrollment in INTD 2002.

## Commercial Design Studio INTD 2050 <br> 3 Credits

This course concentrates on designing a commercial space that meets programming requirements, commercial building codes, and the Americans with Disabilities Act (ADA) Design Guidelines. It entails creating a full set of working drawings as well as sourcing furniture and finishes to meet commercial expectations. Prerequisite: INTD 2001 with a grade of "C" or higher. Recommendation: ECAD 1070.

## Revit for Interior Design INTD 2060

## 3 Credits

This Revit course is designed to give Interior Designers the tools to create building information modeling, from construction documents to 3D models and photo realistic renderings. Students will work with industry standards to complete a construction document set of floor plans, elevations, lighting and electrical plans, furniture plans, details and schedules. Prerequisite(s): INTD 1020 or Interior Design industry experience in hand drafting.

## Interior Design Portfolio INTD 2070

## 1 Credit

This course is intended to refine previous projects into a comprehensive collection representative of the Interior Design students skills. This portfolio course will also enhance presentation skills for future employment opportunities. Prerequisite: INTD 2050 or Instructor consent. Recommendation: Concurrent enrollment in VCT 1018 and VCT 1023.

## Design-Build Partnership INTD 2075

3 Credits
This course is intended for students nearing graduation to put together their accumulated knowledge in a real-life design-build partnership with the Independent School District 916 Building Trades instructor, many sub-contractors, a cabinet shop, a lighting resource, and many suppliers. Students will select all of the exterior and interior furnishings for this spec. house. Students must have transportation to visit many selection sites. Prerequisite: INTD 2001 or instructor consent

## Feng Shui for Interior Design INTD $2080 \quad 3$ Credits

This course is designed as an introduction to the Chinese concept known as Feng Shui and how to use these principles as an interior designer. Topics include basic Feng Shui principles, the Feng Shui approach to architectural and design elements, and Feng Shui for the home, workspace and other commercial spaces. Prerequisite: Must have AAS degree in Interior Design or instructor consent.

## Window Covering Design INTD 2085

 3 CreditsThis course is intended for students to develop in-depth knowledge of window covering design. Topics include identifying an appropriate selection based on function and aesthetics of the space, gaining a full understanding of the fabrication process, and installation. Prerequisite(s): an Interior Design degree or instructor consent

## Residential Design for Aging in Place INTD $2090 \quad 3$ Credits

As the first wave of baby boomers enters retirement, thoughtful residential design for Aging in Place grows dramatically. This course is designed as an introduction to the principles and practices of designing homes for Aging in Place that help clients remain in their homes as they grow older and their needs and abilities change. Prerequisite: Must have Interior Design AAS degree or instructor consent.

## Interior Design: A Global Perspective INTD 2095 3 Credits

This course builds upon all interior design courses and focuses on global perspectives. Students will apply various cultural theories and design disciplines to the Western built environment. Students will research historical and cultural symbolic meanings of various cultures and apply this knowledge to their interior design projects. Prerequisite: Must have Interior Design degree or instructor consent

## Internship in Interior Design INTD 2780 <br> 2 Credits

This course engages students in 160 hours of learning experience at the business/industry site that compliments and reinforces the program's academic work. With employer's input, students are evaluated on a variety of skills. This course involves analyzing one's own work style and skills, then matching personal traits and needs to the workplace.

Students use this experience to gain a competitive edge in the industry. Prerequisite: Consent of instructor.

## Kitchen and Bath Design

## Presentation Standards for Kitchen and Bath Designs KBD 1010 3 Credits

This course covers architectural hand drafting techniques, architectural symbols, measuring and sketching a space, hand drafting floor plans, electrical plans, interior elevation, isometric drawing, and two-point perspective drawing all in accordance with the National Kitchen \& Bath Association (NKBA) standards.

## Construction and Mechanical Systems for Kitchen and Bathroom Designs KBD 1020 3 Credits

This foundational course focuses on residential kitchen and bath construction basics, mechanical systems and interpretation of blueprint drawings. Included is an introduction to the plumbing, HVAC (heating, ventilation, and air conditioning), electrical and lighting systems typically used in a residential construction. Prerequisite: Completion of KBD 1010 or taken concurrently, or a prior drafting course with instructor's consent.

## Basic Kitchen and Bath Design KBD 1030 3 Credits

This course includes a comprehensive introduction of the basics of both kitchen and bathroom design. Emphasis is placed on the NKBA Guidelines and NKBA documentation. Prerequisite: Completion of KBD 1010, prior hand drafting course subject to instructor approval, and/or concurrent enrollment in KBD 1020, KBD 1040, KBD 1050 and KBD 2781.

## Materials and Estimating KBD 1040 <br> 2 Credits

The course covers various materials used in kitchen and bathroom spaces, their appropriateness and installation considerations. Topics include material specifications, measurement, and estimation for cabinetry, countertop materials, floor and wall surfacing treatments, lighting, ceiling finishes, and window treatments. Prerequisite: Completion of KBD 1010 or taken concurrently, or a prior drafting course with instuctor's consent.

## Lighting for Kitchens and Baths KBD $1050 \quad 1$ Credit

This course covers lighting design and its application for kitchen and bathroom spaces. Students will examine a variety of light sources, evaluate their advantages and limitations to create a basic lighting and electrical plan for installations. Prerequisite: Completion of KBD 1010 or taken concurrently, or a prior drafting course with instructor's consent.

## Advanced Kitchen and Bath Design KBD $2010 \quad 3$ Credits

This advanced course examines the concepts of universal design and theme design within kitchen and bathroom spaces. A review of ergonomics includes a stronger emphasis on universal design guidelines, Americans with Disabilities Act considerations, multiple cook design, and the application of theme design (historical applications). The graphic standards as recommended by NKBA (National Kitchen and Bath Association) are components of each project assigned. The completion of the NKBA Student Design Competition acts as a culminating project for this course. Prerequisite: Completion of KBD 1030, KBD 1010, KBD 1040, KBD 1020, KBD 1050 or equivalent courses and/or training as reviewed and accepted by faculty.

## Basic CAD for Kitchen and Bath Design KBD 2020 3 Credits

This course includes drafting kitchen and bath floor plans using a CAD program. Commands include drawing, editing, placement, drafting complete floor plans with dimensions, preparing drawings such as rendered drawings, isometric drawings, perspective drawings, and interior elevation drawings. Additional items include preparing quotes and a bill of materials. Prerequisite: KBD 1010, KBD 1020, KBD 1030, KBD 1040, KBD 1050. Students must have general computer experience using Microsoft Word for Windows.

## Business Practices for Kitchen and Bath Design <br> KBD $2030 \quad 1$ Credit

This course addresses aspects of managing and/or owning a kitchen and/or bathroom design business. Students will complete some of the necessary contract documents needed to insure the timely installation of a project from surveying the client to appropriate follow-up procedures. Topics include business basics, how financing is handled, how to price products and services, how to manage
inventory, how to market a business, how to determine who should be hired to work within the organization and whom to contact as outside help, and how to keep an organization motivated and on track. Prerequisite: Completion of KBD 1010, KBD 1020, KBD 1030, KBD 1040, KBD 1050, or equivalent as approved by faculty.

## Advanced CAD for Kitchen and Bath Design

KBD $2060 \quad 3$ Credits
Students apply more advanced applications of the computer-aided drafting skills learned in KBD2020. This CAD program is most commonly used for the design of kitchen and bath spaces in the design industry. Skills utilized will include more complex techniques for the execution of the following drawings: floor plans, elevation drawings, dimensional drawings, customization of cabinetry and layout, remodeling aspects, renovation aspects, color coding drawings and creating complete quotes and Bill of Materials for projects. This advanced application of computer skills entails designing additional spaces such as entertainment area, home office, condo and incorporating universal design applications into a residential two cook kitchen. Prerequisite: KBD 2020. Students must have their own laptop meeting program specifications; same as KBD 2020.

## Customized Consulting and Presentation KBD $2080 \quad 3$ Credits

This course addresses communication styles, selling philosophies, value-added selling, client relationships, product strategies, ethics, customer strategies, and conducting successful sales presentations for the kitchen and bath clientele. All course content is specifically designed for selling in the kitchen and bath design field. Prerequisite: KBD 1010, KBD 1020, KBD 1030, KBD 1040, KBD 1050, and/or adequate experience in the kitchen and bath design industry or sales courses previously taken may apply with consent of the instructor.

Kitchen and Bath Design Internship Preparation KBD 2085

## 2 Credits

This course aids the KBD students in preparing for their KBD internship experience. Students develop/revise professional skills, as well as conduct informational interviews of KBD industry professionals. Prerequisite: Must be currently enrolled in the KBD program. Recommendation: This course can be
completed concurrently with Fall Semester courses and/or KBD 2780.

## Kitchen and Bath Design Internship KBD $2780 \quad 3$ Credits

This course gives the KBD student an opportunity to complete an on-the-job experience that is kitchen and/or bath design related, and approved by faculty prior to enrollment. Each student is required to complete a minimum of 160 hours to receive their Kitchen \& Bath Design certificate and qualify to take the Associate of Kitchen \& Bath Design (AKBD) exam upon graduation. Prerequisite: Must be currently enrolled in the KBD program. Recommendation: This course can be completed concurrently with Fall Semester courses and/or KBD 2085.

## Linguistics

## Introduction to English Language Analysis LING 1030 MnTC: Goals 05 \& 07

This course examines how languages operate and how to analyze language. Students will analyze language patterns and variations by comparing standard American English to non-standard varieties. Students will examine factors that affect language choice and factors that influence the perceived message, including attitude, identity, and social status. This course includes an overview of basic linguistic and sociolinguistic topics, terminology, and methods. Prerequisite: Assessment score placement in ENGL 0090 or above or completion of ENGL 0080 with a grade of " C " or higher, and assessment score placement in RDNG 1000 or completion of RDNG 0090 with a grade of "C" or higher.

## Introduction to Linguistics LING 2020 4 Credits

Students will consciously think about language and its structure, identify patterns in language, and compare structures that are shared across languages. The course practices logical reasoning and deduction. Problem sets will focus on a variety of languages with special emphasis on English, and immigrant languages, such as Hmong, Somali, Spanish, and Liberian Creole. Prerequisite: Assessment score placement in RDNG 1000, or completion of RDNG 0090 with a grade of "C" or higher. Assessment score placement in MATH 0070, or completion of MATH 0030 with a grade of

## 7 Course Descriptions

" $C$ " or higher or completion of PHIL 1041 with a " $C$ " or higher. Recommendation: Second year student.

## Introduction to Socio-Linguistics LING 20304 Credits MnTC: Goal 05

This course looks at the interrelationship of language and society. It looks at the social aspects of language, including usage, attitudes towards usage of various varieties of language, and issues of language planning and policy. Students will examine factors that affect their choice of language and how language affects the hearer's perception of the speaker. Prerequisite: Assessment score placement in RDNG 1000, or completion of RDNG 0090 with a grade of " $C$ " or higher. Assessment score placement in ENGL 1021 or completion of ENGL 0090 with a grade of "C" or higher.

## Marketing

## Visual Merchandising and Store Planning MKTG $1020 \quad 3$ Credits

This course emphasizes merchandise presentation as a seller's tool for getting customers and clients "in touch" with branded products and services in conventional retail settings as well as non-traditional venues like grocery stores, special events, and trade shows. Students analyze branding and visual image in existing stores and devise ways to physically present products/services to targeted markets. They can expect to apply art principles and elements of design to create store fronts, floor plans, wall elevations, fixture layouts, lighting plans, and select site-appropriate props, mannequins and fixtures. The course stresses creativity and innovation in class projects as well as outside assignments related to student interests or current employment. Prerequisite: MKTG 2050. Recommendation: VCT 1013, or ARTS 1020, or ARTS 1041.

## Professional Development MKTG $1025 \quad 3$ Credits

 This course alerts students to the importance of accurately identifying and assessing elements of the workplace culture - values, norms, behaviors, and ethics that can support employee wellness and satisfaction on the job. Students are encouraged to analyze theircurrent workplace climates relative to their own positions within those organizations. Projects and case studies focus on leadership traits, motivational theory, and teamwork development as well as time-management and stress-management strategies in workplace and classroom settings. Recommendation: Assessment score placement in RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of " C " or higher; assessment score placement in ENGL 1021 or completion of ENGL 0090 with a grade of " $C$ " or higher.

## Fashion Marketing Essentials MKTG 1043 3 Credits

This course focuses on the history and traditions of the global fashion industry - from haute couture design to budget-priced mass market apparel. It offers basic information about fabrication and production processes, and provides selling tools like textile basics, fashion terminology, apparel design elements, and color trends that increase sales and profitability at retail. Students also explore the psychological, sociological, and ethical factors that influence both producer and consumer behavior while guiding contemporary marketing strategy at the retail level. Recommendation: Assessment score placement in RDNG 1000 or above, or completion of RDNG 0900 OR RDNG 0950 with a grade of " C " or higher.

## Event, Convention, and Meeting Panning MKTG 1066 3 Credits

This course provides necessary background for the planning of special events, conventions, and meetings for commercial businesses and non-profit community organizations. Effective planning is a dynamic process that begins well in advance of actual production. It includes organizational mission and goal setting, audience targeting, branding, effective marketing communications, sponsorship development, program planning, logistics, risk management, crisis planning, and a variety of other elements that ensure safety, service, entertainment, and satisfaction for all event stakeholders and participants. Recommendation: MKTG 2050 and MKTG 2063

## Marketing Independent Study MKTG 1790 1-3 Credits

This variable-credit elective course emphasizes the student's independent search for advanced knowledge as well as additional hands-on skills beyond current Marketing course offerings. The student and instructor
will devise a formal plan of study to satisfy credit workload requirements within the semester timeline. Prerequisite: Consent of instructor and dean. MKTG 2050 or its equivalent with a grade of "B" or higher.

## Customer Service Strategies MKTG $2000 \quad 3$ Credits

This course investigates marketing trends and changing practices in the customer service sector. It focuses on developing and managing cost-effective, value-adding service strategies, policies, and procedures to enhance consumers' experiences with business organizations. The course stresses effective face-to-face and/or electronic communication strategies with both external and internal customers in a variety of business settings. It also covers recent advances in customer relationship management (CRM) strategies, data mining, and Website customer service activities. Recommendation: MKTG 2050 (or concurrent registration). Assessment score placement in RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of " $C$ " or higher; assessment score placement in ENGL 1021 or completion of ENGL 0090 with a grade of " $C$ " or higher.

## Entrepreneurship Fundamentals MKTG $2005 \quad 3$ Credits

This course emphasizes basic elements that potential entrepreneurs must consider in preparation for launching a new business venture. It focuses on the tasks involved with the launch of a business, product, and /or service -- financial planning, market planning and research, advertising, and project management. Students will also investigate ethics, succession planning, and other essentials needed to create a unique business plan. It stresses innovation in class projects and assignments related to the student's knowledge and expertise in a particular interest area with business potential. Students present their completed projects to the class at semester's end. Recommendation: MKTG 2050 and MKTG 2080 (or BMGT 1020).

## Workplace Leadership MKTG 2010

## 3 Credits

This course includes essential elements of leadership in a workplace environment. Many businesses today operate with a flatter management structure which requires collaboration across teams and functions. To succeed, todays leaders must influence those around them, without relying on
vested authority. Topics include leadership styles, team-building, motivation, delegation, morale (climate and culture-building), and employee retention in a marketing environment. Students will practice making business decisions, executing those decisions, accepting accountability for the outcomes, including the need to re-evaluate decisions and make adjustments as needed to meet company goals and objectives. Recommendation: Assessment score placement in RDNG 1000, or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher.

## Negotiation Strategies MKTG 2020

## 3 Credits

Negotiating is a fundamental skill that can be learned. This course introduces students to the techniques and tactics employed by sales professionals in a variety of business transactions. The skill of principled negotiation is used regularly by people engaged in business but is often overlooked by the same people in the conduct of their daily lives where it can influence and facilitate a number of important human activities. Recommendation: Assessment score placement in RDNG 1000 or completion of RDNG 0090 with a grade of " $C$ " or higher; assessment score placement in ENGL 1021 or completion of ENGL 0090 with a grade of "C" or higher.

## Trend Tracking and Futuring MKTG 2035 <br> 3 Credits

This course focuses on trends and the directions in which marketing concepts, production, and outputs seem to be moving. Sometimes quickly and sometimes slowly, trends traverse the marketplace in response to demand and consumer acceptance. Trend tracking and futuring include learning from the past and looking to the future. Timely anticipation and response to demand are critical to competitiveness and profitability. Recommendation: MKTG 2050. Assessment score placement in RDNG 1000, or completion of RDNG 0900 OR RDNG 0950 with a grade of $C$ or higher.

## Principles of Marketing MKTG 2050

## 3 Credits

This course introduces current marketing theories and practices that bring ideas, products, and services to targeted consumers. In a consumer-driven marketplace, the successful conception, pricing, promotion and distribution of products and services depends on scanning the competitive environment;
analyzing the constraints affecting marketing decision making; and identifying profitable, effective marketing strategies and tactics. This course provides the foundation for more specialized courses in business and marketing. Recommendation: CAPL 1010 and BMGT 1020. Assessment score placement in RDNG 1000 or above, or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher.

## Web and Mobile Marketing MKTG 2055 <br> 3 Credits

This introductory course exposes students to the basic tools for electronic marketing in the business-to-consumer (B2C) marketplace or business-to-business (B2B). Students will explore e-commerce, e-business, web and mobile marketing and develop an e-marketing plan. Topics include basic e-commerce processes and translating marketing strategies into accessible, attractive, and profitable options for consumers. Prerequisite: MKTG 2050 Recommendation: CAPL 1050 and CAPL 1053. Assessment score placement in RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher; assessment score placement in ENGL 1021 or completion of ENGL 0090 with a grade of C or higher.

## Relationship Selling MKTG 2060 <br> 3 Credits

This course provides comprehensive coverage of contemporary professional selling with an emphasis on a trust-based relationship sales philosophy. Topics include an overview of relationship selling, methods of building effective communication skills and an exploration of sales careers. Students will study techniques to initiate customer relationships and better understand the buyer's needs, while gaining trust and understanding and establishing solid relationships. Students will also plan sales dialogues and presentations. Recommendation: MKTG 2050 or BMGT 1020. Assessment score placement in RDNG 1000 or above, or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher.

## Advertising and Sales Promotion MKTG 2063 3 Credits

This course introduces the basics of sales promotion and advertising as elements of effective sales campaigns that stimulate consumer demand and increase sales of products and services. Under the umbrella of the promotional mix, students will create, discuss and analyze advertisements and promotional pieces. In addition, they will
select media as they devise coordinated promotional campaigns employing several promotional tools. Prerequisite: MKTG 2050. Recommendation: Assessment score placement in RDNG 1000 or above, or completion of RDNG 0900 OR RDNG 0950 with a grade of " $C$ " or higher.

## Principles of Social Media Marketing MKTG 2065 <br> 3 Credits

This course will focuses on social media marketing in business including the use of various tools and social media marketing strategies to improve communication and brand messaging between a business or organization and various target markets and stakeholders. Topics will include search engine optimization, increasing web traffic, tools and services such as Twitter, Facebook and other social networking sites, mobile marketing, YouTube, blogging, affiliate advertising, etc. to market products/services to target audiences. The course will focus on strategies for using social media as well as best practices, communication methods and various options of choice. Students will address ethical issues as well as day- to-day management and implementation of social media marketing activities. Recommendation: MKTG 2050. Assessment score placement in RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of " $C$ " or higher and basic computer skills.

## Retailing Principles and Practices MKTG 2080 3 Credits

This course introduces students to retailing strategies that include an examination of various types of retailing options available to consumers today. It addresses "brick-and-mortar" retail stores in conventional shopping areas as well as "bricks-and clicks" where store retailers also maintain an online presence. Topics include: consumer behavior, store organization, store and non-store retailing trends, technological advances for logistics, inventory control, and customer service delivery. Recommendation: Assessment score placement in RDNG 1000 or above, or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher.

## Marketing Internship MKTG 2780

## 1-6 Credits

The internship experience provides an opportunity for marketing majors to work beside marketing practitioners in the field. Students select areas of interest to pursue in the internship setting-sales, advertising,

## 7 Course Descriptions


sales promotion, visual merchandising, special events, customer service, and sales force supervision. Students often intern with their current employers but may also work as unpaid interns or volunteers for organizations that they wish to explore. Prerequisite: Last semester before graduation and instructor consent.

## Mathematics

## Basic Mathematics MATH 0010

## 3 Credits

This course is designed to improve the student's computational skills with whole numbers, fractions, decimals, percents, and signed numbers. A major emphasis of this course is to be able to perform these calculations by hand. Students will also learn to solve simple equations. Offered F, S, SS.

## Basic Mathematics Review MATH 0015 <br> 2 Credits

This course is designed to provide an opportunity for a concentrated review of whole numbers, fractions, decimals, percent, and signed numbers. A major emphasis of this course is to be able to perform these calculations by hand. Students will also be able to solve simple equations. Prerequisite: Assessment score placement into MATH 0010 and a score of 50-75 on the Elementary Algebra Test.

## Introductory Algebra with Geometry MATH 0030 <br> 5 Credits

This course is a developmental course for students needing beginning algebra and geometry. Algebra topics include algebraic operations and properties of natural numbers, integers, rational numbers, and real numbers; solving linear equations and inequalities; applications of linear equations and inequalities; operations with polynomials; factoring; solving quadratics by factoring; graphing linear equations; and integer exponents. Geometry topics include lines and angles; angle pairs; parallel and perpendicular lines; triangles, quadrilaterals, circles, and sectors; area and perimeter; prisms, pyramids, cylinders, and cones; and surface area and volume. Prerequisite: Math 0010 with a grade of " $C$ " or higher, or assessment score placement in Math 0030.

## Algebra Fundamentals for General Education MATH 0060 <br> 5 Credits

This course is a developmental course for students needing an appropriate algebra background for statistics and liberal arts mathematics courses. Topics include: algebraic operations and properties of real numbers; solving linear and absolute value equations and inequalities; applications of linear equations and inequalities; slope, intercepts, and equations of lines. Other topics covered: the properties of exponents, operations with polynomial, rational, and square root expressions; solving nonlinear equations including quadratic, rational, and
square root equations; graphing linear and non-linear functions; set theory; sequences and summations; and systems of linear equations. Use of graphing technology, such as the TI-84, is required (see instructor for acceptable models). Students intending to take MATH 1061, College Algebra I, should not take MATH 0060. Offered F, S, SS. Prerequisite: Assessment score placement in MATH 0060.

## Intermediate Algebra MATH 0070

## 5 Credits

This course is equivalent to a second course in high school algebra. Topics include polynomials and rational expressions and equations; systems of linear equations; linear, absolute value, polynomial, and rational inequalities; rational exponents, radicals, and complex numbers; linear, quadratic, exponential, and logarithmic functions; and the binomial theorem. A graphing calculator is required. Instruction will be provided in the use of the TI-83/TI-84 calculator. Offered F, S, SS. Prerequisite: MATH 0030 with a grade of "C" or higher, or assessment score placement in MATH 0070.

## Introductory Trigonometry MATH 0090

## 2 Credits

This course is designed for students who have never had a course in trigonometry or who need to review trigonometry before attempting college level trigonometry. Topics include definitions of trigonometric functions, solving right triangles, laws of sines and cosines, trigonometric identities, trigonometric equations, radian measure, graphs of trigonometric functions. MATH 0090 may be taken concurrently with MATH 1061. A graphing calculator is required. Instruction will be provided in the use of the TI-83/TI-84 calculator. Prerequisite: MATH 0070 with a grade of "C" or higher, or assessment score placement in MATH 0090.

## Medical Dosages Calculations MATH 1000 <br> 1 Credit

This course is designed for students who are currently enrolled in or planning to enroll in the nursing or other health programs. Topics include metric, apothecary, and household systems; conversion between systems; measuring oral medication; parenteral therapy; preparation of solutions and pediatric dosages. Offered F, S, SS. Prerequisite: MATH 0010 with a grade of " $B$ " or higher, or assessment score placement in MATH 1000.

## Applied Mathematics MATH 1015

5 Credits
This course integrates algebraic, geometric and trigonometric topics and their technical application. These topics include scientific and engineering notation, precision and accuracy, linear and non-linear equations, systems of equations, functions, plane figure and solid figure geometry, trigonometric functions, right triangle trigonometry, vectors, exponential and logarithmic functions, and statistics. The primary purpose is to help prepare students for technical and scientific careers. A graphing calculator is required. Instruction will be provided in the use of the TI-83/TI-84 calculator. Offered S. Prerequisite: MATH 0030 with a grade of "C" or higher, or assessment score placement in MATH 1015. Recommendation: Assessment score placement in RDNG 1000 or above, or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher.

## Statistics MATH 1025 MnTC: Goal 04

This course is an algebra-based statistics course that introduces the basic concepts involved in collecting, analyzing, and interpreting data. Topics include graphs, frequency distributions, measures of central tendency and variation, probability, probability distributions, expected value, sampling distributions, normal distribution, confidence intervals, hypothesis testing for one and two population means and proportions, chi square, linear regression, and correlation. This course includes analysis and interpretation of data using the Minitab software package and using the TI-83/TI-84 calculator. Students are required to have a $\mathrm{TI}-83$ or a $\mathrm{TI}-84$ calculator. Prerequisite: Assessment score placement in MATH 1025 or higher, or MATH 0060 with a grade of C or higher, or MATH 0070 with a grade of C or higher, or MATH 1030 or above with a grade of C or higher. Recommendation: Assessment score placement in RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher.

## Mathematics for the Liberal Arts MATH $1030 \quad 3$ Credits MnTC: Goal 04

This course is designed for liberal arts and humanities majors whose program does not require statistics, college algebra, or precalculus. Topics include problem-solving strategies, logical systems, mathematics in culture and society, mathematical modeling
and applications, and finite mathematics. Not intended as a prerequisite for other mathematics courses. Use of a scientific or graphing calculator is required (see instructor for acceptable models). Prerequisite:
Assessment score placement in MATH 1030 or higher, or MATH 0060 with a grade of C or higher, or MATH 0070 with a grade of C or higher, or MATH 1025 or above with a grade of C or higher. Recommendation: Assessment score placement in RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher.

## Finite Mathematics MATH $1050 \quad 3$ Credits MnTC: Goal 04

This is an introductory course providing examples of how mathematics is applied in business, science, and social science. Topics include applications of linear equations, matrix algebra, linear programming, mathematics of finance, counting techniques, probability, and Markov chains. Use of a scientific or graphing calculator is required (see instructor for acceptable models). Offered S. Prerequisite: MATH 0070 with a grade of " C " or higher, or assessment score placement in MATH 1050. Recommendation: Assessment score placement in RDNG 1000 or above, or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher.

## College Algebra I <br> MATH $1061 \quad 4$ Credits MnTC: Goal 04

This is a college-level algebra course. Topics include linear, quadratic, polynomial, rational, radical, exponential, logarithmic, and absolute value functions, graphs and equations. Course content will also cover linear, quadratic, polynomial, rational, and absolute value inequalities; systems of linear equations and inequalities, including basic matrix methods; data analysis, regression, and modeling. A graphing calculator is required. Instruction will be provided in the use of the TI-83/TI-84 calculator. Note: MATH 1061 College Algebra I is the prerequisite for MATH 1070 Survey of Calculus. MATH 1061 College Algebra I is also one of the prerequisites for MATH 1062 College Algebra II with Trigonometry which is the prerequisite for MATH 1081 Calculus I. Prerequisite: Assessment score placement in MATH 1061, or completion of MATH 0070 with a grade of C or higher. Recommendation: If MATH 0070 was completed with a grade of C or higher, then MATH 0090 is an additional recommendation for MATH 1062. Take MATH

0090 prior to or concurrently with MATH 1061. If initial assessment score placement was into MATH 1061, then MATH 0090 is NOT a prerequisite for MATH 1062. Assessment score placement in RDNG 1000, or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher.

## College Algebra II with Trigonometry MATH 1062 5 Credits MnTC: Goal 04

This course is the second course of a two-semester sequence for students planning to take MATH 1081 Calculus I. Topics include right triangle trigonometry, trigonometric functions of any real number, graphs of trigonometric functions, trigonometric equations and identities, and inverse trigonometric functions. Course content will also cover systems of non-linear equations and inequalities, sequences and series, parametric equations, polar coordinates, conic sections, and basic vector operations. A graphing calculator is required. Instruction will be provided in the use of the TI-83/ TI-84 calculator. Prerequisite: Assessment score placement into MATH 1062 or higher, or MATH 1061 with a grade of $C$ or higher. Recommendation: Assessment score placement in RDNG 1000, or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher.

## Survey of Calculus <br> MATH 1070 MnTC: Goal 04

4 Credits
This course is designed for those who need only an introduction to calculus. Topics include limits and continuity, derivatives, differentials, indefinite integrals, definite integrals, exponential and logarithmic functions, techniques of integration, applications of differential and integral calculus, integral tables, functions of two variables, partial derivatives, maxima and minima, and applied problems. A graphing calculator is required. Instruction will be provided in the use of the TI-83/TI-84 calculator. Students planning to take more than one semester of calculus should begin with MATH 1081. Offered S. Prerequisite: MATH 1061 with a grade of "C" or higher, or assessment score placement in MATH 1070. Restriction: Credit will not be granted for both MATH 1070 and MATH 1081. Recommendation: Assessment score placement in RDNG 1000 or above, or completion of RDNG 0900 OR RDNG 0950 with a grade of " C " or higher.

## 7 Course Descriptions

## Single Variable Calculus I <br> MATH 1081

MnTC: Goal 04
This is the first course in the two-semester sequence of Single Variable Calculus. Topics include functions of a single variable, limits and continuity, differentiation, antidifferentiation, and integration of algebraic and transcendental functions with associated applications in each area. A graphing calculator is required. Instruction will be provided in the use of the TI-83/ TI-84 calculator. Offered F, S. Prerequisite: MATH 1062 with a grade of "C" or higher, or assessment score placement in MATH 1081. Restriction: Credit will not be granted for both MATH 1070 and MATH 1081. Recommendation: Assessment score placement in RDNG 1000 or above, or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher.

## Single Variable Calculus II <br> MATH $1082 \quad 5$ Credits MnTC: Goal 04

This course is the second course of the two-semester sequence of single variable calculus. Topics include applications of the definite integral, techniques of integration, numerical integration, improper integrals, infinite series, elementary differential equations, parametric curves, and polar curves. A graphing calculator is required. Instruction will be provided in the use of the TI-83/TI-84 calculator. Prerequisite: MATH 1081 with a grade of "C" or higher. Recommendation: Assessment score placement in RDNG 1000 or above, or completion of RDNG 0900 OR RDNG 0950 with grade of " $C$ " or higher.

## Probability and Statistics with Calculus MATH 20254 Credits

This calculus-based course is intended for students majoring in statistics, mathematics, computer science, and some engineering programs. Topics include descriptive statistics, probability, probability distributions for discrete and continuous random variables, joint probability distributions, point estimation, and inferences based on one and two samples. Analysis and interpretation of data using a software package and/or the TI-83/84 series calculator, is required. Prerequisite: MATH 1082 with a grade of C or higher. Recommendation: Assessment score placement in RDNG 1000 or above, or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher.

## Multivariable Calculus

 MATH 20815 Credits
This course is intended for students majoring in chemistry, engineering, physics, science, mathematics, mathematics education, and computer science. Topics include vectors in 3-space, vector functions, functions of two or more variables, partial derivatives, and the chain rule; applications to max/min problems, double and triple integrals; change of variable; polar and spherical coordinates; integration on curves and surfaces; vector fields and the theorems of Green, Gauss, and Stokes. Use of a 3-D graphing calculator, such as a TI-89, is required. Limited use of a computer algebra system will be made. Offered F, S. Prerequisite: MATH 1082 with a grade of "C" or higher, or consent of instructor. Recommendation: Assessment score placement in RDNG 1000 or above, or completion of RDNG 0900 OR RDNG 0950 with a grade of " $C$ " or higher.

## Linear Algebra and Differential Equations MATH 2082

5 Credits
This course is intended for students majoring in chemistry, engineering, physics, science, mathematics, mathematics education, and computer science. This is a basic course in Differential Equations including ordinary differential equations, matrix formulation of linear systems, the nonhomogeneous case, variation of parameters, and undetermined coefficients. The companion topics from Linear Algebra include vector spaces, independence, bases, linear transformations, and eigenvectors. Use of a 3-D graphing calculator, such as a TI-89, is required. Limited use of a computer algebra system will be made. Offered S. Prerequisite: MATH 1082 with a grade of "C" or higher, or consent of instructor. Recommendation: Assessment score placement in RDNG 1000 or above, or completion of RDNG 0900 OR RDNG 0950 with a grade of " $C$ " or higher.

## Medical Assistant

## Laboratory Techniques I MEDA 1001

5 Credits
This course is designed for persons interested in pursuing a career in medical assisting. It introduces diagnostic procedures routinely performed in the physicians office laboratory, including the collection and preparation of appropriate specimens, federal guidelines,
safety, quality control, electrocardiography (EKG), microbiological testing and routine urinalysis. The student will focus on identifying ways to prevent transmission of disease, and the legal and ethical responsibilities for the health care professional. Students must be able to perform physical tasks to complete course requirements. Prerequisite: HLTH 1001 with a grade of C or higher and BIOL 1024 and concurrent enrollment in MEDA 1011.

## Laboratory Techniques II MEDA 1002

5 Credits
This course is a continuation of physician's office laboratory procedures, including phlebotomy, hematology procedures, blood chemistries, and specialty laboratory tests. Students will prepare patients and assist the physician with office/ambulatory surgery followed by sanitizing, disinfecting and sterilizing surgical/office instruments and equipment. Students must be able to perform physical tasks to complete course requirements. Prerequisite(s): MEDA 1001 and 1011 with a grade of C or higher and concurrent enrollment in MEDA 1012.

## Clinical Assisting I MEDA 1011

 5 CreditsThis course is designed for persons interested in pursuing a career in medical assisting. This course will address the medical assisting profession, healthcare settings, history of medicine, coping skills and the therapeutic approach to life threatening illnesses.
The student will perform vital signs, chart documentation, medical histories, patient draping and positioning, prepare patients for physical examination, and apply skeletal supportive devices. Topics also include the importance of therapeutic communication, professionalism and cultural diversity. Students must be able to perform physical tasks to complete course requirements. Prerequisite: HLTH 1001 with a grade of C or higher and BIOL 1024 and concurrent enrollment in MEDA 1001.

## Clinical Assisting II MEDA 1012

## 5 Credits

This course is designed for persons interested in pursuing a career in Medical Assisting. Students will prepare patients for physical and medical specialty examinations and simulate assisting healthcare provider with examinations of the various body systems. Content will also cover the importance of nutrition, exercise and healthy living. Students must be able to perform physical tasks to complete course requirements. Prerequisite(s):

## Mathematics Department <br> Course Flow Chart

Start where your assessment test places you.
See a counselor, your advisor, or the mathematics department for assistance.


## 7 Course Descriptions

MEDA 1001 and MEDA 1011 with a grade of $C$ or higher and concurrent enrollment in MEDA 1002. MN Human Services background study with no restrictions. Current CPR certification required either through American Heart Association-(BLS for Healthcare Providers), or American Red Cross-(Professional Rescuer).

## Administrative Procedures for Medical Assistants MEDA 1020 <br> 4 Credits

This course introduces common manual and computerized office procedures associated with a clinical practice. Topics include reception and telephone management, appointment scheduling, mail processing, filing, banking, bookkeeping, payroll, ICD-9-CM and CPT coding, insurance claims processing, and health care law and ethics. The student will complete a computerized simulation of a medical practice integrating the above topics. Prerequisite: CAPL 1010 or CSCI 1020 with a grade of C or higher, and HLTH 1001 with a grade of C or higher. Assessment score placement in RDNG 1000, or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher and assessment score placement in MATH 0030 or above, or completion of MATH 0010 with a grade of C or higher.

## Medication Administration Techniques MEDA 1030 3 Credits

This course focuses on the principles of pharmacology and administration of medications relating to the medical assisting profession. Course content includes the classification, use, action, side effects, contraindications, and routes of administration of drugs most commonly administered and prescribed in the medical office. Emphasis is placed on the medical assistants role in the calculation, preparation, administration, and documentation in the patients medical record of various medications. Students will be required to show competency by returned demonstrations on all skills taught in this course. Prerequisite: Assessment score placement in MATH 0030 or above, or completion MATH 0010 with a grade of C or higher, assessment score placement in RDNG 1000 , or completion of RDNG 0900 or RDNG 0950 with a grade of C or higher, HLTH 1001 with a grade of C or higher, and completion of BIOL 1024. Must be a current Medical Assistant, a current MEDA major, or instructor consent. Recommendation: MATH 1000

## Medical Assistant Clinical Externship MEDA 1780 6 Credits

This course provides students with learning experiences in administrative, clinical, and laboratory procedures through performance in selected physicians offices and clinics. The 300 hour externship is unpaid. Students must be able to perform physical tasks to complete course requirements. Prerequisite(s): All program requirements must be completed prior to externship. Instructors signature required. MN Human Services background study with no restrictions. Current CPR certification required either through American Heart Association- (BLS for Healthcare Providers), or American Red Cross(Professional Rescuer). Recommendation(s): The student should obtain their Limited Radiographer X-ray Operators License through the State of Minnesota.

## Independent Study MEDA 1790

## 3 Credits

This elective credit course emphasizes the students independent search for advanced knowledge as well as additional hands-on skills beyond course offerings. The course is designed to provide students with the opportunity for study on an in-depth topic designed in collaboration with their faculty member. The student and instructor will devise an individual formal plan of study to satisfy credit workload requirements within a one-semester timeframe. Students may apply and learn a variety of medical assistant topics and technical skills. Prerequisite: Consent of instructor and dean, MEDA 1001 \& MEDA 1011.

## Music

## Century College Choir MUSC 1000

## 1 Credit

The Century College Choir is a vocal ensemble that sings a variety of choral literature. Concerts are presented each semester. No previous singing experience or audition is required. Some special evening rehearsals are required as scheduled by the director. Students may take this course for academic credit up to four times. Note: Registration for choir may be done as an activity for academic credit or through Continuing Education.

## Century Chamber Singers MUSC 1005

1 Credit
Designed as an advanced opportunity in choral performance, the Century Chamber Singers is open to students and community musicians with previous singing experience. A wide variety of music is performed and at least one major choral concert is presented each semester. Some special evening rehearsals are required as scheduled by the director. Registration for Chamber Singers may be done as an activity for academic credit or through Continuing Education. Students may take this course for academic credit up to four times. Prerequisite(s): An audition or an interview with the director is required. Concurrent enrollment in MUSC 1000 or consent of instructor.

## Century Chamber Orchestra MUSC 1010 <br> 1 Credit

The Century Chamber Orchestra rehearses and performs a wide variety of orchestral music in a series of concerts during the academic year. The primary object of the ensemble is to develop the musicians' ensemble playing ability and their understanding of orchestral technique and literature. The ensemble is open to musicians with previous performing experience. Students may take this course for academic credit up to four times. Note: Registration for orchestra may be done as an activity for academic credit or through Continuing Education. Additional rehearsal time may be scheduled for the week of each performance. Prerequisite: An interview and audition with the instructor.

## Century Concert Band MUSC 1015

## 1 Credit

The Century Concert Band is a musical ensemble dedicated the study and performance of quality band literature. The music performed is from a wide variety of styles ranging from the Baroque period to the music of today. The objective of this course is to expand students' understanding and enjoyment of music through the performance and study of music of various periods and styles. The membership in the band includes students and community members. Students may take this course for academic credit up to four times. Note: Registration for band may be done as an activity for academic credit or through Continuing Education. Prerequisite: Must have prior experience playing a wind or percussion instrument.

## Century Guitar Ensemble MUSC 1018

## 1 Credit

The Century Guitar Ensemble rehearses and performs a variety of guitar ensemble music in concerts during the academic year. The primary objective of the ensemble is to develop the musician's ensemble playing ability and their understanding of classical guitar technique and ensemble literature. Students must provide their own nylon string classical guitar. Students may take this course for academic credit up to four times. Note: Registration for guitar ensemble may be done as an activity for academic credit or through Continuing Education. Additional rehearsal time may be scheduled for the week of each performance. Prerequisite: An interview and audition with the instructor. Recommendation: Ability to read standard notation on the guitar.

## Century Piano Ensemble MUSC 1019

## 1 Credit

Students in the Century Piano Ensemble rehearse and perform a wide variety of piano ensemble music in concerts during the academic year. The primary objective of the ensemble is to further develop each musician's ensemble playing, collaborative skills, and performing skills through the study of the diverse repertoire for piano ensemble. Students may take this course for academic credit up to four times. Note: Registration for piano ensemble may be done as an activity for academic credit or through Continuing Education. Additional rehearsal time may be scheduled for the week of each performance. Prerequisite: An interview and audition with the instructor. Recommendation: Sight reading skills and the ability to perform on the piano at the intermediate level or higher.

## Beginning Group Piano <br> MUSC 1020

2 Credits
This course is group instruction for students with little or no previous keyboard experience. Basic skills in sightreading, chording, harmonization, and technique are learned. Students must practice outside of class time to successfully complete this course.

## Century Jazz Combo

 MUSC $1021 \quad 1$ CreditThe Century Jazz Combo rehearses and performs a wide variety of music during the academic year. The primary object of the ensemble is to develop the musicians' improvisation skills and ensemble playing ability, as well as their understanding of jazz technique and literature. The ensemble is
open to musicians with previous performing experience. Students may take this course for academic credit up to four times. Note: Registration for jazz combo may be done as an activity for academic credit or through Continuing Education. Additional rehearsal time may be scheduled for the week of each performance. Prerequisite: An interview and audition with the instructor.

## Intermediate Group Piano MUSC 10252 Credits

This course is group instruction for students with some piano background and for those who have successfully completed Beginning Group Piano. Students must practice outside of class time to successfully complete this course.

## Class Piano for Music Majors MUSC 1026 2 Credits

This course is primarily intended for students pursuing the AFA degree in music. This course provides group instruction to develop basic keyboard and musicianship skills for students enrolled in Music Theory, Ear Training, and/or who have experience reading and performing music. Skills to be developed are sight reading, technique, harmonization, transposition, improvisation, and performing simple piano literature. Students must practice outside of class time to successfully complete this course. Recommendation: Concurrent enrollment in MUSC 1061/1071 or 2061/2071.

## Fundamentals of Music <br> MUSC 1030 <br> MnTC: Goal 06

Fundamentals of Music is an introduction to basic music theory. The course covers concepts such as tonality, rhythm, scales and harmony, and explores various musical styles such as classical, popular, blues, jazz and folk. This course serves as an introduction to music theory for general students or for those considering a career in music.

## Enjoyment of Classical Music MUSC 1035 3 Credits MnTC: Goal 06

Enjoyment of Classical Music is a survey of Western classical music from the Middle Ages in Europe to the present in Europe and North America. The course explores various musical styles and forms, including orchestral, choral and chamber music. There is an emphasis on focused listening, with the purpose of enhancing the ability to understand and appreciate music. Note: Attendance at a
classical concert outside of class time may be required.

## Popular Music in American Society MUSC 1045 3 Credits MnTC: Goals 06 \& 07

This course surveys the history of American popular music from the 1950s to the present. The course examines the development of various music styles, such as rock and hip-hop, and explores the relationship between cultural trends and popular music. Notable recordings and musicians will be studied.

## Introduction to Music Notation Software MUSC 1050 1 Credit

This course introduces the basics of music notation software and applies this knowledge to various musical activities, using industrystandard music notation software. Activities include creating professional-quality written scores, generating MIDI files for sequencing and editing, combining music with other media, and surveying other music software programs. Prerequisite: Basic note-reading ability and experience with computers

## Music Industry Topics and Careers MUSC 1055 3 Credits

This course is an introduction to the music industry. Topics include publishing, recording, arts management, copyright issues and the impact of technology on the music industry. Marketing strategies, entrepreneurial skills and career opportunities are also covered. This course is designed for music majors and students considering a career in the music industry.

## Music Theory I <br> MUSC 1061 <br> 3 Credits

This course is designed to help the music student develop the analytical and compositional skills necessary for a more complete understanding of music. The course focuses on melody, harmony, rhythm and musical structure. Topics include notation, scales and modes, keys, intervals and transposition, chords, cadences, non-chord tones and melodic structure. Students will apply music theory concepts by analyzing music examples and by writing short music compositions. Prerequisite: Concurrent enrollment in MUSC 1071 or consent of instructor. Recommendation: Students should be able to read music at a basic level.

## 7 Course Descriptions

## Music Theory II MUSC 1062

## 3 Credits

This course is the continuation of Music Theory I (MUSC 1061). The course focuses on music texture, two- and four-part voice leading, harmonic progressions, a variety of seventh chords, and modulation. Students will apply music theory concepts by analyzing music examples and by writing music compositions. Prerequisite: MUSC 1061; concurrent enrollment in MUSC 1072, or consent of instructor.

## Ear Training I MUSC 1071

## 2 Credits

This course is designed to help the music student strengthen their musical abilities through focused listening and sight singing. It is intended for all students who desire a deeper understanding of music. Topics include ear training and sight singing on basic melodies in major and minor keys, and learning to recognize, write and sing basic melodic and rhythmic examples and harmonic progressions. This course applies many of the concepts learned concurrently in Music Theory I (MUSC 1061). Prerequisite: Concurrent enrollment in MUSC 1061 or consent of instructor.

## Ear Training II <br> MUSC $1072 \quad 2$ Credits

This course is the continuation of Ear Training I (MUSC 1071). The course is designed to further help the music student strengthen their musical abilities through focused listening and sight singing. Topics include ear training and sight singing on advanced melodies in major and minor keys, and learning to recognize, write and sing advanced melodic and rhythmic examples and harmonic progressions. This course applies many of the concepts learned concurrently in Music Theory II (MUSC 1062). Prerequisite: Concurrent enrollment in MUSC 1062 or consent of instructor.

## Private Instrumental MUSC 2011

## 1 Credit

This course is individual instruction in learning to play a woodwind, brass, string, or percussion instrument. The student's needs and interests will determine the selection of music literature. Students may repeat this course up to four times and receive academic credit.

## Private Instrumental-Advanced MUSC 2012 <br> 2 Credits

This course is individual instruction on a woodwind, brass, string, or percussion

instrument for the advanced player. The students progress will be reviewed at the end of each semester by the music faculty (jury). Students may take this course for academic credit up to four times. Prerequisite: Consent of instructor.

## Beginning Group Guitar MUSC 2020

## 2 Credits

Group instruction for students with little or no previous guitar instruction. Basic skills in chords, strumming, finger picking, harmony/ theory, improvisation, music reading and guitar technique. Practice outside class is necessary for completion of this course. Students must provide their own guitar. Offered F, S. Restriction: Students already proficient in the areas listed in the course description should register for individual instruction.

## Private Guitar MUSC 2021

## 1 Credit

This course is individual instruction in learning to play the guitar. The student's needs and interests will determine the selection of music literature. Students may repeat this course up to four times and receive academic credit.

## Private Guitar-Advanced MUSC 2022

## 2 Credits

This course is the study of the guitar for the advanced player. Depending on the students needs and interests, this course will have a Classical, Jazz, or Rock and Blues emphasis. The students progress will be reviewed at the end of each semester by the music faculty (jury). Students may take this course for academic credit up to four times. Prerequisite: Consent of instructor.

## Private Piano MUSC 2031

## 1 Credit

This course is individual piano instruction for elective credit. The focus of the course is on the development of elementary and intermediate keyboard skills with an emphasis on technique, theory and interpretation of musical styles. The student's needs and interests will determine the selection of music literature. Students may repeat this course up to four times and receive academic credit.

## Private Piano-Advanced MUSC 2032

## 2 Credits

This course focuses on the development of advanced keyboard skills. Standard classical literature from the Baroque, Classical, Romantic, Impressionist, or Modern periods will be studied. The students progress will be reviewed at the end of each semester by the music faculty (jury). Students may take this course for academic credit up to four times. Prerequisite: Consent of instructor..

## Private Voice MUSC 2041

## 1 Credit

This course is individual instruction for elective credit. The emphasis of this course is on proper voice function in speaking and singing through basic techniques including correct posture, breath management, free tone production, proper diction, and expression. The student's needs and interests will determine the selection of music literature. Students may repeat this course up to four times and receive academic credit.

## Private Voice-Advanced MUSC 2042

2 Credits
This course focuses on vocal development for the advanced singer. A variety of vocal literature will be studied. The students progress will be reviewed at the end of each semester by the music faculty (jury). Students may take this course for academic credit up to four times. Prerequisite(s): Consent of instructor.

## World Music <br> MUSC 2051 <br> 3 Credits MnTC: Goals 06 \& 08

This course introduces students to traditional music from a variety of cultures, such as India, China, Japan, Indonesia, Ghana, Zimbabwe, and the Middle East. The course also examines the relationships between American popular music and non-Western societies. There is an emphasis on focused listening, with the purpose of enhancing the ability to appreciate and understand music.

## Advanced Music Theory I MUSC 2061 <br> 3 Credits

This course is the continuation of Music Theory II (MUSC 1062). It is an advanced study of chromatic harmony including borrowed chords, Neapolitan 6th chords, augmented 6th chords, extended chords, altered dominants, and chromatic mediants. Students will apply advanced music theory concepts by analyzing music examples and by writing music compositions. Prerequisite: MUSC 1062; concurrent enrollment in MUSC 2071, or consent of instructor.

## Advanced Music Theory II MUSC 2062 <br> 3 Credits

This course is the continuation of Advanced Music Theory I (MUSC 2061). It is an advanced study of form in music including binary and ternary form, two-voice 18th Century counterpoint, the fugue, variation technique, sonata form, and rondo form. Students will apply advanced music theory concepts by analyzing music examples and by writing music compositions. Prerequisite: MUSC 2061; concurrent enrollment in MUSC 2072, or consent of instructor.

## Advanced Ear Training I MUSC 2071 <br> 2 Credits

This course is a continuation of Ear Training II (MUSC 1072). It is designed to help the music student strengthen their advanced musical abilities through focused listening and sight singing. Topics include advanced
melodies (chromaticism, non-harmonic tones), advanced rhythms (syncopation, asymmetrical rhythms, dotted rhythms) and advanced chord progressions (7th chords, applied dominants, modulation). This course applies many of the concepts learned concurrently in Advanced Music Theory I (MUSC 2061). Prerequisite: Concurrent enrollment in MUSC 2061 or consent of instructor.

## Advanced Ear Training II MUSC 2072 <br> 2 Credits

This course is the continuation of Advanced Ear Training I (MUSC 2071). It is a continuation of the advanced study of focused listening and sight singing. Topics include advanced melodies (suspensions), advanced rhythms (double dotting, polyrhythms, meter shifts), advanced chord progressions (diminished 7th chords, Neapolitan 6th chords, augmented 6th chords) and extended harmony. This course further applies concepts learned in Advanced Music Theory I (MUSC 2061), and learned concurrently in Advanced Music Theory |I (MUSC 2062). Prerequisite: Concurrent enrollment in MUSC 2062 or consent of instructor.

## Music History I: Antiquity Through 1800 MUSC $2081 \quad 3$ Credits

This course explores the development of Western classical music from antiquity through 1800. Students will examine the lives and works of notable composers, the changing role of music in Western civilization, the advancement of music theory, and the development of music styles and genres. Prerequisite: Completion of or concurrent enrollment in MUSC 1061 and MUSC 1071, or consent of instructor.

## Music History II: 1800 Through Present

 MUSC 20823 CreditsThis course will study the development of Western classical music from 1800 to the Present. Students will examine the lives and works of notable composers, the changing role of music in Western civilization, the advancement of music theory, and the development of music styles and genres. Prerequisite: Completion of MUSC 2081 with a grade of "C" or higher, or consent of instructor. Restriction: Open only to students who are able to read music.

## Nursing

## Clinical Application for NURS 1020 NURS 10254 Credits

This course applies theoretical concepts to nursing practice in individual, small group and large group settings. The therapeutic nursing interventions include medication administration, physical assessment, sterile technique, catheterization, wound care, enteral tubes, and intravenous fluid administration. The practicum experiences include contact with patients across the lifespan in a variety of settings such as nursing lab, long term care, acute care, ambulatory clinics and the community. Prerequisite: Nursing Assistant course or equivalent, concurrent enrollment in NURS 1020, Healthcare Provider CPR certification, background clearance, and required immunizations.

## Directed Study in Nursing NURS 1028

Credits
This course provides opportunity for directed study in nursing theory and/or lab and clinical for nursing students in the classroom, long term care, community, or acute care settings. The course content is individualized based on an assessment of each student's learning needs. Focus of the course will be demonstration of competency in identified learning goals related to safe, holistic nursing care. Prerequisite: Admission to the Nursing Program and consent of the Nursing Program Director.

## Nursing Intervention I: Health, Healing and Holism and the Role of the RN NURS 1030 4 Credits

This course provides students with theoretical content related to acute, chronic, and terminal health conditions of the respiratory, immune, renal, endocrine, neurological and musculoskeletal systems, cancer and infectious diseases. The course includes exploration of patterns of health and wellness for patients within their environment. Course emphasis includes critical thinking in the application and analysis of therapeutic nursing interventions, pain management, and levels of prevention in relation to the health of patients across the lifespan. Prerequisite: NURS 1020, NURS 1025, BIOL 2031, concurrent enrollment in BIOL 2032 and NURS 1035. Recommendation: MATH 1000

## 7 Course Descriptions

## Clinical Application for NURS 1030 NURS 1035 <br> 4 Credits

This course applies theoretical concepts to holistic nursing practices promoting critical thinking, assessment skills, caring behaviors, therapeutic nursing interventions, prevention of disease, and health and wellness throughout the life span. This practicum, with clinical experiences in acute care, ambulatory care clinics, long term care, community agencies, and the Nursing Learning Resource Center, provides the student with opportunities to provide intermediate level nursing interventions. Course emphasis includes holism, nursing process with emphasis on assessment and interventions, prioritization, communication, and health teaching in both acute care and community service learning. Prerequisite: Concurrent enrollment in NURS 1030, Healthcare Provider CPR certification, background clearance, and required immunizations.

## Health, Healing and Holism and Role Transition From LPN to RN NURS 1160 <br> 4 Credits

This course introduces the Licensed Practical Nurse to the Registered Nurse role in healthcare. Content includes communication, teaching-learning theory, caring theory, levels of prevention, critical thinking and collaborative process. An emphasis of holism throughout the life span provides the basis for nursing assessment and diagnosis of patients and families. The beginning concepts of nursing interventions and their relationship to health and wellness are presented, as well as evaluation of nursing care. Professional boundaries, leadership concepts, and current healthcare trends are also included. Prerequisite: Admission to the LPN Mobility Nursing Track, BIOL 2031 and BIOL 2032. Recommendation: Computer skills are essential.

## Clinical Application for NURS 1160 NURS $1165 \quad 2$ Credits

This course applies theoretical concepts to professional registered nursing practice in individual, small group, and large group settings. Application of the nursing process, critical thinking, holistic nursing care, and health promotion are included. Demonstrations and validations of professional nursing skills are performed in the Nursing Learning Resource Center and clinical setting. Practicum experiences include interactions with patients across the lifespan in a variety
of healthcare settings. Prerequisite: Admission to the LPN Mobility Nursing Track, concurrent enrollment in NURS 1160, Healthcare Provider CPR certification, background clearance, and required immunizations. Recommendation: Computer skills are essential.

## Nursing Interventions I: Health, Healing and Holism and the Role of the RN NURS 1230 4 Credits

This course provides mobility (Paramedic) students with theoretical content related to acute, chronic, and terminal health conditions of the respiratory, immune, renal, endocrine, neurological and musculoskeletal systems, cancer and infectious diseases. This course includes exploration of patterns of health and wellness for patients within their environment. Critical thinking in the application and analysis of therapeutic nursing interventions, pain management, and levels of prevention in relation to the health of patients across the lifespan are emphasized. Prerequisite: NURS 1260, NURS 1265, and concurrent enrollment in NURS 2235.

## Health, Healing, and Holism and Role Transition From Paramedic to RN NURS 1260 4 Credits

This course introduces the Nationally Registered Emergency Medical TechnicianParamedic (EMT-P) to the Registered Nurse role in health care. This course builds upon the competencies of the Paramedic in addition to expanding their knowledge in content that includes communication, teaching-learning theory, caring theory, levels of prevention, critical thinking and group process. An emphasis on holism throughout the lifespan provides the basis for assessment of patients and families. The beginning concepts of therapeutic nursing interventions and their relationship to health and wellness, professional boundaries, and leadership concepts are presented. Prerequisite: Admission to the Paramedic Mobility Nursing Track, BIOL 2031 and BIOL 2032 (or equivalent), concurrent enrollment in NURS 1265.

## Clinical Application for NURS 1260

 NURS $1265 \quad 2$ CreditsThis is a transition course for Nationally Registered Emergency Medical TechnicianParamedics (EMT-P) that includes an introduction to the role of the Registered Nurse in health care settings. This course builds upon the clinical competencies of the Paramedic in addition to expanding their
knowledge and psychomotor skills in clinical settings. An emphasis on holism throughout the lifespan provides the basis for assessment and nursing care of patients and families. The beginning practice of therapeutic nursing interventions and their relationship to health and wellness, professional boundaries, and leadership practice are applied. Prerequisite: Admission to the Paramedic Mobility Nursing Track, concurrent enrollment in NURS 1260, Healthcare Provider CPR certification, background clearance, and required immunizations.

## Clinical Specialty Focus NURS 2025

1-4 Credits
This course provides an opportunity to increase knowledge and nursing skills within a specialized lab or clinical setting utilizing the Nursing Learning Resource Center, acute care or community settings. The course builds upon content taught within the Nursing Program while providing the opportunity to expand experiential learning and go beyond the basics in a specialized field of nursing. Prerequisite Successful completion of at least one nursing course, concurrent enrollment in the Nursing Program, Healthcare Provider CPR certification, background clearance, required immunizations, and consent of instructor.

## Nursing Interventions II: Health, Healing and Holism and the Role of the RN NURS 2030 4 Credits

This course provides the student with the theoretical content related to health and wellness in the infant, child and adult. Primary, secondary and tertiary health care management and health conditions are discussed throughout the lifespan. Critical thinking skills, therapeutic nursing interventions, communication, prioritization, collaborative care and the holistic nursing process are emphasized. Major content areas include maternal/child health, mental health, cardiac, and gastrointestinal conditions as well as emergency and trauma care. Prerequisite: NURS 1030, NURS 1035, and concurrent enrollment in NURS 2035. Recommendation: NURS 2222 or concurrent enrollment.

## Clinical Application for NURS 2030 NURS 20354 Credits

This course applies theoretical concepts to nursing practice. This practicum, with clinical experiences in acute, specialty and community settings, provides the student with opportunities to provide comprehensive nursing care to multiple clients. Course content
emphasizes team leading, health teaching, holism, nursing process with an emphasis on evaluation, communication and the RN role. Unique to this course is community screening, maternal/child health, newborn assessment, and a comprehensive family assessment. Concepts of supervision/delegation, critical thinking and prioritization are emphasized. Additional application includes identification and facilitation of patterns in health and wellness for clients within their environment. Prerequisite: Concurrent enrollment in NURS 2030, Healthcare Provider CPR certification, background clearance, and required immunizations.

## Synthesis and Transition to the Registered Nurse Role NURS 2050 <br> 3 Credits

This course synthesizes concepts taught previously such as health, healing, and holism. There is a special focus on leadership, supervision, delegation, management of patient caseloads, economic, social, political, and current trends in health care. The course also includes self-care strategies, preparation to enter the work force and exploration of other nursing opportunities. There is continued emphasis on group dynamics and processes, teaching/learning projects and experiences with different types of healthcare delivery systems presented via case study methodologies. Prerequisite: NURS 2030, NURS 2035, and concurrent enrollment in NURS 2055 and NURS 2222 unless NURS 2222 previously completed. Recommendation: Computer skills are essential.

## Clinical Application for NURS 2050 NURS 2055 4 Credits

This course applies and synthesizes concepts represented in NURS 2050. The practicum experience focuses on critical thinking, team leading, leadership/management, supervision/delegation, and decision-making/ priority setting while providing holistic care to multiple patients with complex health needs and situations. Clinical experiences encourage students to prepare themselves for the personal and professional transition to the role of the registered nurse. Additional course activities involve the exploration of career opportunities, preparing and presenting teaching projects, working in collaboration with health care professionals, working collaboratively with peers in developing a patient discharge/referral plan, and participating in service learning within the community. Prerequisite: NURS 2030, NURS

2035, and concurrent enrollment in NURS 2055 and NURS 2222 unless NURS 2222 previously completed.

## Nursing Interventions II: Health, Healing and Holism and the Role of the RN NURS 21304 Credits

This course provides the LPN mobility student with the theoretical content related to health and wellness in the infant, child and adult. Primary, secondary and tertiary health care management and health conditions are discussed throughout the life span. Course emphasis includes critical thinking skills, therapeutic nursing interventions and communication, prioritization, collaborative care and the holistic nursing process. Major content areas include maternal/child health, mental health, cardiac and gastrointestinal conditions as well as emergency and trauma care. Prerequisite: NURS 1160, NURS 1165, and concurrent enrollment in NURS 2135. Recommendation: NURS 2222 or concurrent enrollment.

## Clinical Application for NURS 2130 NURS 2135 4 Credits

This course applies theoretical concepts to nursing practice for the LPN mobility student. This practicum, with clinical experiences in acute, specialty and community settings, provides the student with opportunities to provide comprehensive nursing care to multiple clients. Course content emphasizes team leading, health teaching, holism, nursing process with an emphasis on evaluation, communication and the RN role. Unique to this course is community screening, maternal/child health, newborn assessment, and a comprehensive family assessment. Concepts of supervision/delegation, critical thinking and prioritization are emphasized. Additional application includes identification and facilitation of patterns in health and wellness for clients within their environment. Prerequisite: Concurrent enrollment in NURS 2130, Healthcare Provider CPR certification, background clearance, and required immunizations.

## Synthesis and Transition to the Registered Nurse Role NURS 2150 <br> 3 Credits

This course uses a case study modality to synthesize concepts taught previously such as health, healing, and holism. It emphasizes evidence-based practice, leadership, ethics, group dynamics/ processes, and economic, social, political, and current trends in health care. The case studies allow students to plan
and evaluate holistic, individualized nursing interventions for patients with complex health care needs. Prerequisite: NURS 2130, NURS 2135, NURS 2222, and concurrent enrollment in NUSR 2155.

## Clinical Application for NURS 2050 NURS 2155 3 Credits

This course applies and synthesizes concepts presented in NURS 2150. The practicum experience focuses on critical thinking, leadership/management, and decisionmaking/priority setting while providing holistic care to multiple patients with complex health needs and situations. A preceptorship, with a selected RN, encourages students to prepare themselves for the personal and professional transition to the role of registered nurse. Additional course activities involve the exploration of career opportunities, preparing and presenting teaching projects, working in collaboration with health care professionals, working collaboratively with peers in developing a patient discharge/referral plan, and participating in service learning within the community. Prerequisite: NURS 2130, NURS 2135, concurrent enrollment in NURS 2150, Healthcare Provider CPR certification, background clearance, and required immunizations.

## A Pathophysiological Approach to Health Problems and Pharmacologic Therapy <br> NURS 2222 <br> 3 Credits

This course analyzes the progressive changes that take place in the human organism when normal adaptive processes are influenced by chemical, microbial, genetic and/or psychological stress. The course focuses on the pathophysiology of major health problems that lead to mortality and morbidity. This course connects the interrelationship between pathophysiology and pharmacology, emphasizing the importance of pharmacology to these major health problems. This knowledge is applied to the planning of holistic nursing care and pharmacologic interventions of patients with these health problems. Prerequisite: BIOL 2031 and BIOL 2032, NURS 1020, NURS 1025, and completion or concurrent enrollment in NURS 1030 and 1035 or admission to the LPN or Paramedic Mobility Nursing Track.

## Clinical Application for Nursing 1230 NURS 2235 <br> 4 Credits

This course is for paramedic mobility students and applies theoretical concepts of holistic nursing practices promoting critical

## 7 Course Descriptions

thinking, assessment skills, caring behaviors, therapeutic nursing interventions, prevention of disease, and health and wellness throughout the life span. This practicum, with clinical experiences in acute care, community agencies, and the Nursing Learning Resource Center, provides the student with opportunities to provide intermediate level nursing interventions. Course emphasis includes holism and the nursing process with emphasis on assessment and interventions, prioritization, communication, and health teaching in both acute care and community service learning. Prerequisite: NURS 1260, NURS 1265, concurrent enrollment in NURS 1230, Healthcare Provider CPR certification, background clearance, and required immunizations. Recommendations: Completion or concurrent enrollment in NURS 2222.

## Synthesis and Transition to the Registered Nurse Role NURS 2250 3 Credits

This course uses a case study modality to synthesize concepts taught previously such as health, healing, and holism. It emphasizes evidence based practice, leadership, ethics, group dynamics/ processes, and economic, social, political, and current trends in health care. The case studies allow students to plan and evaluate holistic, individualized nursing interventions for patients with complex health care needs. Prerequisite: NURS 1230, NURS 2235, NURS 2222, and concurrent enrollment in NURS 2255.
$\begin{array}{ll}\text { Clinical Application for NURS } 2250 \\ \text { NURS } 2255 & 3 \text { Credits }\end{array}$
This course applies and synthesizes concepts presented in NURS 2250. Practicum experience focuses on critical thinking, team leading, leadership/management, supervision/delegation, and decision-making/ priority setting while providing holistic care to multiple patients with complex health needs and situations. A preceptorship with a selected RN encourages students to prepare themselves for the personal and professional role transition to the role of registered nurse. Other applications will involve exploration of career opportunities, preparing and presenting teaching projects, working collaboratively with health care professionals, working collaboratively with peers in developing a patient discharge/referral plan, and service learning within the community. Prerequisite: NURS 1230, 2235, concurrent enrollment
in NURS 2250, Healthcare Provider CPR certification, background clearance, and required immunizations.

## Foundations of Nursing - Health Promotion NURS $2700 \quad 9$ Credits

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. Prerequisites: Admission to the nursing program, BIOL 2031 with a grade of C or higher, PSYC 1020, PSYC 1041, COMM 1031 or COMM 1041 or COMM 1051, General Education Electives - 8 credits, Completion of NURS 1150 or concurrent enrollment, Completion of BIOL 2032 with a grade of $C$ or higher or concurrent enrollment Recommendation: Computer skills are essential.

## Transition to the Professional Nurse NURS 2720 4 Credits

This course is designed to expand the knowledge and skills of the LPN and Paramedic 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. Prerequisites: Admission to the nursing program, Licensure as a Practical Nurse in the State of Minnesota or equivalent licensure in any state in the U.S., or Certified as a Nationally Registered Paramedic (NRP), and/or State Certified as a Paramedic (may be in any state in the U.S. but must be to a level equivalent to National Registration), BIOL 2031 with a grade of C or higher, PSYC 1020, PSYC 1041, COMM 1031 or COMM 1041 or COMM 1051, General Education Electives 8 credits, Completion of NURS 2750
or concurrent enrollment, Completion of BIOL 2032 with a grade of C or higher or concurrent enrollment Recommendation: Computer skills are essential.

## Nutrition and the Role of the Professional Nurse NURS 2750 <br> 2 Credits

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. Prerequisites: Admission to the nursing program, BIOL 2031 with a grade of $C$ or higher, PSYC 1020, PSYC 1041, COMM 1031 or COMM 1041 or COMM 1051, General Education Electives 8 credits, Completion of NURS 2700 or 2720 or concurrent enrollment, Completion of BIOL 2032 with a grade of $C$ or higher or concurrent enrollment, Recommendation: Computer skills are essential.

## Clinical Internship NURS 2785

## 1 Credit

This elective clinical internship course provides learning opportunities to apply nursing theory to nursing practice. The focus is on gaining depth of understanding of the role of the registered nurse as well as strengthening nursing skills in the clinical setting. Students will be precepted by nurses in the practice setting and by nursing faculty. Prerequisite: Successful completion of two semesters in an associate degree nursing program, acceptance into an approved metro area clinical internship program, and permission of nursing director. Healthcare Provider CPR certification, background clearance, and required immunizations.

## Chronic and Palliative Care NURS 2800 <br> 7 Credits

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.

## Pharmacology and the Role of the Professional Nurse NURS $2820 \quad 3$ Credits

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. Prerequisites: NURS 2700 or NURS 2720 with a grade of C or higher, NURS 2750 with a grade of C or higher, BIOL 2032 with a grade of C or higher Recommendation: Computer skills are essential.

## Applied Pathophysiology for Nursing I NURS 2850 2 Credits

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 maladaptations 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. Prerequisites: NURS 2700 or NURS 2720 with a grade of C or higher, NURS 2750 with a grade of C or higher, BIOL 2032 Anatomy and Physiology II with a grade of C or higher, Completion of BIOL 2035 with a grade of $C$ or higher or concurrent enrollment, Completion of NURS 2800 or concurrent enrollment Recommendation: Computer skills are essential.

## Acute and Complex Care NURS 2900

## 7 Credits

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. Prerequisites: NURS 2800 with a grade of C or higher, NURS 2820 with
a grade of C or higher, NURS 2850 with a grade of C or higher, BIOL 2035 with a grade of C or higher, Completion of NURS 2920 with a grade of C or higher or concurrent enrollment, Completion of NURS 2950 with a grade of $C$ or higher or concurrent enrollment. Recommendation: Computer skills are essential.

## Applied Pathophysiology for Nursing II NURS 29202 Credits

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. Prerequisites: NURS 2800 with a grade of C or higher, NURS 2820 with a grade of C or higher, NURS 2850 with a grade of C or higher, BIOL 2035 with a grade of C or higher, Completion of NURS 2900 with a grade of C or higher or concurrent enrollment, Completion of NURS 2950 with a grade of $C$ or higher or concurrent enrollment. Recommendation: Computer skills are essential.

## Nursing Leadership I NURS 2950

## 3 Credits

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. Prerequisites: NURS 2800 with a grade of C or higher, NURS 2820 with a grade of C or higher, NURS 2850 with a grade of C or higher. Recommendation: Computer skills are essential.

## Office Technology

## Keyboarding <br> OFFT 0093

 2 CreditsThis course develops basic keyboarding techniques and skills using a computer. The emphasis will be learning the touch method of keying the alphabetic keys. In addition emphasis will be on using proper keyboarding technique to develop speed and accuracy on alphabetic material and the numeric keypad.

## Document Formatting Essentials OFFT 1001 1 Credit

This hands-on course will cover the formatting of educational, business, and personal documents. The students will create professional looking memos/e-mails, letters, reports and tables. Prerequisite: OFFT 0093 or equivalent or instructor consent

## Speech Recognition OFFT 1002

## 1 Credit

This course is designed to prepare students to use speech-recognition technology to produce business documents in corporate and medical office settings. This course is valuable for new students and individuals who wish to update their skills. Prerequisite: OFFT 1001 or equivalent, or instructor consent.

## Independent Study OFFT 1790

## 1-6 Credits

The intent of this course is to allow flexibility in providing learning experiences to meet the unique needs of the individual. This will include specific assignments that are customized/designed for the student. Prerequisite: Consent of instructor and dean.

## Records Classification Systems OFFT $2000 \quad 3$ Credits

This course presents techniques for the control of records and information with emphasis on the four basic methods of filing-alphabetic, numeric, geographic, and subject. Students will investigate and practice how to implement, maintain, and justify a records management systemstoring, retrieving, and transferring records. Legal and ethical issues regarding records management (hard copy, electronic, image, magnetic and optical media) will be covered. Current database software is used in this course. Prerequisite: CAPL 1010 or CSCI 1020, database skills, or consent of instructor

## Medical Office Fundamentals OFFT 2006 <br> 3 Credits

This course introduces students to the healthcare office environment. Topics covered in the course include professional organization guidelines, organization of healthcare facilities, and the role of healthcare office personnel. Students will be exposed to the various medical specialties and the language of each specialty. Use of medical reference materials will be incorporated, along with an introduction of medical records, and medicolegal ethics. Students will focus on preparing patient records, billing, telephone

## 7 Course Descriptions

procedures, appointments, professional reports, and medical meetings. Consent of instructor is required. Prerequisite: Assessment score placement in RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher. Instructor consent required for registration to verify program prerequisites have been met. Recommendation: BIOL 1024, CAPL 1023, and ENGL 1021 with grades of C or higher.

## Medical Office Terminology OFFT 2010 3 Credits

This course is intended for students interested in medical office careers. The focus is on medical terminology as it relates to healthcare documentation with an emphasis on word-building techniques, usage, and spelling. Consent of instructor is required. Prerequisite: Assessment score placement in RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of $C$ or higher. Instructor consent required for registration to verify program prerequisites have been met. Recommendation: BIOL 1024, CAPL 1023, and ENGL 1021 with grades of C or higher.

## Medical Office: Disease Concepts OFFT 2012 <br> 2 Credits

This course is intended for students interested in medical office careers. It is an overview of the language and nature of disease and its treatment. Students will study disease conditions organized by body systems for effective medical documentations. Prerequisite: OFFT 2006, concurrent enrollment in OFFT 2010 or equivalent, or instructor consent. Recommendation: Concurrent enrollment in OFFT 2013 and OFFT 2041.

## Medical Office: Pharmacology and Lab OFFT 2013 2 Credits

This course is intended for students interested in medical office careers. It is a system-by-system overview of the principles and language of pharmacology and laboratory medicine, including drugs and drug classes, diagnostic tests, indications, techniques, expressions of values, and significance of findings for effective medical documentation. Prerequisite: OFFT 2006, concurrent enrollment in OFFT 2010 or equivalents, or instructor consent. Recommendation: Concurrent enrollment in OFFT 2012 and OFFT 2041.

## Electronic Health Records OFFT 20213 Credits

This course is intended for students interested in healthcare careers. Students will focus on practical applications and hands-on exercises
using an electronic health record (EHR) that will be transferable to many prominent EHR systems currently in use in medical clinics. Prerequisite: OFFT 2006, OFFT 2010, or equivalents, or instructor consent.

## Medical Office: Insurance and Billing OFFT 2030 <br> 3 Credits

This course introduces the student to insurance and billing procedures for the medical office. Topics include insurance requirements related to Medicare and Medicaid, managed care, and other insurance policies, hospital and clinic billing procedures, auditing and compliance, and collection procedures. Prerequisite: Assessment score placement in MATH 0030 or above or completion of MATH 0010 with a grade of C or higher, OFFT 2006 and OFFT 2010, or instructor consent.

## ICD Coding OFFT 2031

## 3 Credits

Medical coders use their medical knowledge to ensure adherence to insurance requirements and federal regulations. This course is the first in a series. It is an introduction to basic coding guidelines for International Classification of Diseases (ICD). The course focuses on how to code using the current ICD code set and guidelines for usage. Prerequisite: BIOL 1024, OFFT 2010, OFFT 2012, OFFT 2013, and OFFT 2050 with grades of C or higher.

## CPT-4 Coding OFFT 2032 <br> 3 Credits

Medical coders use their medical knowledge to ensure adherence to insurance requirements and federal regulations. This course is the first in a series. It is an introduction to basic medical procedural coding guidelines. Student will focus on basic Current Procedural Terminology-4 (CPT-4) coding (Anesthesia, E\&M, Surgical, Pathology/ Laboratory, Radiology and Medicine) and Healthcare Procedural Coding System (HCPCS) codes. Prerequisite: BIOL 1024, OFFT 2010, OFFT 2012, OFFT 2013, and OFFT 2050 with grades of $C$ or higher.

## Advanced Coding OFFT 20353 Credits

Students will apply codes to advanced medical case studies, using ICD-10 CM/PCS. Topics will include compliance, diagnosis codes, procedural codes, DSM-IV, computerized encoding systems, reimbursement, and code linkage. Prerequisite: OFFT 2031 and OFFT 2032 with grades of $C$ or higher, or instructor consent.

## Healthcare Documentation Fundamentals OFFT 2041 <br> 3 Credits

This course introduces transcription and editing of basic healthcare documentation. It incorporates skills in English language, technology, medical knowledge, proofreading, editing, and research. Prerequisite:
Assessment score placement in RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher. CAPL 1010 and OFFT 2010 with a grade of C or higher, concurrent enrollment, or instructor consent.

## Healthcare Documentation Capstone OFFT 20443 Credits

In this course, students will be transcribing original healthcare dictation using advanced proofreading, editing, and research skills, while meeting progressively demanding accuracy and productivity standards. Emphasis will be on the current professional style guidelines and medical editing practice. This course assists in preparing the student for the registered healthcare documentation specialist (RHDS) credentialing exam. Prerequisite: OFFT 2041 with a grade of " $C$ " or higher or instructor consent.

## Introduction to Health Information OFFT 2050 3 Credits

This course is an introduction to the organization, analysis, and use of health information used in ambulatory, acute, and long-term care facilities. Topics will include data collection, structure and use of health information. Healthcare data sets, data storage, retrieval, monitoring and compliance reporting will also be discussed. Prerequisite: CAPL 1010 and OFFT 2010 with grades of C or higher.

## Legal Aspects of Health Information OFFT 20522 Credits

This course is an overview of the legal issues involved in maintaining and using health information. Topics will include legal terminology, legislative and regulatory processes, confidentiality, security, privacy, and ethics related to health information. Prerequisite: OFFT 2050 with a grade of C or higher.

## Health Information Office Management OFFT 2054 3 Credits

In this course students will examine the skills necessary to manage a health information office. Topics will include workflow processes, leadership, teamwork, budgeting, and
managing employees. Prerequisite: OFFT 2050 with a grade of C or higher.

## Administrative Office Procedures OFFT 2055 <br> 3 Credits

Todays business employee must be knowledgeable about the concepts and procedures basic to the information management, problem solving, and communication tasks that are performed in businesses. This course addresses the administrative professionals role in this challenging work environment. The student will be exposed to patterns of work, current technology, skills, and abilities necessary to succeed in the workplace. Students will create an electronic portfolio. Prerequisite: CAPL 1010 or consent of instructor

## Health Information Statistical Applications and Quality Management OFFT 20563 Credits

In this course students will study the components of quality improvement systems, including quality assessment, utilization review and risk management. This course is also a study of collecting, analyzing, interpreting, and presenting numerical data relating to healthcare services. Prerequisite: OFFT 2050 with a grade of C or higher.

## Office Technology Capstone OFFT 20993 Credits

This course reinforces and applies previously learned skills to complete complex and integrated business projects such as itineraries, newsletters, expense reports, forms and other business-related tasks. Students will complete business documents using multiple software applications and apply critical thinking and problem-solving skills in realistic business situations. Prerequisite: CAPL 1010 and CAPL 1023 or consent of instructor.

## Office Technology Internship OFFT 2780 1-3 Credits

This course is designed to provide students with the opportunity to apply knowledge and skills learned in the Office Technology area. Students will gain work experience in a professional environment while applying a variety of communication, business, and technical skills. Prerequisite: Consent of Faculty Member

## Medical Office Practicum OFFT 2783

## 1-3 Credits

This course is an unpaid internship designed to provide a realistic occupational experience
in the medical office. The administrative and coding tracks require 2 credits ( 80 hours) of work experience. The transcription track requires 3 credits ( 120 hours) of work experience. Students must be in their final semester before graduation. A Minnesota Human Services background study with no restrictions is required. Preference will be given to medical office diploma or AAS students. Prerequisites: Consent of instructor. Students must be in their final semester.

## Orthotic and

Prosthetic Clinical Application

## Introduction to the Orthotic and Prosthetic Lab OPCA 1010

2 Credits
This course introduces the roles within the orthotic and prosthetic profession and the safety practices and habits required by the profession. Students become familiar with the tools, equipment, materials, and components commonly used in orthotic and prosthetic fabrication. Lab work concentrates on basic metal-working skills necessary to fabricate a properly functioning device. Prerequisite: Assessment score placement in RDNG 0950 or above, or completion of RDNG 0900 with a grade of C or higher.

## Foot Orthosis Fabrication and Shoe Modifications OPCA $1020 \quad 3$ Credits

This hands-on laboratory experience focuses on repairing and modifying shoes, correcting tracings of the lower limb, fabricating stirrups, and attaching them to the patients shoes. The student will also fabricate custom-molded foot orthoses to control and support the patients foot. Prerequisite: OPCA 1010 or concurrent enrollment.

## Metal Orthoses Fabrication

 OPCA 1030 4 CreditsThis course focuses on the theories and skills required for the fabrication of the basic metal ankle-foot orthoses, knee-ankle-foot orthoses, and wrist-hand orthoses. Students interpret various orthotic prescriptions to create one-of-a-kind orthotic devices in the laboratory setting. Prerequisite: OPCA 1020 or concurrent enrollment.

## Leatherwork for Lower-Limb Orthoses OPCA $1040 \quad 3$ Credits <br> This course concentrates on fabricating leather cuffs and closures, corrective T-straps, and knee control pads. These components are essential parts of the lower limb orthosis to hold the limb in a secure and functional position. Prerequisite: OPCA 1030 or concurrent enrollment. <br> Thermoplastic Orthoses OPCA 1050 <br> 4 Credits

In this course students practice skills necessary to vacuum form thermoplastic over a variety of plaster models to create acceptable orthoses. Practical skills include negative wraps, creating positive plaster models and the addition of metal components which are contoured and aligned to finish the orthoses. Prerequisite: OPCA 1040 or concurrent enrollment.

## Trans-Tibial Exoskeletal Fabrications OPCA 10604 Credits

 This course covers the trans-tibial prosthetic measurement forms,soft inserts and lamination techniques in trans-tibial socket fabrications. This course will introduce students to various suspension systems, static alignment, alignment duplication, shaping and finishing techniques of trans-tibial prostheses. Prerequisite: OPCA 1050 or concurrent enrollment.
## Trans-Tibial Endoskeletal Fabrications OPCA 1070 3 Credits

This course covers socket lamination utilizing vacuum techniques. Students will fabricate a variety of suspension systems. The students will also finish and assemble the endoskeletal prosthesis for delivery to a patient. Prerequisite: OPCA 1060 or concurrent enrollment.

## Trans-Femoral Fabrications OPCA $1080 \quad 3$ Credits

This course covers anatomy of trans-femoral amputations and trans-femoral prosthetic measurement forms. This course prepares students for shaping and finish lamination procedures of trans-femoral prostheses and assembly of trans-femoral prostheses. Prerequisite: OPCA 1070 or concurrent enrollment.

## Trans-Radial/Humeral Fabrications OPCA 1090 <br> 4 Credits

This course introduces students to upperlimb amputation anatomy and upper-limb measurement forms. Students will identify

## 7 Course Descriptions

upper-limb components used in the prosthetic industry and fabricate a long trans-radial, short trans-radial, and trans-humeral prostheses. Prerequisite: OPCA 1080 or concurrent enrollment.

## Orthotic Fitter/Prefabricated Orthoses OPCA 10954 Credits

This course will cover human gait and the biomechanics of gait. The student will also study human anatomy and pathologies that relate to the spine, lower and upper extremities. They will learn to select and fit all classifications of prefabricated orthotic devices to these pathologies. Prerequisite: OPCA 1090 or concurrent enrollment.

## Clinical Applications of Lower Extremity Foot Orthoses OPCA 2010 4 Credits

This course concentrates on the effects of disease, trauma and malformation of the foot complex related to functional loss in the foot and ankle. The students will design, fabricate, and fit functional and supportive orthotic devices. The student will formulate a treatment plan based on patient evaluation. Prerequisite: OPCA 1095 with a grade of C or higher or instructor consent and BIOL 1020 and PHYS 1020 with a grade of C or higher. Assessment score placement in ENGL 1021 or completion of ENGL 0090 with a grade of C or higher, and assessment score placement in RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher.

## Clinical Applications of Lower Extremity Orthoses OPCA 2020 <br> 4 Credits

During this course, students focus on the pathological effects of disease, trauma, and malformation of the lower limb related to functional loss. Students will concentrate on patient evaluation, casting, measurement acquisition, and management skills to successfully fabricate and fit several different types of lower limb orthoses. The patient's gait is analyzed using a video gait lab to evaluate orthotic function and outcomes. Prerequisite: OPCA 2010 with a grade of C or higher or concurrent enrollment.

## Clinical Applications of Upper Extremity Orthoses OPCA 2030

## 3 Credits

During this course, the student will identify pathology of the upper-limb, followed by identification of specific pathologies related to functional loss in order to determine proper orthotic treatment. This process includes
evaluation of the patient and fabricating the basic orthoses to control specific joints of the upper extremity. Prerequisite: OPCA 2020 with a grade of C or higher or concurrent enrollment.

## Clinical Applications of Spinal Orthoses OPCA 2040 4 Credits

This course will focus on identification of spinal pathologies in order to determine proper orthotic treatment. This will include measurement, casting, and fitting of pre-made and custom fabricated spinal orthoses designed to treat related spinal pathologies. Students concentrate on the specific fitting criteria and orthosis selection to achieve the goal of functional biomechanical control of the affected trunk segments. Fitting sessions with patient models will include post-operative body jackets, metal and plastic spinal orthoses, soft corsets, and cervical devices. Prerequisite: OPCA 2030 with a grade of C or higher or concurrent enrollment.

## Clinical Applications of Trans-Tibial Prostheses I OPCA 2050

3 Credits
This course identifies the role and essential patient management skills of the Prosthetist. Basic structure and function of the musculoskeletal system will be covered. This course focuses on the lower limb, trans-tibial patient evaluation and casting techniques. Also included are normal human locomotion and the biomechanics of the trans-tibial amputee. Patient recordkeeping, fabrication, and static and dynamic alignment of standard trans-tibial prostheses. The student will fit various trans--tibial type prostheses with a variety of modular components. Prerequisite: OPCA 2040 with a grade of C or higher or concurrent enrollment.

## Clinical Applications of Trans-Tibial Prosthese II OPCA 2060

## 4 Credits

This course will focus on trans-tibial casting techniques with variations in socket designs and suspensions. It also covers the biomechanics of the trans-tibial limb, recordkeeping, fabrication, and static and dynamic alignment of the trans-tibial prostheses. The students will fit various trans-tibial type prostheses with a variety of modular components. Prerequisite: OPCA 2050 with a grade of C or higher or concurrent enrollment.

## Clinical Applications of Trans-Femoral Prostheses OPCA 2070 <br> 4 Credits

This course focuses on the characteristics of trans-femoral amputation surgery, functional anatomy, and biomechanics. This course introduces the suction socket which is the most common trans-femoral suspension used in prosthetic design. Students will evaluate, measure, and mold a patient. Students will fabricate, statically align and dynamically align trans-femoral prosthesis with a fluidcontrolled knee device. This course also covers knee disarticulation, hip disarticulation, and hemi-pelvectomy prostheses. Prerequisite: OPCA 2060 with a grade of C or higher or concurrent enrollment.

## Clinical Applications of Upper Limb Prostheses OPCA 2080

4 Credits
This course involves evaluating, measuring, recording patient information, and making a mold for trans-radial and trans- humeral prosthesis. Students will fabricate and fit the trans-radial and trans-humeral prosthesis. This course will also cover variations in upper limb socket design, review basic upper limb muscular/skeletal anatomy, as well as identify components and material science for upper-limb fabrication. Prerequisite: OPCA 2070 with a grade of C or higher or concurrent enrollment.

## Clinical Applications Practicum OPCA $2090 \quad$ Credits

This practicum provides students with opportunities to apply the theories and skills learned in the program in an approved clinical setting with actual patient contact. Practicum students work under the direct supervision of a Certified Orthotist/Prosthetist or Certified Assistant preceptor in an approved professional facility. In addition, students are observed periodically on site by a Century College program instructor who also confers with facility supervisors/preceptors. Prerequisite: OPCA 2080 with a grade of C or higher or concurrent enrollment.

## Orthotic Technology

## Introduction to the Orthotic Lab and Basic Hand Skills <br> ORTE $1020 \quad 5$ Credits

This course introduces the role of the orthotic technician and the safety practices and habits required by the profession. Students become familiar with the tools, equipment, materials, and components commonly used in orthotic fabrication. Lab work concentrates on basic metal-working skills necessary to fabricate a properly functioning orthotic device.

## Spinal Orthoses Fabrication ORTE 1030 <br> 5 Credits

This course concentrates on identification of spinal anatomy and interpretation of spinal orthometry assessment forms. Students fabricate three types of spinal orthoses that cover and control specific areas of the spine. Students also focus on application of appropriate covering materials to ensure patient comfort and utility. Prerequisite: ORTE 1020 or concurrent enrollment.

## Foot Orthosis Fabrication and Shoe Modification/Repair ORTE $1040 \quad 3$ Credits

This course covers the biomechanical principles of the foot and ankle as they respond to the effects of shoe modification and external forces generated by the application of an orthotic device. This hands-on laboratory experience focuses on repairing and modifying prescription orthopedic shoes along with fabricating prescribed custom-molded foot orthoses to control and support the structure of the foot. Prerequisite: ORTE 1030 or concurrent enrollment.

## Stirrup Layout and Fabrication ORTE 1050 3 Credits

This course introduces the musculoskeletal system and examines body movements and planes that divide the human body. In the laboratory setting, students integrate this theoretical knowledge with practical orthotic theory to correct a tracing of the lower-limb and fabricate a stirrup, shaping and attaching it to the patient's shoe to accommodate ankle deformities. Prerequisite: ORTE 1040 or concurrent enrollment.

## Ankle-Foot Orthoses Fabrication ORTE 1060 3 Credits

This course focuses on the theories and skills required for the fabrication of ankle-foot
orthoses both with and without tibial torsion. Students interpret various orthotic prescriptions to create one-of-a-kind orthotic devices in the laboratory setting. Prerequisite: ORTE 1050 or concurrent enrollment.

## Knee-Ankle-Foot Orthoses Fabrication ORTE 1070 <br> 5 Credits

The focus of this course is the requisite skills for proper layout and correction for a knee-ankle-foot orthoses and fabrication of these with and without tibial torsion and growth extension. Lab work consists of fabrication of three types of knee-ankle-foot orthoses. Prerequisite: ORTE 1060.

## Leatherwork for Lower-Limb Orthoses ORTE 20004 Credits

This course concentrates on fabricating leather cuffs and closures, corrective T-straps, and knee control pads, which are all essential parts of the lower limb orthosis to hold the limb in a secure and functional position. Prerequisite: ORTH 1070 or concurrent enrollment.

## Thermoplastic Orthoses ORTE 2010

## 4 Credits

In this course students practice skills necessary to accurately vacuum form polypropylene plastic over a variety of plaster models to create acceptable orthoses. Practical skills include negative wraps creating positive plaster models, and the adding of metal components contoured and aligned to finish the orthoses. Prerequisite: ORTE 2000 or concurrent enrollment.

## Upper-Limb Fabrication ORTE 2020

4 Credits
This course concentrates on identification of the skeletal structure, joints and landmarks of the hand, wrist, and forearm. Identification of various types of upperextremity orthoses includes, measurements used for fabrication and interpretation of upper-extremity orthometry forms. Students fabricate both metal and plastic hand and wrist-hand orthoses to specific prescription from measurements and a plaster models of the upper extremities in the orthotics lab. Prerequisite: ORTE 2010 or concurrent enrollment.

## Orthotic Technician Clinical ORTE 27804 Credits

During this 160-hour orthotic clinical, students are placed in an orthotic facility or department. This clinical experience provides opportunities to apply theory and skills learned
in the program. All student work is performed under the direct supervision of a certified orthotist or clinical supervisor in each clinical facility. Prerequisite: Completion of all ORTE program curriculum and consent of instructor.

## Pedorthic

## Therapeutic Shoe Fitter PEDO 1020

## 3 Credits

This course introduces the role of the Pedorthist as a member of the rehabilitation team. The student will look at the relationship between the different professional organizations and credentialing requirements. In this course, students will look at the effects of disease and trauma related to functional loss in the foot and ankle. Students will concentrate on patient evaluation, measurement acquisition, and management skills to successfully fit therapeutic shoes and over the counter (OTC) foot orthoses and foot care products. Prerequisite: Assessment score placement in RDNG 0950 or above, or completion of RDNG 0900 with a grade of C or higher. MN Human Services background study with no restrictions will be required.

## Shoe Modifications PEDO 1030

## 3 Credits

This course covers the tools, equipment, and materials commonly used in pedorthic fabrication. The student will also be introduced to the biomechanical principles of the foot and ankle as they respond to external forces generated by shoe modifications. This hands-on laboratory experience focuses on modifying prescription orthopedic shoes. Prerequisite: Assessment score placement in RDNG 0950 or above, or completion of RDNG 0900 with a grade of $C$ or higher. PEDO 1020 or concurrent enrollment. MN Human Services background study with no restrictions will be required.

## Fabrication of Functional and Accommodative Orthoses PEDO 1040 3 Credits

This hands-on laboratory experience focuses on fabricating prescribed custom-molded foot orthoses to control and support the structure of the foot. The student will design and fabricate these orthoses from common materials used in the pedorthic practice. Student will fit foot orthosis in footwear. Prerequisite: Assessment score placement in RDNG 0950 or above, or completion of RDNG

## 7 Course Descriptions

0900 with a grade of $C$ or higher. PEDO 1030 or concurrent enrollment. MN Human Services background study with no restrictions will be required.

## Functional Anatomy and Pathology of the Foot and Ankle PEDO $1050 \quad 3$ Credits

This course explores the relationship between mechanical principles and forces affecting human locomotion. The course expands into the study of pathological gait and functional loss impacting orthotic design for the foot and ankle. The student will also concentrate on the effects of disease, trauma and malformation of the foot and ankle. Prerequisite:
Assessment score placement in RDNG 0950 or above, or completion of RDNG 0900 with a grade of $C$ or higher. PEDO 1040 or concurrent enrollment.

## Clinical Applications of Foot Orthoses PEDO 1060 3 Credits

In this course, the student will look at the effects of disease, trauma and malformation of the foot complex related to functional loss in the foot and ankle. Students will concentrate on patient evaluation, casting, measurement acquisition, and management skills to design, fabricate, and fit functional and supportive orthotic devices. The student will formulate a treatment plan based on patient evaluation. Prerequisite: Assessment score placement in RDNG 0950 or above, or completion of RDNG 0900 with a grade of C or higher. PEDO 1050 or concurrent enrollment. MN Human Services background study with no restrictions will be required.

## Clinical Applications of Prefabricated Ankle-Foot Orthoses PEDO $1070 \quad 3$ Credits

This course will cover human gait and the biomechanics of gait. Students will also study human anatomy and pathologies that relate to the lower extremities. Students will select and fit all classifications of prefabricated A.F.O. devices to these pathologies as it relates to the pedorthic scope of practice. Prerequisite: Assessment score placement in RDNG 0950 or above, or completion of RDNG 0900 with a grade of $C$ or higher. PEDO 1060 or concurrent enrollment. MN Human Services background study with no restrictions will be required.

## Philosophy

## Introduction to Western Philosophy PHIL $1021 \quad 3$ Credits MnTC: Goal 06

For over 2500 years philosophy has been concerned with an understanding of one's self, one's world, one's relationship with others, and one's place in the world. Philosophy integrates the findings of other disciplines and examines them in broader philosophical perspectives. Students will be introduced to the concerns and questions of philosophy through a variety of readings, both historical and contemporary and mainly from a Western perspective. The areas of philosophy that this course may cover: general introduction to philosophy, philosophical argumentation, epistemology, metaphysics, ethics and the historical development of the discipline of philosophy. Prerequisite: An assessment score placement in RDNG 1000 or above, or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher. Recommendation: Assessment score placement in ENGL 1021, or completion of ENGL 0090 with a grade of "C" or higher.

## Introduction to Eastern Philosophy PHIL $1025 \quad 3$ Credits <br> \section*{MnTC: Goals 06 \& 08}

"Who am I?" "How should I live?" "What is real?" "What can I know?" These are the perennial questions that philosophy has asked and answered for thousands of years and will be the basis of this course. Students will be introduced to these concerns and questions of Eastern philosophy (East India - Hinduism and Buddhism, China - Confucianism and Daoism, and perhaps Japan) through a variety of readings both historical and contemporary. The areas of philosophy that this course may cover are general introduction to philosophy, philosophical argumentation, epistemology, metaphysics, ethics, and the historical development of the discipline of Eastern philosophy. Prerequisite: An assessment score placement in RDNG 1000 or above, or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher. Recommendation: An assessment score placement in ENGL 1021, or completion of ENGL 0090 with a grade of " C " or higher.

## Ethics <br> PHIL 1031 <br> MnTC: Goals 06 \& 09

This course will examine questions of what is morally right and wrong. Theoretical questions such as "what makes an action morally right or wrong?", "what type of moral
character should a person have?" and "are there correct answers to moral questions?" will be studied. Included in the course will be the study of ethical theory and the application of ethical theory to modern moral problems. Prerequisite: An assessment score placement in RDNG 1000 or above, or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher; assessment score placement in ENGL 1021, or completion of ENGL 0090 with a grade of "C" or higher.

## Biomedical Ethics PHIL 1035 MnTC: Goals 06 \& 09

## 3 Credits

This course, intended for all students, provides background material in basic ethical theories, principles, and decision-making guidelines used in health care ethics. It examines moral issues confronting health care consumers, practitioners, and patients. It emphasizes the philosophical analysis of moral reasoning on specific topics such as truth-telling, confidentiality, human cloning, medical research, abortion, transplantation, allocation of resources, and euthanasia. Readings are selected from contemporary literature in bioethics. Prerequisite: An assessment score placement in RDNG 1000, or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher. Recommendation: An assessment score placement in ENGL 1021, or completion of ENGL 0090 with a grade of " $C$ " or higher.

## Introduction to Logic <br> PHIL 1041 MnTC: Goal 04

This course introduces students to the formal study of reasoning using the concepts and techniques of symbolic logic. Topics covered include representing the underlying logical structure of English sentences and arguments, testing whether arguments have good form, identifying valid and invalid argument forms, and recognizing common examples of bad reasoning. While it can be abstract and challenging, learning symbolic logic does have its practical side: it may lead to a deeper appreciation of the uses and abuses of language, more careful and critical reading skills, and a better understanding of how to craft well-reasoned writing.

```
World Religions
PHIL }105
MnTC: Goals 06 & 08
```

This course is an introduction to the major world religions. The course will focus on the historical formation of the religions and
those who founded them. It will also focus on their scriptures, practices and the ways each religion answers the fundamental questions concerning the nature of reality, purpose in life, ethics and death. Recommendation: An assessment score placement in RDNG 1000, or completion of RDNG 0900 OR RDNG 0950 with a grade of " C " or higher; assessment score placement in ENGL 1021, or completion of ENGL 0090 with a grade of " $C$ " or higher.

## Environmental Ethics

PHIL 2032

## 3 Credits

 MnTC: Goals 06 \& 10This course covers moral aspects of the relationship between human beings and the environment. Environmental Ethics covers ethical theory and applies ethical theory to the question of whether the environment is inherently valuable, or whether it is valuable only because it is useful to human beings? Topics may include whether we have a duty to preserve wild spaces, whether animals have rights, and the ethical implications of modern methods of food production. This course is suitable for all students. Prerequisite: ENGL 1021 with a grade of C or higher. Recommendation: Completion of 12 collegelevel credits.

## Business Ethics PHIL 2033 MnTC: Goals 06 \& 09

## 3 Credits

This course covers the moral aspects of the relationship between employers and employees as well as the moral aspects of the relationship between companies and society. The course also covers ethical theory. Students will have the opportunity to apply ethical theory to topics such as: employee privacy, employee drug testing, companies taking positions on social controversies, and the question of government regulation of business. This course is appropriate for all students. Prerequisite: ENGL 1021 with a grade of C or higher. Recommendation: Completion of 12 college-level credits.

## Philosophy of Religion

PHIL 2051
3 Credits MnTC: Goals 06 \& 08
Religion is one of the most powerful forces that has influenced human identity and history. Philosophy of religion addresses what is believed by religious, non-religious, and anti-religious people and what grounds they have for their beliefs. Topics may include definitions of religion, characteristics of the ultimate reality, the role and limits of reason
in religion, evil, life after death, and religious pluralism. This course will address such issues from both the Western and Eastern perspectives. Prerequisite: ENGL 1021 with a grade of C or higher. Recommendation: PHIL 1051 or PHIL 1025 or another PHIL course.

## Physical Education

## Archery <br> PE 1000

1 Credit
The course is designed to instruct the beginning fundamentals of archery. Topics to be covered in this course include history, selection and care of equipment, shooting techniques, safety practices, and etiquette.

## Personal Safety and Self Defense PE 10041 Credit

This course covers how to empower yourself by developing the psychological and physical skills to avoid and/or escape physical assault, harassment, and dangerous situations. Equip yourself with new approaches to bystander intervention. You will practice physical techniques of basic striking and kicking, shifting, blocking, and releasing. Additional course topics include: analysis and prevention of dangerous situations, victim behavior, characteristics of attackers, domestic violence and sexual harassment/violence.

## Bowling

PE 1005
1 Credit
This course introduces the basic strategies of bowling. Topics will include the history of bowling, scoring, selection and care of equipment, etiquette, fundamental techniques, and rules. Students will be responsible for shoe rental, lane fees and transportation to the bowling facility.

## Shooting Sports

PE $1008 \quad 2$ Credits
The course is designed for prospective shooting sports enthusiasts with little or no experience, as well as those with experience, who wish to attain an understanding of beginning fundamentals and safety in shooting sports. The following shooting styles are covered in the course: Trap, Skeet, Sporting Clays, Hand Guns and Black Powder. Students will have the opportunity to shoot at a regulation outdoor course. Prerequisite: Must be 18 or older, and must obtain a "permit to purchase" certificate from local police department to continue in the course. Local
police department is determined by student's home address.

## Brazilian Jiu Jitsu

PE $1009 \quad 1$ Credit
This course will introduce Brazilian Jiu Jitsu (BJJ) as a form of self-defense and lifetime wellness activity for those with little or no self-defense experience, as well as those with experience. We will cover basic knowledge and skills needed for a progressive skill building approach with an emphasis on proper technique, mobility, pressure, and leverage awareness. Intended for those interested in establishing a foundational knowledge of BJJ, or for those who would like to learn self-defense utilizing ground techniques. An emphasis will be placed on history, culture, and etiquette. Students are responsible for transportation to an off-campus training studio.

## Badminton <br> PE 1010

## 1 Credit

This course introduces students to basic badminton skills, techniques, and rules for singles and doubles play. Emphasis will be placed on the development of strokes, serves, offensive and defensive strategies, as well as an appreciation for badminton as a lifetime activity.

## Golf

PE $1015 \quad 1$ Credit This course presents the fundamentals of golf, including selection and care of equipment, etiquette, scoring and playing on a golf course. This course is intended for beginners and students who have not had formal golf instruction although students of all ages and abilities are welcome. Students are responsible for green fees and transportation to off-campus sites.

## Social Dance

PE 1016

## 1 Credit

In this course students will participate in the following types of dance: folk, square, line, country, salsa, swing, hip-hop, and ballroom. Emphasis will be placed on the fundamentals of dance and various dance styles. This class is intended for beginning dancers of all ages who have not had formal instruction.

## Winter Downhill Sports

PE $1021 \quad 1$ Credit
This course introduces students to Winter Downhill Sports as a lifetime activity. Students will select from snowboarding or skiing options. Using the American Teaching System (ATS), classes are split into appropriate skill

## 7 Course Descriptions

levels, beginning through advanced. Students are responsible for their transportation to the Adventure Park, lift fees, and equipment.

## Recreational Volleyball <br> PE $1030 \quad 1$ Credit

This course introduces students to the social as well as the competitive aspects of the game of volleyball. The course includes instruction in fundamental skills, techniques, rules, and strategies of team play. Emphasis will be on skill development for the recreational player. Sand volleyball is also offered as weather permits.

## Recreational Softball PE 10351 Credit

This course introduces students to the recreational aspects of the game of softball. The course includes instruction in fundamental skills, techniques, rules, and strategies of slow-pitch softball. Emphasis will be on skill development for the recreational player.

## Rock Climbing

PE $1040 \quad 2$ Credits
This course introduces students to artificial and natural rock climbing as a lifetime activity. Topics include techniques, safety, etiquette, and equipment selection and care. The class culminates in a climbing field trip at local climbing area. Students are required to provide some equipment and are responsible for their transportation to the off-campus sites.

## Soccer <br> PE 10451 Credit

This course introduces students to the game of soccer. The course examines the rules and regulations of soccer, as well as the fundamental skills necessary to participate.
Teamwork and participation is an integral part of the course.
Boot Camp
PE 1051
1 Credit
Challenge yourself with a variety of boot camp style indoor and outdoor workouts consisting of circuit training, interval training, plyometrics, flexibility, cardiovascular and resistance training activities within an encouraging group setting. Recommendation: Student is currently physically active.

## Biking

PE $1055 \quad 1$ Credit
This course introduces students to biking as a fitness activity for all skill levels. Emphasis will be placed on conditioning, maintenance,
techniques, etiquette, and regulations for biking. Prerequisite: Students must have bike and helmet.

## Personal Fitness <br> PE 1060

2 Credits
This course is for students interested in developing a personal exercise program based on their own fitness level as part of a healthy lifestyle. The personal fitness program will incorporate the health- related components of physical fitness. Emphasis is placed on the personal development of fitness, based on individualized goals.

## Aerobic Exercise

PE $1063 \quad 2$ Credits
A fitness class in understanding the principles applied to aerobic exercise as a means of achieving weight loss and cardiovascular conditioning. Emphasis also placed on muscle strength and endurance and development of flexibility. A variety of aerobic activities will be offered. Offered F, S.

## Yoga

PE $1064 \quad 1$ Credit
This course introduces students to the fundamental philosophies, skills, techniques and terms of yoga. Emphasis is placed on the performance of yoga postures, breathing exercises, meditation, and relaxation techniques. Note: Students should furnish their own yoga mats.

## Step Aerobics

PE $1065 \quad 2$ Credits
This course is designed for students interested in developing cardiovascular fitness through step aerobics. The course also includes the development of muscle strength, muscle endurance, and flexibility as part of a healthy lifestyle.

Fitness Walking PE 1067

## 2 Credits

This course focuses on individual improvement in cardiovascular fitness through fitness walking, while emphasizing exercise as a part of a healthy lifestyle. Students will develop a personal walking program based on current fitness levels and fitness principles. Flexibility and muscular strength and endurance exercises are also incorporated into exercise programs.
Fitness for Life PE $1070 \quad 2$ Credits
This course is designed for students interested in participating in group fitness activities
as a means of improving their fitness level. Emphasis is placed on using exercise as part of a healthy lifestyle. Students will participate in a variety of circuit, cardiovascular, and resistance training activities within a group setting.

## Weight Training

## PE 1075

## 2 Credits

This course is for students interested in developing a resistance training program based on their own fitness level and skill as part of a healthy lifestyle. Emphasis is placed on the development of muscle strength and endurance, based on personal goals.

## Foundations of Physical Education PE $1080 \quad 3$ Credits

This course is a critical examination of the history, events, programs and philosophical positions that have led to the current status of physical education, fitness, and the sports entertainment industry in the United States. Students will be provided with up-to-date information about physical education and its diverse subfields as well as introduction to career roles in preparation for professional service in all areas of physical education, exercise science, sports management and sports facility management. Students will develop a professional philosophy of physical education.

## Baseball Officiating

## PE 1090 <br> 1 Credit

The course is designed to teach the fundamentals of sports officiating in baseball. Coursework covers officiating at the elementary, junior, and high school levels as well as park and recreational programs. Students are eligible to become certified and registered officials with the Minnesota State High School League (MSHSL) when they pass the written rules test and pay registration fees. Note: To pursue certification, the Minnesota State High School League (MSHSL) requires all applicants to be at least 18 years of age and pass a background study.

## Basketball Officiating <br> PE 1091 <br> 1 Credit

The course is designed to teach the fundamentals of sports officiating in basketball. Coursework covers officiating at the elementary, junior, and high school levels as well as park and recreational programs. Students are eligible to become certified and registered officials with the Minnesota State High School League (MSHSL) when they pass the written rules test and pay registration
fees. Note: To pursue certification, the Minnesota State High School League (MSHSL) requires all applicants to be at least 18 years of age and pass a background study.

## Softball Officiating PE 10921 Credit

The course is designed to teach the fundamentals of sports officiating in softball. Coursework covers officiating at the elementary, junior, and high school levels as well as park and recreational programs. Students are eligible to become certified and registered officials with the Minnesota State High School League (MSHSL) when they pass the written rules test and pay registration fees. Note: To pursue certification, the Minnesota State High School League (MSHSL) requires all applicants to be at least 18 years of age and pass a background study.

\section*{Volleyball Officiating

\section*{PE 1093

## PE 1093 <br> 1 Credit

The course is designed to teach the fundamentals of sports officiating in volleyball. Coursework covers officiating at the elementary, junior, and high school levels as well as park and recreational programs. Students are eligible to become certified and registered officials with the Minnesota State High School League (MSHSL) when they pass the written rules test and pay registration fees. Note: To pursue certification, the Minnesota State High School League (MSHSL) requires all applicants to be at least 18 years of age and pass a background study.

## Internship: Sports Facility/Operations PE 1780 <br> 1-12 Credits

This course provides students an opportunity to apply knowledge and skills learned in the Sports Management program. Students will work in operational roles at facilities while applying a variety of communication, technical, and time management skills. Internship positions must be held in some facet of the sports facility management industry, and approved by the program coordinator. May be repeated with program coordinator's consent. Prerequisite: Consent of instructor.

## Introduction to Sports Management PE $2080 \quad 3$ Credits

This course introduces students to the field of sports management and the numerous career opportunities available over the wide spectrum of the sports management industry. Emphasis will be placed on examining the job
responsibilities and competencies required of the various areas of sports management.

## Intercollegiate Golf

 PE $2090 \quad 1$ CreditThis course is designed for men or women who participate on the intercollegiate golf team. Skill instruction and techniques for mental preparation are covered. This course may be taken two times for credit. Prerequisite: Must be a member of intercollegiate golf team and have consent of instructor or athletic director. Restriction: Student must be eligible based on the Minnesota College Athletic Conference (MCAC) and National Junior College Athletic Association (NJCAA) rules.

## Intercollegiate Men's Soccer PE $2091 \quad 1$ Credit

This course is for students who participate on the intercollegiate men's soccer team. This course offers advanced skill instruction as well as intercollegiate experience. This course may be taken two times for credit. Prerequisite: Must be a member of intercollegiate men's soccer team and have consent of instructor or athletic director. Restriction: Student must be eligible based on the Minnesota College Athletic Conference (MCAC) and National Junior College Athletic Association (NJCAA) rules.

## Intercollegiate Women's Soccer PE $2092 \quad 1$ Credit

This course is for students who participate on the intercollegiate women's soccer team. This course offers advanced skill instruction as well as intercollegiate experience. This course may be taken two times for credit. Prerequisite: Must be a member of intercollegiate women's soccer team and have consent of instructor or athletic director. Restriction: Student must be eligible based on the Minnesota College Athletic Conference (MCAC) and National Junior College Athletic Association (NJCAA) rules.

## Intercollegiate Women's Softball PE $2093 \quad 1$ Credit

This course is for students who participate on the intercollegiate women's softball team. This course offers advanced skill instruction as well as intercollegiate experience. This course may be taken two times for credit. Prerequisite: Must be a member of intercollegiate women's softball team and have consent of instructor or athletic director. Restriction: Student must be eligible based on the Minnesota College

Athletic Conference (MCAC) and National Junior College Athletic Association (NJCAA) rules.

## Intercollegiate Men's Baseball PE 20941 Credit

This course is designed for students who participate on the intercollegiate baseball team. This course offers advanced skill instruction as well as intercollegiate experience. This course may be taken two times for credit. Prerequisite: Must be a member of intercollegiate baseball team and have consent of the instructor or athletic director. Restriction: Student must be eligible based on the Minnesota College Athletic Conference (MCAC) and National Junior College Athletic Association (NJCAA) rules.

## Internship: Sports Management

 PE 2780 1-12 CreditsThis course provides students with the opportunity to apply knowledge and skills learned in the Sports Management program. Students will work in a professional environment while applying a variety of human relations, communication, sales and/or marketing and operation/event management skills. Internship positions must be held within some facet of the sports management or recreation industries. May be repeated with program coordinator's consent. Prerequisite: Consent of instructor.

## Special Topics in Physical Education PE $2790 \quad 1-3$ Credits

This course is designed for students interested in participating in high intensity group fitness activities as a means of improving their fitness level. Students will participate in a variety of boot camp style indoor and outdoor workouts consisting of circuit training, interval training, plyometrics, flexibility, cardiovascular, and resistance training activities.

## Physics

## Physics Concepts PHYS 1020 <br> 4 Credits MnTC: Goal 03

This course serves as an introduction to the basic concepts of physics: motion, force, energy, momentum, and rotations. Additional topics in physics may be included at the discretion of the instructor including (for example) fluid dynamics or the modern study of matter. The course is a problem-solving

## 7 Course Descriptions

course, but the focus is on the concepts of physics rather than on detailed quantitative analysis. This course is intended for students who have not had a recent course in physics at the high school or college level. The laboratory associated with this course emphasizes measurement, interpretation of data, and synthesis of results. Prerequisite: Assessment score placement in MATH 0070 or above, or completion of MATH 0030 with a grade of "C" or higher.

## Astronomy Concepts PHYS 1030 MnTC: Goal 03

Astronomy Concepts offers an overview of the science of the cosmos. The course covers a wide variety of topics: the Earth-Moon-Sun system, the solar system, stars, galaxies, and cosmology. The course is purely conceptual. Mathematical expressions are used only in a conceptual way to express relationships between various astronomical and physics ideas. Students will write research papers on approved topics in astronomy throughout the semester. Lab-like activities afford students the opportunity to make observations that allow them to interpret and refine their own models of how the cosmos is put together. Restriction: Closed to students who have completed PHYS 1070 or PHYS 1035.

## Observational Astronomy PHYS $1035 \quad 3$ Credits MnTC: Goal 03

Observational Astronomy introduces the student to the basic ideas of astronomy in the context of measurement and analysis. Students will be offered the chance to make observations on a variety of astronomical topics, such as lunar observations, unaided-eye observations of the stars, and indirect observations of solar phenomena. The lecture part of the class links these observations to their scientific foundation as well as introducing the student to the methods of analysis that will be used to draw conclusions from their observations. This is a laboratory course that makes use of student observations of celestial phenomena. Prerequisite: Assessment score placement in MATH 0070 or higher or completion of MATH 0030 with a grade of $C$ or higher. Restriction: Closed to students who have completed PHYS 1070 or PHYS 1030.

## General Physics I MnTC: Goal 03

 PHYS $1041 \quad 5$ CreditsThis is the first course in a sequence that introduces the topics of mechanics using the mathematical techniques of algebra and trigonometry. Students will investigate kinematics, forces, momentum, circular motion, work/energy, and rotational dynamics. The course is problem-based, focusing on quantitative analysis of physics problems. It includes a computer-based laboratory component in which students will collect, analyze, and interpret data. Prerequisite: Assessment score placement in MATH 1061 or above, or completion of MATH 0090 or MATH 1015 with a grade of "C" or higher, or concurrent enrollment in MATH 0090 or MATH 1015.

## General Physics II PHYS 1042 MnTC: Goal 03

This course is a continuation of PHYS 1041, introducing many of the remaining topics in classical physics. This course in general physics introduces the topics of thermodynamics, optics, waves, and electricity. It includes a computer-based laboratory component where students collect, analyze, and interpret data. Prerequisite: Completion of PHYS 1041 with a grade of " $C$ " or higher.

## Descriptive Astronomy

PHYS 1070
MnTC: Goal 03
Descriptive Astronomy is an introductory course intended for students with an interest in the stars and planets. This course introduces the motion of the stars and planets, the properties of the solar system and its development, and the lives of stars. These ideas will be taught in such a way as to emphasize how astronomers know the properties of the universe and then use their observations to construct scientific models about how the universe works and includes lab-like experiences.

## Descriptive Astronomy Laboratory PHYS 1075 1 Credit MnTC: Goal 03

This is a laboratory course in which students will gain an understanding of how to use the tools and methods of the astronomer. Students will make measurements and observations and will be asked to draw conclusions based on these observations in
order to explain astronomical phenomena. Calculations done in this laboratory course will require no more than basic arithmetic skills. Prerequisite: Successful completion of PHYS 1070 or concurrent enrollment. Assessment score placement in MATH 0030 or above, or completion of MATH 0010 with a grade of "C" or higher.

## Introductory Physics I PHYS 1081 <br> 5 Credits MnTC: Goal 03

This course is the first of a comprehensive two-semester sequence in introductory physics. The topics of kinematics, vectors, rotational motion, gravity, energy, and oscillatory motion are introduced at the level of calculus. The course presents these topics as a foundation for further studies in science while at the same time developing problemsolving skills that will be useful for students in practically any endeavor they choose to undertake. Prerequisite: MATH 1081 or concurrent enrollment. Recommendation: High school physics or PHYS 1020.

## Introductory Physics II PHYS 1082 MnTC: Goal 03

This course is the second course in a comprehensive two-semester sequence in introductory physics. The topics of wave motion, geometric optics, and electricity and magnetism are introduced at the level of calculus. The course presents these topics as a foundation for further studies in science while at the same time developing problemsolving skills that will be useful for students in practically any endeavor they choose to undertake. Prerequisite: Successful completion of PHYS 1081. MATH 1082 or concurrent enrollment.

## Modern Physics PHYS 2081

## 4 Credits

Modern physics is the study of physics since the turn of the twentieth century. The two great theories of twentieth century physics are Einstein's Theory of Relativity and the Quantum Theory. The emphasis of this course will be on giving students a thorough understanding of these two complex topics as well as helping students gain an understanding of how these two theories apply to atomic and molecular structure and to condensed matter physics. Other topics such as nuclear physics, elementary particles physics, or astrophysics may also be covered. Prerequisite: PHYS 1082, MATH 1082.

## Political Science

## Introduction to Political Science POLS $1020 \quad 3$ Credits MnTC: Goals 05 \& 09

This course introduces the discipline of political science. It will survey the political science subfields of political behavior, comparative government, international relations and political theory. Key concepts such as power, the state, conflict, ideology, nationalism, and political violence are examined. Structure and change in democratic and non-democratic governments are emphasized.

## International Relations POLS 1023 MnTC: Goals 05 \& 08

 3 CreditsThis course introduces students to the central concepts that frame thinking about global trends and the major theories in the study of international relations. It identifies the actors in the global arena and discusses the processes by which those actors make decisions. It looks at issues of global welfare and trends reshaping global conditions. This course also reviews the globalization of trade, population demographics, the ecological environment, armed conflict and its management.

## American Government POLS 1031 MnTC: Goals 05 \& 09

3 Credits
The course examines the political process in the United States of America. It pays special attention to patterns of citizen participation, political parties and interest groups, and the cultural and constitutional basis of the American political system. It also reviews the major governmental institutions involved in the making of public policy in the United States. These institutions include the presidency, congress, and the federal courts.

## State and Local Government POLS 1033 3 Credits MnTC: Goals 05 \& 09

This course introduces students to the dynamic world of state and local politics. It's primary focus is on state constitutions, political parties and interest groups, voting and elections, state legislatures, governors and mayors, and state courts. This course also gives special attention to Minnesota state politics, history, and culture.

## Constitutional Law MnTC: Goals 05 \& 09

 POLS $1035 \quad 3$ CreditsThis course examines the development of constitutional principles, judicial review, commerce powers, executive action, civil rights and liberties, and the pivotal role of the U.S. Supreme Court in maintaining the checks and balances of our Federal system of government. This course is intended for all students, and it is of special interest for students interested in government and political science.

## Internship: Political Science POLS 1780 1-3 Credits

This course provides an opportunity for students to intern with a state legislator, government agency, political organization, or nonprofit agency. The course is designed to enhance learning by putting to use the knowledge students have already attained and also building on that knowledge and skill-set. The individual competencies will vary from internship to internship depending upon the agency site. Prerequisite: Permission of faculty coordinator and completion of or concurrent enrollment in POLS 1031 or POLS 1033.

## Prosthetic Technology

## Introduction to Prosthetics PRTE 1020 3 Credits

This course introduces the role of the prosthetic technician and the safety practices and habits required by the profession. Topics include safety practices, and prosthetic bench tools and equipment as well as the materials and components used to craft prosthetic fabrications.

## Anatomy of Trans-Tibial Amputations PRTE 1030 4 Credits

This course covers the relationship between trans-tibial anatomy and prosthetic measurement charts in trans-tibial amputations. This course will introduce students to trans-tibial socket fabrication. Students will make plaster of Paris models, prepare tapered polyvinylalcohol (PVA) sleeves, lay up the patellar tendon-bearing (PTB) socket and laminate PTB sockets. Prerequisite: PRTE 1020 or concurrent enrollment.

Trans-Tibial Socket Inserts,
Alignment and Duplication PRTE 1040

3 Credits
This course concentrates on fabrication techniques for trans-tibial socket inserts and patellar tendon-bearing (PTB) waist belts with suspension attachments. In the lab, students place PTB sockets into extension blocks, statically align and assemble them, and practice procedures for duplicating proper PTB alignments. Prerequisite: PRTE 1030 or concurrent enrollment.

## Finishing Procedures for Patellar Tendon-Bearing (PTB) Prostheses PRTE 1050 3 Credits <br> This course covers shaping, laminating, and finishing of Patellar tendon-bearing (PTB) prostheses. Prerequisite: PRTE 1040 or concurrent enrollment.

## Fabrication of Patellar Tendon-Bearing (PTB) Joint and Lacer PRTE 1060 <br> 3 Credits

This course covers laminating a patellar tendon-bearing (PTB) socket utilizing vacuum techniques, statically aligning PTB prostheses and mounting joints. Students will also fabricate fork straps and joint covers. Prerequisite: PRTE 1050 or concurrent enrollment.

## Anatomy of Trans-Femoral Amputations PRTE $1070 \quad 3$ Credits

This course covers anatomy of trans-femoral amputations, and trans-femoral prosthetic measurement charts. This course focuses on duplicating procedures for making a Patellar tendon-bearing (PTB) prosthesis. Students shape and laminate the prosthesis, as well as finish and assemble the PTB prosthesis for delivery to a patient. This course covers anatomy of trans-femoral amputations, and trans-femoral prosthetic measurement charts. Prerequisite: PRTE 1060 or concurrent enrollment.

## Trans-Femoral Socket Fabrication PRTE $1080 \quad 4$ Credits

This course concentrates on creating plaster of Paris models of trans-femoral residual limbs, as well as the lay-up and lamination of trans-femoral prosthetic sockets. Activities include placement of a trans-femoral socket in an extension block, static alignment of a transfemoral socket on an adjustable leg, duplicate alignment of a trans-femoral prosthesis, and attachment of trans-femoral flexible leather belts and hip joint components. Prerequisite: PRTE 1070 or concurrent enrollment.

## 7 Course Descriptions

## Finishing Procedures for Trans-Femoral Prostheses PRTE 2000

3 Credits
This course prepares students for shaping and finish lamination procedures of trans-femoral prostheses and assembly of trans-femoral prostheses. Prerequisite: PRTE 1080 or concurrent enrollment.

## Thermoplastic Check Socket Fabrication PRTE 2010 3 Credits

This course concentrates on vacuum forming plastic trans-tibial, trans-femoral, long transradial, short trans-radial and trans-humeral check sockets. Prerequisite: PRTE 2000 or concurrent enrollment.

## Anatomy of Upper-Limb Amputation and Long Trans-Radial Fabrication PRTE 2020 3 Credits

This course introduces students to upperlimb amputation anatomy and upper-limb measurement charts. Students will identify upper-limb components used in the prosthetic industry and fabricate a long trans-radial prosthesis. Prerequisite: PRTE 2010 or concurrent enrollment.

## Fabrication of Short Trans-Radial and Trans-Humeral Prosthesis PRTE 2030 4 Credits

This course introduces materials and techniques used to fabricate short transradial and trans-humeral prosthetic devices. Students will fabricate short trans-radial and trans-humeral prosthetic devices in a lab setting. Prerequisite: PRTE 2020 or concurrent enrollment.

## Clinical Internship Practicum PRTE 2780 4 Credits

During this 160-hour prosthetic clinical, students are placed in a prosthetic facility or department. This placement provides the opportunity to apply theory and skills learned through out the program, and be under the direction of a certified prosthetist or clinical supervisor. Prerequisite: Completion of all PRTE curriculum and consent of instructor.

Psychology

## Introduction to the Social and Behavioral Sciences: ANTH, PSYC and SOC PSYC $1000 \quad 3$ Credits

This course serves as a broad introduction to three of the social and behavioral sciences: Anthropology, Psychology, and Sociology. The course provides an overview of the history, theories, research methods, and research publications of each discipline. The course is designed to help students to acquire the knowledge and skills that will enable them to succeed in the introductory courses in these three disciplines. Prerequisite: Assessment score placement in RDNG 0950, or completion of RDNG 0900 with a grade of " $C$ " or higher or consent of the instructor. Restriction: May not be taken for credit if credit has been earned in ANTH 1000 or SOC 1000.

## General Psychology <br> PSYC $1020 \quad 4$ Credits MnTC: Goal 05

Psychology is the science of behavior and mental processes. Scientific psychologists do research on human and animal behavior, and on mental activities such as cognition and intelligence. This course is a survey of the fundamental principles, research findings, and theories in psychology. This course does not train students in the practice or application of psychology, but introduces the core ideas and findings in the scientific study of behavior and the mind. Psychology is a very broad discipline that includes many topics including brain anatomy and function, learning, development, perception, memory, emotions, motivation, personality, social psychology, sleep and dreaming, and psychological disorders and their treatments. Prerequisite: Assessment score placement in RDNG 1000 or above, or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher.

## Psychology of Adjustment

PSYC 1030
3 Credits

## MnTC: Goal 05

This course is a survey of the psychological factors involved in human adjustment and healthy personal development. Content includes broad based psychological theories, developmental stages of the lifespan including death and dying, and acquisition and maintenance of coping mechanisms.

Additionally, course content includes theories of personality, stress and health, self-concept, and interpersonal relationships.

## Developmental Psychology: Lifespan <br> PSYC $1041 \quad 4$ Credits MnTC: Goal 05

The focus of this course is on human development from conception to death. The course includes research methodology, theoretical perspectives, and the biological, cognitive, and psychosocial changes occurring in human development, as well as the role of social context and developmental challenges. Emphasis will be placed on the application of research and theory to current issues. Prerequisite: Assessment score placement in RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of $C$ or higher. Assessment score placement in ENGL 1021 or above or completion of ENGL 0090 with a grade of C or higher. Recommendation: PSYC 1020, ENGL 1021

## Brain Science Foundations

PSYC $2001 \quad 1$ Credit MnTC: Goal 05
This course is a description and discussion of the brain's influence on behaviors and mental processes. The focus is on how the brain and nervous system contribute to psychological functioning, both normal and pathological. This course presents a brief introduction to the field of cognitive neuroscience, the multidisciplinary study of how the brain affects cognition and mental states. Topics include the history and philosophy of brain research, how neurons and synapses work, fundamental brain anatomy and localization of function, the cerebral hemispheres and split-brain, brain development, and the role of genetics. Prerequisite: Assessment score placement in RDNG 1000 or completion of RDNG 0090 or RDNG 0950 with grade of C or higher. Recommendation: PSYC 1020.

## Sex, Drugs, and Rock " $n$ " Roll PSYC 20021 Credit MnTC: Goal 05

What is the biopsychology of desire? How does the brain regulate and influence experiences of motivation, emotion, reward, and pleasure? This course presents an introduction to the brain's role in mental and behavioral processes that involve motivation, sex, drug addiction, music, and emotions. The focus is on how the brain and nervous system contribute to and influence psychological functioning, both normal and pathological, in ways that are related to cravings and desires,
such as sex, motivation, music, and emotion. Prerequisite: Assessment score placement in RDNG 1000 or completion of RDNG 0900 or RDNG 0950 with grade of " $C$ " or higher. Restriction: Recommendation: PSYC 1020 or PSYC 2001.

## Sensation, Movement and Language PSYC 2003 <br> 1 Credit <br> MnTC: Goal 05

How does the brain receive information, interpret it, and then respond? This course presents an introduction to the brain's role in sensation (vision, hearing, and other senses), perception (creating meaning from sensory information), language (including language disorders such as aphasia), and body movement (including disorders of movement such as dystonia and Parkinson's disease). The focus is on how the brain and nervous system sense the environment, perceive and interpret incoming sensory information, communicate with others using language, and move the muscles of the body. Prerequisite: Assessment score placement in RDNG 1000 or completion of RDNG 0900 or RDNG 0950 with grade of "C" or higher. Recommendation: PSYC 1020 or PSYC 2001.

## Higher Mental Processes <br> PSYC 20041 Credit MnTC: Goal 05

This course is an introduction to the brain's role in the higher mental and psychological functions that people experience. The focus is on how the brain and nervous system contribute to and influence complex cognitive processes, sleep, awareness, and psychological abnormalities such as schizophrenia, mood disorders, and Alzheimer's disease. This course presents the most recent findings in the scientific study of the biopsychology of learning, memory, cognition, sleep, consciousness, and mental disorders. Prerequisite: Assessment score placement in RDNG 1000 or completion of RDNG 0900 or RDNG 0950 with grade of "C" or higher. Recommendation: PSYC 1020 or PSYC 2001.

## Abnormal Psychology <br> PSYC 2021 MnTC: Goals 05 \& 07

This course is an introduction to the diagnosis, classification, causes, and treatments of psychological disorders. This course covers the Diagnostic and Statistical Manual of Mental Disorders (DSM), the book universally used to diagnosis mental illnesses, as well as theories about disorders, descriptions
and statistics of major mental illnesses, and medical and psychological therapies. Some of the disorders that will be studied in detail include schizophrenia, mood, anxiety, developmental, cognitive, and personality disorders. Prerequisite: PSYC 1020 with a grade of C or higher, ENGL 1021 with a grade of C or higher.

## Forensic Psychology PSYC 2031

## 3 Credits

Forensic Psychology seeks to provide to students a broad-based understanding of the role of psychology within the legal field. Students will learn about aspects of human behavior related to the legal process including eyewitness memory and testimony, competence and insanity, risk assessment, and criminal behavior. The emphasis will be on scientific and empirical applications of psychology to civil and criminal law. Prerequisite: PSYC 1020, Assessment score placement into RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher. Recommendation: ENGL 0090 with a grade of "C" or higher, or assessment score placement into ENGL 1021.

## Child Development

PSYC $2043 \quad 3$ Credits MnTC: Goals 05 \& 09
Child Development is a field within Developmental Psychology concerned with the facts and principles that influence the health, well-being, and future of the child. The course includes an in-depth study of the physical, cognitive, and psychosocial changes that occur from birth to adolescence. The course includes research methods and theories of child development, as well as an exploration of genetic and environmental factors that influence the child's development. Prerequisite: ENGL 1021 with a grade of C or higher. Recommendation: PSYC 1020

## Adolescent Development PSYC 2044 <br> 3 Credits MnTC: Goals 05 \& 09

Adolescent psychology is a field within Developmental Psychology, concerned with the psychological principles that apply to the study of adolescent development. The course includes an in-depth study of the physical, cognitive, and psychosocial changes that occur during the adolescent years. This course will familiarize students with the fundamental psychological concepts, research findings, and theories in adolescent psychology. Prerequisite: ENGL 1021 with a grade of C or higher. Recommendation: PSYC 1020

## Adulthood, Aging and Death PSYC $2045 \quad 3$ Credits MnTC: Goals 05 \& 09

This course presents an overview of the developmental tasks of adulthood, with particular reference to aging and death. It includes the study of the physical, cognitive, and psychosocial aspects of the aging process. Normal aspects of aging are contrasted with aging related to various diseases. Ethical, moral, and other contemporary issues associated with adulthood, aging, and death will be examined. Prerequisite: ENGL 1021 with a grade of C or higher. Recommendation: PSYC 1020.

## Special Topics in Psychology PSYC 2790 <br> 1-3 Credits

A course in which one of a variety of contemporary topics of interest would be selected as the focus for study. The specific topic will be announced in advance, and published at the time of registration. Prerequisite: PSYC 1020 or consent of instructor; assessment score placement in RDNG 1000 or above, or the completion of RDNG 0900 OR RDNG 0950 with a grade of "C" or higher; and assessment score placement in ENGL 1021, or completion of ENGL 0090 with a grade of " $C$ " or higher.

## Public Safety

## Foundations of Public Safety PSAF 1020 <br> 3 Credits

This survey course is an introduction to the multidisciplinary field of public safety as it applies to the disciplines of emergency medical services (EMS), the fire service, law enforcement, communications/dispatch, and emergency management. Students will not only study an overview of each discipline/ occupation, but interact with peers from their own profession as well as others from across the public safety spectrum. Recommendation: Computer literacy and word processing skills.

## Public Safety Technology PSAF 1031 <br> 3 Credits

This course focuses on integrating new and emerging technology in managing the allocation and utilization of resources needed during large scale gatherings, special events, natural, human-made, and terrorist disasters. Prerequisite: PSAF 1020 or instructor consent. Recommendation: Computer literacy and word processing skills.

## 7 Course Descriptions

## Principles of Public Safety Leadership PSAF 1032 <br> 3 Credits

This course will examine decision-making models, team development techniques, and leadership skills necessary to contribute to the success of a public safety organization. This course will also assess how organizational behavior, laws, and culture influence the delivery of public safety. Prerequisite: PSAF 1031 or instructor consent. Recommendation: Computer literacy and word processing skills.

## Community Service Principles PSAF 1035 3 Credits

This course will explore the perceptions and expectations of governmental organizations, the media, and culturally diverse communities. The course provides a focus on customer service, public relations, crisis communications, recruitment and retention, and education as it relates to public safety. Recommendation: Computer literacy and word processing skills.

## Public Safety Telecommunicator PSAF 1080 3 Credits

The course will introduce students to a career as a Public Safety Telecommunicator, also referred to as a 911 dispatcher, with an emphasis on the knowledge, skills and abilities that are required to be successful within the profession. This can include, but are not limited to, interpersonal communication, telephone communication techniques, exposure to a broad spectrum of technology, computer-aided dispatch, and call classification. Prerequisite: Assessment score placement in ENGL 0090 or above, or completion of ENGL 0080 with a grade of C or higher. Recommendation: Keyboarding skills (30 WPM or higher) or OFFT 1001.

## Technological Disasters PSAF 1100

3 Credits
This course is designed to study various unintentional technological disasters, such as structural failures, hazardous materials releases, fire outbreaks, and transportation accidents. Students will develop case studies of various technological disasters and utilize critical thinking and analysis methods to determine the anatomy of the given disaster. Recommendation: Entry level computer skills.

## Independent Study <br> PSAF $1790 \quad 1-4$ Credits

This course provides the opportunity for students to enhance their learning experiences or explore a specialty area beyond the scope
of the basic Public Safety coursework through an independent study projects. Projects will be developed cooperatively between the students and the instructor with the approval of the dean in order to help the student pursue specific areas of interest relative to public safety. Projects may apply to the students discipline within public safety or may be interdisciplinary in scope. Prerequisite: Consent of instructor and dean. Completion of PSAF 1020 or equivalent with a grade of " $B$ " or above. Recommendation: Computer literacy, word processing skills, and basic PowerPoint skills.

## Incident Command Strategies PSAF 2040 <br> 4 Credits

This course is a comprehensive and in-depth examination of the incident command system used to manage small to large scale natural, human-made and terrorist incidents using the guidelines set forth by the National Incident Management System (NIMS) per Homeland Security Presidential Directive-5. Basic through advanced principles of the incident command system and NIMS will be discussed, examined, and applied in simulations utilizing various media all revolving around a multidisciplinary approach. Recommendation: Computer literacy and word processing skills.

## Project Management in Public Safety PSAF 2045 3 Credits

This course is intended to prepare the student to manage projects of varying sizes and difficulty that they may encounter in the public safety discipline. This course will provide activities to simulate selecting or analyzing an organization for an issue, procedure, process, problem, or service that can be improved or developed. Then the student will be provided resources concerning how to design, develop, implement, evaluate, and make necessary improvements or modifications to the project. This course will also focus on presenting all the project stages and final project results in written, multi-media, and verbal formats. Recommendation: Computer literacy and word processing skills.

## Public Safety Capstone

 PSAF 2050
## 3 Credits

The Public Safety Capstone course is intended to provide the public safety student with the opportunity to research, analyze, and present a multidisciplinary approach to current issues or events within the public safety arena. Using a team approach, the student will demonstrate their skills in writing, critical thinking, and knowledge of public safety. Prerequisite:

Completion of all coursework required for the program: PSAF 1020, PSAF 1031, PSAF 1032, PSAF 1035, PSAF 2040, and PSAF 2045. Knowledge and proficiency in Microsoft applications.

## Radiologic Technology

## LMXO Radiation Production and Protection RADT 10113 Credits

This course is designed to introduce the student to the $x$-ray machine, radiation production physics, and methods of minimizing radiation exposure to the patient, self and others. Topics will include atomic structure, the electromagnetic spectrum, and components of the $x$-ray unit, photon interaction with matter, and radiation safety and protection. This course is not intended for the general public. Prerequisite: RADT or MEDA program director consent and Assessment score placement in MATH 0070 or above, or completion of MATH 0030 with a grade of $C$ or higher. Assessment score placement into RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher. Student will need to provide proof that he/she is a 1) current medical assistant student or 2) current radiologic technology student or 3) graduate from a medical assistant program.

## Fundamentals of Radiography RADT 1020 3 Credits

This course is an introduction to the field of radiography and its role in health care. Basic patient care skills, body mechanics, infection control techniques, aseptic procedures, emergency care, drug administration, HIPPA guidelines, patient communication and meeting the psychological needs of the patient are discussed. Students are introduced to the basic principles of radiation protection and safety, related radiography terminology, legal issues, and basic exposure factors of radiology. Students will demonstrate theory and clinical applications in the laboratory setting. Prerequisite: Application and acceptance in the Radiologic Technology Program and concurrent enrollment in RADT 1031.

## LMXO Image Production and Analysis RADT 1021 <br> 3 Credits

Students will be introduced to the basic technical factors utilized to produce a quality radiographic image while minimizing
patient radiation exposure. A comparison of film-screen radiography and digital imaging systems will be included in course theory. This course is not intended for the general public. Prerequisite: RADT 1011 with a grade of C or higher.

## Anatomy and Positioning I RADT 1031 <br> 5 Credits

The course is the first of two semester courses that pertain to anatomy and radiographic positioning of the body. Initially, the student is introduced to radiographic terminology, including anatomical body planes, surfaces, movements and topographical landmarks. This course covers the anatomy and radiographic positioning of the chest, abdomen and extremities. Emphasis is also placed on bone development, skeletal articulations and joint morphology. The student will demonstrate theory and clinical applications in the laboratory setting. The student must be able to perform physical tasks to complete course requirements. Prerequisite: Concurrent enrollment in RADT 1020, or the RADT or MEDA program director consent.

## Anatomy and Positioning II RADT 1032 <br> 3 Credits

This course is the second of two semester courses that pertain to anatomy and radiographic positioning of the human body. The first portion of the course pertains to anatomy and positioning of the vertebral column and skull. The second portion of the course places emphasis on the use of contrast medium in radiography of the body systems. Routine contrast procedures of the digestive, biliary and urinary procedures and related anatomical structures will be included. The remainder of the course will emphasize specialized procedures using contrast medium. The student will demonstrate theory and clinical applications in the laboratory setting. The student must be able to perform physical tasks to complete course requirements. Prerequisite: RADT 1020, RADT 1031 and concurrent enrollment in RADT 1040 and RADT 1781.

## Radiographic Exposure Factors RADT $1040 \quad 3$ Credits

The course is an introduction to the science of radiographic image production and explores the details of the principles of radiographic exposure techniques. Topics of discussion include film processing, intensifying screens, grids, contrast, density, control of scatter radiation, and the management of human body variables in image production. Emphasis
is placed on methods to minimize radiation exposure to the patient and self. Image production and viewing using the advances of digital radiography and associated computer technology are included. In addition, the course introduces students to the computer network systems that store, transmit, and retrieve digital radiographic images. Students will apply classroom theory in the clinical setting. Prerequisite: RADT 1020, RADT 1031 and concurrent enrollment in RADT 1032 and RADT 1781.

## Bone Densitometry I RADT 1051

## 1 Credit

This course is designed to introduce the student to the basic principles of bone densitometry. The course includes discussion of metabolic bone disorders, modality history, patient care, equipment operation and physics with an emphasis on radiation protection. This is the first of a two part course sequence to assist participants with preparation for the national certification exam in bone densitometry. Prerequisite: Current standing as a radiologic student and/or a healthcare worker performing bone density exams. Restriction: Must be a Radiologic technology student and/or employed in a healthcare facility and currently performing bone densitometry. Not intended to prepare student for employment.

## Bone Densitometry II RADT 1052 <br> 1 Credit

During this course the student will review advanced bone densitometry topics. Topics of discussion include bone composition physiology, patient education skills, state and national guidelines and position statements, radiation safety and scanning protocol. Two of the class sessions will be held at a local health care facility. Not intended to prepare student for employment. Prerequisite: Must be a radiologic technology student, a registered radiographer and/or a healthcare facility employee currently performing bone densitometry. Restriction: RADT 1051 or permission of instructor.

## Clinical Radiography I RADT 1781

## 6 Credits

The course is designed to provide students with opportunities to apply basic theoretical principles of radiography and patient care to practical experience in the clinical setting. Students will assist with and perform basic radiographic procedures under the direction of a qualified practitioner at affiliated clinical sites. State regulations regarding safe
operation of radiation-generating equipment will be followed and proper radiation safety practices will be adhered to. Students must be able to perform physical tasks to complete course requirements. Prerequisite: RADT 1020, RADT 1031 and concurrent enrollment in RADT 1032 and RADT 1040. Minnesota Human Services background study with no restrictions.

## Clinical Radiography II RADT 1782

6 Credits
The course is designed to provide students with opportunities to apply basic theoretical principles of radiography and patient care to practical experience in the clinical setting. Students will assist with and perform radiographic procedures under the direction of a qualified practitioner at affiliated clinical sites. State regulations regarding safe operation of radiation-generating equipment will be followed and proper radiation safety practices will be adhered to. Students must be able to perform physical tasks to complete course requirements. Prerequisite: RADT 1032, RADT 1040, RADT 1781 and concurrent enrollment in RADT 2000.

## Radiation Biology and Protection RADT 2000 1 Credit

The course is an introduction to the science of molecular and cellular radiobiology including the early and late effects of radiation. Federal and State radiation guidelines are reviewed and also all methods of minimizing radiation exposure. Prerequisite: RADT 1032, RADT 1040, RADT 1781 and concurrent enrollment in RADT 1782.

## Imaging Pathology RADT 2010

## 1 Credit

The student will be introduced to various disease conditions of patients and the effect these have on the resulting image. The student will also be introduced to other types of imaging modalities including which modality is preferred for diagnosing specific pathologic disorders. Prerequisite: RADT 2020, RADT 2030, RADT 2783 and concurrent enrollment in RADT 2090, RADT 2100 and RADT 2784.

## Introduction to Sectional Anatomy RADT $2020 \quad 2$ Credits

This is an introductory course designed to prepare students to identify anatomical structures on sectional images that are obtained in related imaging modalities. During the laboratory section of the course the student will have an opportunity to view

## 7 Course Descriptions

computer-generated sectional images and identify specific anatomy without overlapping structures. Students of the course will be expected to complete a clinical rotation in computerized tomography. Prerequisite: RADT 1782, RADT 2000 and concurrent enrollment in RADT 2030 and RADT 2783.

## Radiation Physics and Quality Control RADT $2030 \quad 2$ Credits

During this course the basics of $x$-ray circuitry, production of $x$-radiation and basic operation of energized x-ray and fluoroscopic units are reviewed. Additionally, the differences between digital and computerized imaging will be introduced. This course will place emphasis on quality control testing in the imaging department. Some basic quality control testing will be observed and analyzed by the students. Prerequisite: RADT 1782, RADT 2000 and concurrent enrollment in RADT 2020 and RADT 2783.

## Radiography Seminar RADT 2060

2 Credits
This course is designed allow students to apply all previously learned coursework to entry level radiography standards. This is the final academic course before graduation. Prerequisite: RADT 2010, RADT 2090, RADT 2100, RADT 2784 and concurrent enrollment in RADT 2785.

## Topics in Radiology RADT 2090

## 1 Credit

In this course, students will be expected to investigate and report on various legal, ethical and cultural diversity issues that impact the radiography field. Job preparation skills specific to the field of radiology are also discussed. Prerequisite: RADT 2020, RADT 2030, and RADT 2783 and concurrent enrollment in RADT 2010, RADT 2100 and RADT 2784.

## Introduction to Mammography RADT 20951 Credit

This is an elective RADT course designed for second year RADT students interested in pursuing career opportunities in mammography. Students may choose to perform a clinical rotation in mammography during Clinical Radiography IV, which would fulfill the minimum MOSA federal requirements to perform mammography upon graduation. Prerequisite: RADT 1782 and concurrent enrollment in the Century College RADT Program or a registered radiologic technologist.

## Introduction to Computed Tomography RADT 2100 1 Credit

This required course includes the fundamentals of computed tomography (CT), equipment components, image creation and manipulation, CT protocols and their applications in radiology and specialized examinations performed in the CT department. Students will have the opportunity to apply the theoretical component in Clinical Radiography III, IV and V, under the direct supervision of a qualified radiologic technologist. Prerequisite: RADT 2020, RADT 2030, RADT 2783 and concurrent enrollment in RADT 2010, RADT 2090 and RADT 2784.

## Clinical Radiography III RADT 2783

## 8 Credits

This course is designed to provide the student with opportunities to master performance competencies and gain additional experience in all areas of diagnostic radiology. Emphasis is placed on fluoroscopic, surgical and trauma radiography. Students will be assigned in the special imaging modalities of computed tomography and angiography. Assigned rotations to an area childrens hospital provides additional experience in pediatric radiology. Students who elect to pursue the MOSA mammography certificate will rotate through the mammography department for a one-week orientation rotation. Students will assist with and perform radiographic procedures under the direction of a qualified practitioner at affiliated clinical sites. State regulations regarding safe operation of radiation-generating equipment will be followed and proper radiation safety practices will be adhered to. Students must be able to perform physical tasks to complete course requirements. Prerequisite: RADT 1782, RADT 2000 and concurrent enrollment in RADT 2020 and RADT 2030. Minnesota Human Services background study with no restrictions.

## Clinical Radiography IV RADT 2784

## 8 Credits

Students continue their clinical experiences and have an opportunity to rotate to another clinical facility. Students will perform radiographic procedures with limited supervision, emphasizing proficiency in trauma, bedside, and specialized radiographic procedures. Students will select an optional rotation from among various special imaging modalities. Students will assist with and perform radiographic procedures under the
direction of a qualified practitioner at affiliated clinical sites. State regulations regarding safe operation of radiation-generating equipment will be followed and proper radiation safety practices will be adhered to. Students must be able to perform physical tasks to complete course requirements. Prerequisite: RADT 2020, RADT 2030, RADT 2783 and concurrent enrollment in RADT 2010, RADT 2090 and RADT 2100.

## Clinical Radiography V RADT 2785

6 Credits
The final clinical course provides students with an opportunity to integrate and apply all previously learned clinical and academic theories in a practical setting. Students will perform all radiographic examinations with limited supervision in various clinical situations. Students will assist with and perform radiographic procedures under the direction of a qualified practitioner at affiliated clinical sites. State regulations regarding safe operation of radiation-generating equipment will be followed and proper radiation safety practices will be adhered to. Students must be able to perform physical tasks to complete course requirements. Prerequisite: RADT 2010, RADT 2090, RADT 2100, RADT 2784 and concurrent enrollment in RADT 2060.

## Cross Sectional Anatomy I RADT 2800 <br> 2 Credits

This course is designed to introduce the student to the radiology related imaging modality of Computed Tomography (CT). Introduction of the basic CT unit and operational components will be reviewed. Emphasis will be placed on the cross sectional anatomy of the brain, skull, thorax, spine, abdomen and pelvis. Clinical indications relative to the appropriate CT exam will be discussed. Prerequisite: Acceptance to program by showing evidence of being a current radiography student or ARRT certified radiographer.

## Cross Sectional Anatomy II <br> RADT 2804

2 Credits
This is an advanced cross sectional anatomy course designed to review images obtained in Computed Tomography. Topics of discussion will include musclo-skeletal imaging, post myleography, radiation therapy procedures, vascular structures, intervention procedures such as drainage, biopsies and aspiration.

## Patient Assessment in Computed Tomography RADT $2808 \quad 2$ Credits

This course is designed to introduce the student to patient care and assessment of the CT patient. Items of discussion include methods of evaluating patients with various health conditions, collecting vital signs, drugs and routes of administration, infection control and emergency situations. Recommendation: CPR Certification but not required.

## Computed Tomography Physics and Instrumentation I RADT 2812 <br> 2 Credits

This course is designed to provide the student with an introductory presentation of the physical principles and instrumentation involved in computed tomography. The historical development of CT is reviewed. Physics topics include x-radiation, CT beam attenuation, linear attenuation coefficients, tissue characteristics and Hounsfield numbers application. The course will include a discussion of types of CT scanners, CT hardware, basic image formatting and software functions.

## Computed Tomography Physics and Instrumentation II RADT $2816 \quad 2$ Credits

The second physics course will explore the processing of CT images from data acquisition. The technique for post processing, archiving and assessing patient factors related to imaging quality will be reviewed. Methods of improving image quality and reducing artifact production will be presented. The benefits of spiral, helical and multi-detectors are covered in the course. Prerequisite: RADT 2012, or permission of the instructor.

## Computed Tomography Radiation Safety and Quality Control RADT $2820 \quad 2$ Credits

The purpose of this course to review all possible methods of reducing patient exposure to the patient, personnel and the public. A discussion of the radiation health and safety requirements of federal and state regulatory agencies, accreditation agencies and health care organizations are included. The second portion of the course will deal with establishing and implementing a quality management program in CT departments.

## Computed Tomography Pathology RADT 28242 Credits

This entire course is devoted to the study of common diseases/disorders that are best visualized by obtaining CT images. A discussion of supportive diagnostic exams is included. Case studies in CT will be used in the discussion of pathological findings. Prerequisite: RADT 2800, RADT 2804, or permission of the instructor.

## Computed Tomography Imaging and Application

 RADT 2828 2 CreditsDuring the course students will study the procedure protocols for computed tomography. The protocols include orientation and positioning, contrast media usage, scout imaging, selectable scan parameters, filming and archiving of the images. Students will have the opportunity to view numerous CT images and critique them for quality, anatomy and pathology. Prerequisite: RADT 2804, RADT 2816, RADT 2824, or permission of the instructor.

## Reading

## Fundamentals of College Reading RDNG 09006 Credits

This course focuses on the skills necessary for reading and studying college-level material. Topics and skill development include critical reading and thinking strategies, building academic vocabulary, textbook processing for deeper comprehension, and fluency. All new entering students who place into RDNG 0900 are also required to take STSC 1000, New Student Seminar. Prerequisite: Assessment score placement in RDNG 0900 and concurrently enrolled in STSC 1000.

## Strategies for College Reading RDNG 0950 3 Credits

This course focuses on techniques for reading and studying textbooks in various college courses. Topics include effective learning and critical reading strategies for social sciences, sciences, technology, and the humanities. All new entering students who place into RDNG 0950 are also required to take STSC 1000, New Student Seminar. Prerequisite: Assessment score placement in RDNG 0950 and concurrently enrolled in STSC 1000, OR RDNG 0900 with a grade of C or higher and STSC 1000

## Critical Reading and Thinking for College RDNG 1000 <br> 3 Credits

Critical Reading and Thinking for College is a college level course in reading which emphasizes critical reading and thinking skills using focused questioning. This course primarily presents and applies strategies for critical analysis and evaluation of collegelevel texts. Students will develop strategies to adjust reading rate based on need and purpose to enhance more effective textbook study and to increase college level vocabulary. Prerequisite: Appropriate assessment score or completion of RDNG 0900 or RDNG 0950 with a grade of "C" or higher.

## Renewable Energy Systems

## Solar Energy Basics RENW 2020

3 Credits
This course provides the student with an overview of the theory and practice foundational to the technologies of solar thermal and solar photovoltaic (PV) systems. Topics include current and potential methods of harnessing solar radiation as an energy source, solar thermal theory and application, and solar photovoltaic theory and application. Prerequisite: Assessment score placement in RDNG 0950 or completion of RDNG 0900 with a "C" or better. Assessment score placement in MATH 1015 or equivalent with a "C" or better.

## Sociology

## Introduction to the Social and Behavioral Sciences: ANTH, PSYC and SOC SOC 1000 <br> 3 Credits

This course serves as a broad introduction to three of the social and behavioral sciences: Anthropology, Psychology, and Sociology. The course provides an overview of the history, theories, research methods, and research publications of each discipline. The course is designed to help students to acquire the knowledge and skills that will enable them to succeed in the introductory courses in these three disciplines. Prerequisite: Assessment score placement in RDNG 0950, or completion

## 7 Course Descriptions

of RDNG 0900 with a grade of " C " or higher or consent of the instructor. Restriction: May not be taken for credit if credit has been earned in ANTH 1000 or PSYC 1000.

## Introduction to Sociology <br> SOC $1020 \quad 3$ Credits <br> MnTC: Goals 05 \& 07

This course is a survey of sociology's major theoretical perspectives and research methods. Basic concepts include culture, socialization, groups, organizations, deviance, social institutions, change, and inequalities based on class, race, and gender. The course explains how sociological research is conducted using concepts, theories, and methods as well as the significance of a global perspective for understanding social behavior. Prerequisite: Assessment score placement in ENGL 1021 or completion of ENGL 0090 with a grade of $C$ or higher and assessment score placement in RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher.

## Sociology of Families in Crisis SOC 1033 3 Credits MnTC: Goals 05 \& 07

How are individual family problems connected to broader social systems? This course explores the social forces that influence family crises. It covers a variety of issues, such as poverty, family violence, and contemporary social problems that affect families. Relevant social policy debates are also discussed. Prerequisite: Assessment score placement in ENGL 1021 or completion of ENGL 0090 with a grade of C or higher and assessment score placement in RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of $C$ or higher.

## Sociology of Social Problems SOC 1041 3 Credits MnTC: Goals 05 \& 09

This course is a survey of the sociology of a selected set of social problems in the U.S. and globally, e.g. crime and violence, poverty, unemployment, war and terrorism, environmental degradation, and population growth. The social-structural and cultural sources of these problems are critically analyzed, and structural and cultural solutions following from such analyses are examined. Prerequisite: Assessment score placement in ENGL 1021 or completion of ENGL 0090 with a grade of $C$ or higher and assessment score placement in RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of $C$ or higher.

Introduction to the Criminal Justice System
SOC $1080 \quad 3$ Credits MnTC: Goals 05 \& 09
This course provides an overview of the criminal justice system in US society, including the role of the police, courts, and corrections. Sociological perspectives are applied to an analysis of crime and victimization, ethics, and the concept of justice. Prerequisite: Assessment score placement in ENGL 1021 or completion of ENGL 0090 with a grade of $C$ or higher and assessment score placement in RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher.

## Sociology of the Family SOC 2031

## 3 Credits

## MnTC: Goals 05 \& 07

This course examines the family as a social institution, focusing on how family life both shapes and is shaped by larger social forces, including the economy and public policy. The diversity of family forms and experiences, and how these change over time, will be examined along the lines of gender, race, class, and sexual orientation. The course will also address the gendered nature of family roles and experience, i.e. the way that individuals' actions may conform to, or challenge, dominant cultural expectations of women and men in families. Prerequisite: ENGL 1021 with a grade of C or higher

## Sociology of Race and Ethnicity SOC $2051 \quad 3$ Credits MnTC: Goals 05 \& 07

This course introduces students to the complexity of diverse racial/ethnic groups in the United States. It focuses on the historical development of the concept of race. It also addresses contemporary issues of racial formation, individual prejudice and discrimination, institutional racism and discrimination, racial/ethnic identity and collective resistance, and white privilege. Prerequisite: ENGL 1021 with a grade of C or higher.

## Sociology of Disability <br> SOC 2053 <br> MnTC: Goals 05 \& 07

Disability activists reject society's pity for the handicapped, demanding acceptance and the same opportunities non-disabled people take for granted as they live and work in the world. Starting with a brief history of disability in the United States, this course will examine how disability is socially constructed and forms
an axis of inequality in society. Topics include disability culture and identity, disability policy, the intersection of disability and gender, portrayals of disability in the media, and disability rights movements in the US and abroad. Prerequisite: ENGL 1021 with a grade of C or higher.

## Sociology of Gender and Work SOC $2061 \quad 3$ Credits MnTC: Goals 05 \& 07

How does gender influence your occupational choices and opportunities? This course explores the changing relationship between gender and the institution of work. Topics include individual level issues of identity and relationships as well as structural issues of inequality and public policy. Prerequisite: ENGL 1021 with a grade of C or higher.

## Social Psychology <br> SOC 2071 <br> MnTC: Goals 05 \& 07

3 Credits
Why do people behave as they do? How do society, social groups, and other people impact individuals choices, beliefs, and identities? This course will attempt to answer these questions through the examination of key social psychological theories and concepts. Topics will include socialization, the self, symbolic communication, self-presentation, group cohesion and conformity, deviant behavior, and collective behavior and social movements. Prerequisite: ENGL 1021 with a grade of $C$ or higher.

## Criminology and Criminal Behavior SOC 2087 3 Credits

 MnTC: Goals 05 \& 08This course is designed to develop an understanding of criminally deviant behavior and how it is studied within the discipline of sociology. The course examines crime theories, trends in criminal behavior, and methods of criminological investigation. Public policy implications and considerations from the local to national levels will be examined in the US and other countries. The global focus of this course will draw from cross-cultural, transnational, and international examples, such as the drug trade, human trafficking, or terrorism. Prerequisite: ENGL 1021 with a grade of $C$ or higher.

## Data Analysis for the Social Sciences SOC 29914 Credits

This course is one of two courses intended to prepare students to gather and analyze social and behavioral science data. It will introduce students to the methods of data
analysis social scientists use to understand social relationships and interactions, social structure, and culture, with a particular focus on opinion polls and surveys. Students will be introduced to the Statistical Package for the Social Sciences (SPSS) software. Prerequisite: Completion of ENGL 1021 with a grade of "C" or higher; assessment score placement in MATH 1025 or above, or completion of MATH 0070 with a grade of "C" or higher; or consent of instructor.

## Research Methods for the Social Sciences SOC 2993

## 4 Credits

This course is one of two intended to prepare students to gather and analyze social and behavioral science data. It will introduce the methods social scientists use to gain knowledge about social relationships, settings, organizations, institutions, and the larger society. The course will cover the role of theory, forms of causal reasoning, modes of observation, units of analysis, operationalization, ethical questions in social research, and the analysis of narrative data. Prerequisite: ENGL 1021 with a grade of C or higher Recommendation: SOC 2991 with a grade of $C$ or higher. SOC 1020 or another social or behavioral science course with a grade of C or higher.

## Solar Energy

## Introduction to Solar Assessment SOLR 1020 3 Credits

This course introduces students to basics of solar energy and solar site assessment for solar photovoltaic and thermal systems. Students will measure the solar window with a Solar Pathfinder(TM and estimate the effects of climate, system design, and vegetation growth (and removal) on energy production. Using industry-standard hardware, mounting options and equipment, students will propose system designs, model economic and environmental costs and benefits, and report their findings.

## Solar Energy Construction Projects SOLR 1030 2 Credits

This course introduces students to basic construction skills and mounting methods used in solar air, water, and electric systems. Topics
include how to safely and carefully work with roofing, how to plan and assemble racking, how solar modules and panels are mounted, and how the remaining solar components are incorporated. Recommendation: ECAD 1020.

## Photovoltaic System Integration Internship SOLR 1780 <br> Credits

This course is designed to provide students with the opportunity to apply knowledge and skills learned in the Solar Energy Program outside the classroom. Students will install photovoltaic (PV) systems with a company or as part of a Century College project. This internship is designed for 1 to 3 credits, with an out-of-class commitment of 45 hours per credit. Students will create a professional presentation describing their internship to Century students and will gain other job-seeking skills. Prerequisite(s): SOLR 1020, SOLR 2020, and SOLR 2025

## Solar Thermal Installation Internship SOLR $1781 \quad$ Credits

This course is designed to provide students with the opportunity to apply knowledge and skills learned in the Solar Program outside the classroom. Students will install solar thermal systems with a company or as part of a Century College project. This internship is designed for 1 to 3 credits, with an out-of-class commitment of 40 hours per credit. Students will create a professional presentation describing their internship to Century students and will gain other job-seeking skills. Prerequisite: SOLR 1020, SOLR 2030/2035.

## Advanced Photovoltaic Systems SOLR 2020 3 Credits

This course will provide an introduction to photovoltaic (PV) systems design, installation, operation, and maintenance for residential and commercial applications. Students will collect and interpret data. They will apply this data to the design and configuration of grid-tied and standalone system designs. Prerequisite(s): MATH 1015, FST 1030, Concurrent enrollment in SOLR 2025, assessment score placement in RDNG 0950 or above, or completion of RDNG 0900 with a grade C or higher. Recommendation(s): PHYS 1020

## Photovoltaic Systems Lab SOLR 2025 2 Credits

This hands-on course will cover the National Electrical Code (NEC) specifics concerning photovoltaic installation Article
690. Code-compliant wiring of modules, inverters, charge controllers, and batteries will be explored. Students will plan and execute photovoltaic system installations. Prerequisite: MATH 1015, FST 1030, concurrent enrollment in SOLR 2020, assessment score placement in RDNG 0950 or above, or completion of RDNG 0900 with a grade C or higher.

## Advanced Solar Thermal Concepts SOLR 20303 Credits

This course introduces students to the knowledge and skills needed to construct solar hot water and space heating systems. Topics include preconstruction preparation, assessing roofing and roof structure, hardware and mounting methods, tools, routing of pipe and sensor wire, layout and connection of equipment, connection of the system to domestic hot water and heating systems, operation and maintenance. Efficiency, calculations of output and flow rate, and various load types will also be covered. The course is designed to prepare students to build a model solar hot water system in SOLR 2035. Prerequisite: SOLR 1020 and SOLR 1030, concurrent enrollment in SOLR 2035 or consent of instructor.

## Solar Thermal Lab

 SOLR 2035
## 2 Credits

In this course, students will build, test, and commission a working solar thermal system. Taken concurrently with SOLR 2030, students will practice safely working on roofs, mounting solar collectors, routing pipes, and connecting the collectors to heat exchangers and storage tanks. Students will also wire and mount control systems and monitor the performance of their solar system. Prerequisite: SOLR 1020 and SOLR 1030 or consent of instructor. Concurrent enrollment in SOLR 2030.

## Spanish

## Spanish for Healthcare Professionals SPAN 1001 3 Credits

This is a basic practical Spanish course for health professionals. No previous Spanish is required. This course will place emphasis on oral communication skills to help health professionals who work with Spanishspeaking patients obtain basic information before an interpreter is available.

## 7 Course Descriptions

## Spanish for Healthcare Professionals II SPAN 1002 <br> 3 Credits

This course is a continuation of SPAN 1001. Students will further develop their ability to understand and speak, and will work with a larger health-related vocabulary and language structures, which will allow them to give appropriate commands. Students will not be qualified interpreters upon completion of this course. Prerequisite: SPAN 1001.

Spanish for Public Safety Professionals I
SPAN 1005 Credits
Basic practical Spanish and Latino culture for law enforcement and other public safety professionals. No previous Spanish required. This course will place emphasis on oral communication in Spanish and understanding of Latino culture to help peace officers and other public safety professionals who encounter Spanish speakers when no interpreter is available.

## Spanish for Public Safety Professionals II SPAN 1006 <br> 3 Credits

Advanced beginner Spanish and Latino culture for law enforcement and other public safety professionals. This course will place emphasis on oral communication in Spanish and understanding of Latino culture to help peace officers and other professionals who encounter Spanish speakers when no interpreter is available. Continuation of Spanish Language and Latino Culture for Public Safety Professionals I. Prerequisite: SPAN 1005.

## Beginning Spanish I

SPAN 1011
5 Credits MnTC: Goal 08
This course is an introduction to the Spanish language as well as a survey of Spanishspeaking civilizations and cultures. It stresses basic grammar, correct self-expression, aural comprehension, and reading. Students are required to listen to the text audio program and practice their conversation skills in the language laboratory for two hours each week. Restriction: If students have completed three years of high school Spanish, consent of instructor is required.

## Beginning Spanish II SPAN 1012 MnTC: Goal 08

5 Credits
This course is a continuation of SPAN 1011. It stresses continued development of speaking, listening comprehension, writing, and reading.

Students will analyze and compare patterns of behavior and increase their ability to understand the perspectives of the people in the Spanish-speaking world. Students are required to listen to the text audio program and practice their conversation skills in the language laboratory for two hours each week. Prerequisite: SPAN 1011 or equivalent. Restriction: If students have completed four years of high school Spanish, consent of instructor is required.

Independent Study SPAN 1790

## 1-3 Credits

An opportunity for an in-depth study of a particular topic. Prerequisite: Consent of instructor and dean.

## Oral Communication in Spanish SPAN 2010 3 Credits

Taught in Spanish, this is an intermediate course focused on the development of oral skills in Spanish. This course will allow students to improve their vocabulary base in a variety of oral expression activities. Students will engage in discussions, give oral presentations, and conduct interviews related to current events, Hispanic/Latino culture, and other topics of interest. Through continual preparation and practice, students will gain the experience necessary to converse more fluently and in a more sophisticated manner on topics of greater depth and complexity. Grammatical concepts and verb tenses learned in first-year college Spanish will be reviewed to facilitate grammatically correct oral skills in Spanish. One hour a week is required in the Language Laboratory. Students may take this course up to three times for credit. Prerequisite: SPAN 1012 or equivalent with a grade of C or higher or instructor consent. Recommendation: Students should be strong Spanish language students. Class is conducted in Spanish.

## Intermediate Spanish I SPAN 2021 5 Credits <br> MnTC: Goals 06 \& 08

This course will begin with a comprehensive review of concepts covered in first-year college Spanish. It entails further development of oral proficiency, reading comprehension and composition, cultural knowledge and critical thinking. Students will study a variety of texts related to the arts, literature, and cultural and social issues. Two hours per week in the Language Laboratory (or one in the Language Lab and one in Service Learning) are required.

Prerequisite: SPAN 1011 and SPAN 1012 or equivalent. Recommendation: Contact instructor or Spanish department if unsure of level.

## Intermediate Spanish II <br> SPAN 2022 <br> 5 Credits MnTC: Goals 06 \& 08

This course is a continuation of Span 2021: Intermediate Spanish I, and involves further development of oral proficiency, reading comprehension and composition, cultural knowledge and critical thinking. Students will study a variety of texts related to the arts, literature, and cultural and social issues. Two hours per week in the Language Laboratory (or one in the Language Lab and one in Service Learning) are required. Prerequisite: SPAN 2021 or equivalent. Recommendation: Contact instructor of Spanish department if unsure of level.

## Special Topics

SPAN 2790

## 1-3 Credits

Topics of special interest which may vary.
Prerequisite: Consent of instructor and dean.

## Student Success

## New Student Seminar STSC 1000

## 3 Credits

This course helps students understand the demands of college life and develop the skills needed to meet those demands. Students will explore strategies that contribute to success in college and to becoming a lifelong learner. These strategies include identifying learning styles, managing motivation, setting goals, managing time, and applying study skills. In addition, students will explore college policies, resources, and technologies. Prerequisite: Assessment score placement in RDNG 80 or above.

## Habits of Mind

 STSC 1003
## 2 Credits

In this course, students will study the components of critical thinking and effective questioning used in college courses. Students will be guided in utilizing these components to analyze and problem solve. Students will be given opportunities to explore and develop attributes essential for academic success: developing curiosity, accepting and utilizing constructive criticism to enhance performance, and coping with frustrating and
ambiguous learning tasks. In the process of developing these habits of mind, students will improve their oral and written skills, and learn to evaluate the relative credibility of source information. Prerequisite: Assessment score placement in RDNG 0950 or above, or completion of RDNG 0900 with a grade of " $C$ " or higher.

## The Effective Learner STSC 1006

## 2 Credits

This course is designed to promote academic success for students through the application of effective study strategies based on an understanding of underlying theoretical models. Course topics include organization, time management, concentration and memory improvement, listening and note taking, textbook processing, content specific reading, vocabulary development, test-taking, test anxiety management, library research, and learning styles. Prerequisite: Assessment score placement into RDNG 0950 or above or completion of RDNG 0900 with a grade of C or higher.

## Vocabulary Improvement STSC 1010

## 1 Credit

Learning new words leads to greater confidence when approaching new learning situations. The ability to analyze words is useful in school and in life. This course is designed to help students improve vocabulary both by learning college-level words and by developing strategies for learning words independently. Prerequisite: Assessment score placement in RDNG 0950 or above or completion of RDNG 0900 with a grade of "C" or higher.

## How to Learn Online STSC 1020

## 2 Credits

This course emphasizes the learning styles and approaches to learning most likely to lead to success in online learning situations. Students will learn how to use and practice with online learning technology. Students will have the opportunity to investigate their preferences for learning and how those preferences interact with the demands of online learning. Students will also explore the time management and thinking skills needed to be successful in online learning situations. Finally, students will apply what they have learned to online learning tasks.

## Theatre

## Practicum in Stage Performance THTR 1011 1 Credit

This course provides students an opportunity to gain credit for creating and performing a role or roles on stage at Century. Students may take this course up to four times and receive academic credit. Prerequisite: Permission of instructor, gained through audition and/or assignment of a role (or roles) on the Century stage. Recommendations: Assessment score placement in RDNG 1000, or completion of RDNG 0900 OR RDNG 0950 with a grade of " $C$ " or higher.

## Practicum in Stage Technology THTR 1012 1 Credit

In this course students will work in one or more areas of theatre production to gain knowledge, skills, and experience in areas such as lighting, sound, costuming, scenery, properties, stage management, house management, or other areas of stage production. By arrangement, students may work in a variety of areas such as scene shop, costume shop, light booth, or auditorium. Students must be able to perform physical tasks to complete course requirements. Students may take this course up to four times and receive academic credit. Prerequisite: Permission of instructor prior to accepting an assignment. Recommendations: Assessment score placement in RDNG 1000, or completion of RDNG 0900 OR RDNG 0950 with a grade of " $C$ " or higher.
Introduction to Theatre THTR 1020 MnTC: Goals 06 \& 08
This course introduces the student to the art and craft of theatre. An overview of many aspects of theatre including: design, acting, directing, backstage work, history and plays will be provided. Students also view certain theatrical works using cultural, social and political lenses. A study of the process by which the play moves from printed page to stage is included. This course serves students who are interested in pursuing performing arts, and those who would just like to know more about this unique field. Students may explore practical aspects of theatre by working backstage or in the theatre shops. Prerequisite: Assessment score placement in RDNG 1000, or completion of RDNG 0900 or RDNG 0950 with a grade of " $C$ " or higher.

## Careers in Theatre THTR 1023

2 Credits
This course is recommended for all students interested in the world of Theatre Arts and related fields. In this course students will explore and prepare for professional careers in Theatre Arts. Supplemental information on careers in film, cable, and network television will also be provided. Students will study paths for education and training necessary to enter into a variety of career positions. Students interested in performing and technical areas will be introduced to essential knowledge and skills needed to seek out additional education or a professional career. Students will develop resumes and portfolios, which can provide opportunities to exhibit their education and experience to transfer institutions and/or potential employers.

## Beginning Acting <br> THTR $1031 \quad 3 \quad$ Credits MnTC: Goal 06

This course teaches students the basics of acting. In addition to training and developing the actor's voice and body, students are taught methods to enter a creative state, create the world of a play, create characters and play scenes. Students use vocal and physical warm ups, read plays, apply acting vocabulary and concepts, write performance plans, work with physical and imaginative exercises, analyze play texts, and attend and evaluate the acting in a live theatre production. The course works with students at all levels to increase the student's abilities in the performing arts.

## Acting for the Camera THTR 1033

 MnTC: Goal 06This course is for students who want to learn about acting in video, film, television and other recorded media. Students will perform in front of a camera and review their work to improve on-camera acting skills. Students will also be introduced to methods of auditioning, script and character analysis for recorded auditions, acting as communication, and acting styles in film and video. Students will also analyze films and videos and create a sample storyboard for a short scene. Students who enjoy making their own movies may have a special interest in the content of this course. Prerequisite(s): Assessment score placement in RDNG 1000, or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher.

## 7 Course Descriptions

## Theatre Production and Design THTR 1041 4 Credits MnTC: Goal 06

In this course, students explore how plays "come to life" on stage through scenery, costumes, lighting and sound. Students explore basic theory and practice of production, tools and building methods, design principles, traditions of theatre design, and creating designs which enhance the meaning of plays in performance. Problem-solving in designing and running shows helps students experience "real world" issues in technical theatre. Students have opportunities to gain skills and insight in many technical and backstage areas through hands on experience with Century Theatre productions.

## Creative Dramatics

 THTR $1051 \quad 3$ CreditsThis course teaches techniques of creative play through unscripted (improvisational) exercises. Improvisational techniques are used to inspire the imagination and guide students to create both collaboratively and spontaneously. Students learn to use objects, visual art, music, and folktales in creative exercises. Students learn how to plan and lead improvisational teambuilding activities using small or large groups. This course serves students interested in teaching, acting, directing group activities, or counseling.

## World of Drama <br> THTR 1081 <br> MnTC: Goals 06 \& 07

Play texts open up exciting, fictional worlds for the reader, and contain clues to the actual historical and cultural worlds from which they emerged. In this course, a variety of important plays will be read, studied, discussed, written about, and read aloud. The structure and language of plays will be carefully explored. Historical, cultural, and political contexts of plays will be examined and evaluated. Through reading plays, participating in discussions, listening to lectures, engaging in research, and thinking and responding creatively, students can begin to unlock the world of dramatic art. Prerequisite: Assessment score placement in RDNG 0950 or above or completion of RDNG 0900 with a grade of C or higher.

## Independent Study

THTR 1790 1-3 Credits
In this variable credit, elective course, students will have the opportunity to research and design their own project. Students are
expected to explore areas of Theatre Arts which go beyond the content of current Century Theatre Arts courses. In consultation with their instructor, students will create a project plan which includes research, learning, creation and timeline objectives, to satisfy the credit hours required within a one semester time frame. Students will be held accountable for completion of the work. Prerequisite(s): Consent of Instructor and Dean. Recommendation(s): THTR 1020.

## Intermediate Acting THTR 2031

## 3 Credits

This course expands and deepens the work of the student actor. Physical and vocal exercises continue to expand the student actor's technique. Contemporary and classical plays are explored and used for performing. Singer/actors also have the option to work on a musical theatre piece. Students study at least one stage dialect while preparing scenes and monologues. Audition techniques are also taught as part of the course. Prerequisite: THTR 1031 or consent of instructor. Recommendation: THTR 1020.

## Fundamentals of Directing THTR 2061

## 3 Credits

This course introduces the beginning director to the basic tools of the director's craft. Students will learn the basics of interpretation, blocking, movement, composition, communication, and terminology of stage direction. The needs of students interested in theatre, acting, television, film, video production, or elementary and secondary education are served by this course. Recommendation: THTR 1020.

## Script Analysis THTR 2081

## 2 Credits

This course invites students to learn how plays are transformed from written text into live theatre performance. Students will examine how a play moves, looks, sounds, and feels onstage. Through the perspectives of directing, acting, and designing, plays are explored and envisioned to create unique and stage-worthy interpretations. Students read, respond to, examine, and write about plays. Students collaborate as artistic teams to create their interpretations and share them with the class. Prerequisite: THTR 1020 or consent of instructor. Assessment score placement in RDNG 1000, or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher.

## Theatre Internship THTR 2780

1-3 Credits
Students gain real-world experience within the dynamic environment of professional performing arts production. Students create an internship plan with a faculty member and site supervisor. Interns apply their knowledge, skills, and experience in the fast-paced world of professional production. In addition, they gain new knowledge, experience, and contacts though working at the internship site. Students are expected to document their experience. Students may repeat the course for a total of three credits. Prerequisite: Consent of instructor.

## Translating and Interpreting

## Orientation to Interpreting TRIN 1000

 1 CreditThis course introduces students to interpreter codes of ethics and standards of practice. It also introduces basic concepts of interpreting and translating, interpreting modes and settings, and interpreting skills. Coursework includes an initial self-assessment, which helps students evaluate their readiness for a course of study in interpreting.

## Introduction to Translation TRIN 1021 3 Credits

This course introduces students to translation history and theories, preparing them for further training in both translation and interpreting. Coursework includes translation of texts from one language to another in different fields and exploration of different online and traditional research methods for source and target language terms. Coursework also includes discussions of equivalence, linguistic and cultural considerations, and preservation of meaning. Prerequisite: TRIN 1000 with grade of C or higher or instructor consent. Assessment score placement in RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of $C$ or higher. Assessment score placement in ENGL 1021 or completion of ENGL 0090 with a grade of C or higher. Recommendation: Language proficiency level equivalent to the American College Teachers of Foreign Languages (ACTFL) Oral Proficiency Interview (OPI) advanced-mid or higher rating in both English and the second language.

## Standards of Practice and Skills of Interpreting <br> TRIN 1031 <br> 3 Credits

This course focuses on developing criticalthinking, decision-making, and cognitive skills related to interpreting. Coursework includes comparing and contrasting interpreting codes of ethics in different subdomains, reading and discussion of theory and research in the field, role-plays, and other exercises Prerequisite: TRIN 1021 with a grade of C or higher, concurrent enrollment, or instructor consent. Assessment score placement in RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher. Assessment score placement in ENGL 1021 or completion of ENGL 0090 with a C or higher. Recommendation: Language proficiency level equivalent to the American College Teachers of Foreign Languages (ACTFL) Oral Proficiency Interview (OPI) advanced-mid or higher rating in both English and the second language.

## Structured Language Enhancement TRIN 1035 1 Credit

This course provides a structured environment for students or professionals seeking to improve their language skills. Students explore theories, models, and techniques related to language enhancement for novice interpreters. Classroom and homework activities focus on goal-setting, reflection, self-assessment, deliberate practice, and preparation for the Oral Proficiency Interview (OPI) test. This course does not count toward the 30 credits for the Certificate or the 60 credits for the AAS in Translating and Interpreting (TRIN). Prerequisite: Assessment score placement in RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher, assessment score placement in ENGL 1021 or completion of ENGL 0090 with a C or higher, or instructor consent.

## Beginning Skills of Interpreting TRIN 1041 4 Credits

In this course, students will conduct error analysis of their interpreting and refine their understanding of units of meaning. Activities
to develop cognitive capacities for both the consecutive and simultaneous modes will form the core of this course. Topics include memory enhancing activities, shadowing and dual-tasking, as well as memory aides such as note-taking, visualization, and chunking. Students will also continue to discuss ethically challenging situations and the role of the interpreter. Prerequisite: TRIN 1021, TRIN 1031, and consent of instructor. Students must have a language proficiency level equivalent to the American College Teachers of Foreign Languages (ACTFL) Oral Proficiency Interview (OPI) advanced-high or higher rating in both English and the second language.

## Working with Interpreters TRIN 1051 <br> 2 Credits

This course introduces the parameters of the interpreting task, the interpreter's role, and strategies for effective collaboration with interpreters. Topics include disparities in service provision, their effects on culturally diverse and limited-English proficient clients, and legislation related to the provision of interpreting and translating services.


## 7 Course Descriptions



This course is intended for students and professionals who work with clients who have limited English proficiency. This course does not count toward the 30 credits for the Certificate or the 60 credits for the AAS in Translating and Interpreting (TRIN). Prerequisite: Assessment score placement in RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher, assessment score placement in ENGL 1021 or completion of ENGL 0090 with a C or higher, or instructor consent.

## Glossary Development TRIN 1061

## 1 Credit

This course introduces strategies for translating and interpreting terms and concepts that pertain to specialized fields. Course activities explore different methods of researching unfamiliar terminology and various options for addressing terms with no direct equivalent translation. Students will research and build a glossary in a specialized field. Prerequisite: TRIN 1021 with agrade of $C$ or higher and TRIN 1031 with a grade of C or higher, or instructor consent.

## Reading and Writing in Spanish TRIN 1071 3 Credits

This course is conducted entirely in Spanish and covers reading, discussions, and writing
practice in the language. This course is intended for students with a firm grasp of basic reading and writing skills in Spanish. Prerequisite: Assessment score placement in RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of $C$ or higher, and assessment score placement in ENGL 1021 or completion of ENGL 0090 with a grade of C or higher, or instructor consent. Recommendation: Language proficiency level equivalent to the American College Teachers of Foreign Languages (ACTFL) Oral Proficiency Interview (OPI) advanced-mid or higher in both English and Spanish.

## Reading and Writing in Hmong TRIN 1073 <br> 3 Credits

This course refines reading and writing skills in Hmong for students who have advanced oral proficiency in the language. Coursework includes reading and writing in Hmong in a variety of settings and discussion of dialectical variation. This course is intended for students who have some basic knowledge of reading and writing in Hmong. Prerequisite: Assessment score placement in RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher, and assessment score placement in ENGL 1021 or completion of ENGL 0090 with a grade of C or higher, or instructor consent. Recommendation:

Language proficiency level equivalent to the American College Teachers of Foreign Languages (ACTFL) Oral Proficiency Interview (OPI) advanced-high or higher rating in both English and Hmong. Native Hmong speaker or advanced oral proficiency, and basic reading and writing skills in the language

## Reading and Writing in Somali TRIN 1075 <br> 3 Credits

This course is designed for native speakers of Somali who did not receive their primary literacy education in Somali-language schools, or those with advanced oral proficiency in the language. The course reviews formal writing conventions and linguistic structures of Somali and discusses regional dialectical variation. This course is intended for students who have some basic knowledge of reading and writing in Somali. Prerequisite: Assessment score placement in RDNG 1000 or completion of RDNG 0900 OR RDNG 0950 with a grade of C or higher, and assessment score placement in ENGL 1021 or completion of ENGL 0090 with a grade of $C$ or higher, or instructor consent. Recommendation: Language proficiency level equivalent to the American College Teachers of Foreign Languages (ACTFL) Oral Proficiency Interview (OPI) advanced-high or higher rating in both English and the second
language. Native Somali speaker or advanced oral proficiency, and basic reading and writing skills in the language.

## Intermediate Skills of Interpreting TRIN 20224 Credits

This course introduces simultaneous interpreting and refines skills in consecutive interpreting and sight translation. Coursework covers ethical situations, standards of practice, and interpreting theories and research. Prerequisite: TRIN 1041 with a grade of C or higher, or instructor consent

## Advanced Skills of Interpreting TRIN 20234 Credits

This course focuses on refinement of simultaneous interpreting reting skills acquired in previous courses. This course presents increasingly complex and specialized scenarios, continues to explore the application of interpreter codes of ethics and standards of practice, and discusses theoretical frameworks of interpreting studies as a field of research. Prerequisite: TRIN 2022 with a grade of $C$ or higher, or instructor consent.

## Interpreting in Education TRIN $2035 \quad 2$ Credits

This course introduces students to interpreting in educational settings. This course addresses various types of interpreted encounters in education. Coursework includes readings related to the topic and practice with domainspecific role plays, vocabulary, and challenging situations. Prerequisite: TRIN 1041 with a grade of C or higher, or instructor consent.

## Interpreting in Healthcare <br> TRIN 2036 <br> 2 Credits

This course provides an overview of healthcare settings and offers students opportunities to develop their interpreting skills in this field. It also provides an overview of current national certification exams for medical interpreters. Coursework includes theoretical knowledge and practical application of interpreting in the healthcare setting. Prerequisite: TRIN 1041 with a grade of $C$ or higher, or instructor consent.

## Interpreting in Legal Settings TRIN 20372 Credits

This course introduces students to interpreting in the legal setting and offers an overview of the requirements for court certification. Coursework covers the Minnesota state courts and different types of cases tried in courts. The course also introduces students to legal
vocabulary and legal settings outside the courtroom. Prerequisite: TRIN 1041 with a grade of C or higher, or instructor consent.

## Translation Technologies TRIN 20693 Credits

This course explores various technologies available for translation that allow translators to edit images and text, subtitle films and videoclips, and translate websites. Coursework includes exploration of one or more CAT (Computer-Assisted Translation) tools. Prerequisite: TRIN 1041 with a grade of C or higher, or instructor consent.

## TRIN Internship

 TRIN 2780
## 1-2 Credits

Students will have the opportunity to work in the industry to gain experience and advance their skills. This may be a paid or unpaid internship. Prerequisite: TRIN 2022 with a grade of $C$ or higher or concurrent enrollment and instructor consent.

## Visual Communications Technology

## Principles of Digital Communications 1 VCT 10123 Credits

This first semester course provides the student with an introduction to the technical and conceptual principles of the visual communications industry and how those principles are applied in its various fields. Creating projects by combining digital mediums such as graphics, sound, animation, video, photography, text and interactivity establishes a strong foundation for classes in the future. Students will develop and present these projects in a variety of digital formats using an assortment of industry standard applications. Exploration of the various career paths within the VCT Industry will also be covered.

## Design Basics VCT 1013

## 4 Credits

All visual communicators (multimedia experts, videographers, photographers, graphic designers) need to know the fundamentals of design to be effective problem solvers for their clients. Students with good design and typographic skills are needed in industry to communicate efficiently and effectively. In this class, beginning students will learn
the formal elements, principles of design, and build typography skills to create visual communication messages.

## Project Planning

VCT $1015 \quad 3$ Credits
This course will explore the conceptual skills involved in project planning for media production. Students will focus on creative and technical aspects of project management including; project charters, team dynamics project plan, plan implementation, storyboarding, budgeting, and pre-production planning as well as how to close out a project. The course content will apply to all areas within Visual Communications Technologies. Prerequisite: VCT 1012.

## Concept Drawing and Storyboarding VCT 1017 3 Credits

This course introduces students to the unique concepts and drawing techniques used by $2 D \& 3 D$ animators, graphic designers, Web designers, and videographers. Hands-on projects emphasize drawing to develop ideas and to create storyboards, thumbnails, and roughs. Communicating the client's message and the digital implementation of concept drawings in applications such as 3ds max, Adobe Flash, Final Cut Pro, and Adobe InDesign will be discussed.

## Digital Imaging

VCT 1018
3 Credits
In this course students will use a design process to create portfolio quality imagery using Adobe Photoshop and Adobe Illustrator for the creation and manipulation of both raster and vector images. Topics will include: file formats, resolution, illustration and color systems. Recommendations: VCT 1013.

## Principles of Digital Communications II VCT 1019 <br> 3 Credits

This second semester course continues the exploration of the career, technical, and conceptual principles of the visual communications industry that were established in the VCT 1012 course. Intermediate projects will be created using more intricate applications, while expanding upon the concepts and techniques explored in VCT 1012. Students will develop and present these projects in a variety of digital formats using an assortment of industry standard applications. Further exploration of the various career paths within the VCT Industry will also be covered as students begin to develop their professional identities. Prerequisite: VCT 1012.

## 7 Course Descriptions



## Flash Interactive Media I VCT 1021 <br> 3 Credits

In this hands-on, project-oriented course, students will explore the concepts and practical applications of the multiple digital mediums of animation, digital graphics, digital audio, digital video and interactivity, authored with Adobe Flash. This course covers the fundamentals of interactive media with Adobe Flash including image creation, animation with motion tweening, special effects, and basic interactivity with ActionScript. Prerequisite: VCT 1013, VCT 1018 (or concurrent enrollment), or consent of instructor.

## Web Design with HTML5 and CSS3 VCT 1023 3 Credits

In this hands-on, project-oriented course, students will explore the many new and exciting options now available with HTML5 and CSS3. Students will design and create multiple page Web sites with text, graphics, multimedia elements, and interactivity. This course covers the use of HTML5 (Hypertext Markup Language version 5), CSS3 (Cascading Style Sheets version 3), the optimization of graphics, and the application of multimedia elements to produce efficient, interactive

Web sites. Students will create Web sites to communicate a clients message through the application of the principles and elements of design. Prerequisite: VCT 1013 and VCT 1018 or concurrent enrollment

## Advanced Web Design with CSS3 VCT $1024 \quad 3$ Credits

 In this hands-on, project-oriented course, students will explore the vast array of exciting options available with CSS3 to implement highly creative design solutions. This course continues exploring the many CSS3 properties introduced in VCT 1023 Web Design with HTML5 and CSS3. Students will create rich and visually exciting Web site designs using more advanced CSS3 properties and design concepts. Prerequisite: VCT 1023 or instructor consent
## Interactive Web Design with JavaScript and jQuery VCT 1027 <br> 3 Credits

In this hands-on, project-oriented course, students will explore the exciting interactive options available with JavaScript and jQuery. Students will design and create highly interactive Websites to communicate a clients
message. The principles and elements of design and the implementation of JavaScript and jOuery with HTML5 and CSS3 will also be covered. Prerequisite: VCT 1023 or instructor consent.

## Video I

VCT $1030 \quad 3$ Credits
This foundational course will cover the operation and use of video cameras, microphones, monitors, and video recorders, along with techniques of lighting and sound recording through lectures, demonstration, and hands-on experiences. Students will plan and shoot short video productions. Note: Some course assignments require students to move, lift, and carry video equipment.

## Digital Audio <br> VCT 1031 <br> 3 Credits

This course introduces students to the basic tools and techniques of sound pickup, amplification, recording, editing, distribution (including Podcasting), and output as they apply to production. Digital audio equipment and software as well as traditional audio equipment will be covered.

## Digital Editing I VCT 1035

3 Credits
This course covers basic video editing techniques. Topics include digital non-linear editing, motion graphics, and color correction, as well as off-line/on-line editing, edit decision lists, traditional editing equipment, and distribution (including Podcasting). This course is intended to prepare students for the Apple Authorized Final Cut Pro Certification exam. Prerequisite: VCT 1030 or instructor consent.

## Typography VCT 1060 <br> 3 Credits

This course in typography is a hands-on introduction to the world of letterforms. It begins with a historical look at early writing systems and moves to the contemporary computer-generated type and fonts we know today. Exercises and learning activities will help students learn the important concepts and skills of using and creating meaningful type which communicates a message efficiently and effectively. Prerequisite: VCT 1012 or concurrent enrollment.

## Electronic Publishing I VCT 1061

## 3 Credits

This course introduces page layout and assembly using Adobe InDesign software. A formal creative design process will be used to create portfolio quality projects in a simulated real-world environment. Emphasis will be placed on the formal elements and principles of design and the relationship between form and content. Students will be required to draw, plan, execute, and present their design ideas. Prerequisite: VCT 1012 or concurrent enrollment or consent of instructor.

## Imaging and Printing Methods VCT 1063 3 Credits

This course includes the history of printing, the development of desktop publishing, printing methods, and digital printing, along with a review of traditional and digital pre-press methods. Assignments will include graphic arts industry tours and subsequent field reports. Students will be introduced to printing equipment as well as bindery equipment. Four required field trips are scheduled throughout the semester. These may extend past the normal ending time of class due to travel time.

## Introduction to Digital Photography VCT 1071 3 Credits

This course provides opportunities to explore composition techniques while employing fundamental photography concepts. Students will have the opportunity to explore the digital manipulation of images using various techniques. Students are required to furnish their own manual exposure digital camera and memory cards.

## Photo Editing and Printing VCT 1073 <br> 3 Credits

This course introduces industry standard practices for the capture and printing of digital photographs. Topics include digital workflow, paper selection, and printing photos. Students are required to furnish their own manual exposure digital single lens reflex camera, memory cards, and printing paper. Prerequisite: VCT 1018 and VCT 1071 with a grade of C or higher.

## Basic Lighting and Photography VCT 1076 3 Credits

This course introduces the concepts of working with lighting and equipment in the realm of professional photography. This course covers the quality of light, using natural light, and using a flash unit. Students are required to furnish their own manual exposure digital camera, and other equipment to be identified during class. Prerequisite: VCT 1071 with a grade of $C$ or higher.

## Intermediate Lighting and Photography VCT 1078 3 Credits

This course builds upon the introductory skills of VCT 1076 Basic Lighting and Photography. Coursework offers in-depth study of the different types of professional photography including both equipment and techniques. Course topics include location shooting, studio lighting, flash unit modifiers, and backdrops. Prerequisite: VCT 1076 with a grade of C or higher.

## Flash Interactive Media II VCT 2021 <br> 3 Credits

In this advanced hands-on, project-oriented course, students will explore the concepts and practical applications of Flash interactivity with ActionScript. The multiple mediums of animation, digital graphics, digital audio, and digital video, authored with Adobe

Flash, will also be creatively applied. The emphasis of this course is on the creation of highly interactive multimedia applications. The concepts of programming will be implemented using Flash's native scripting language ActionScript to create various forms of interactivity. Through the application of the principles and elements of design, students will design highly interactive media applications, to communicate a client's message. Prerequisite: VCT 1021 or consent of instructor.

## App Design for Mobile Devices VCT 2022 3 Credits

Mobile app design has become, arguably, the fastest growing area of the Visual Communications Industry. In this hands-on, project-oriented course, students will explore the concepts, design issues, and techniques of planning and designing for the mobile app space or GUI. Projects will include designing the mobile app space for multiple mobile design applications. Prerequisite: VCT 1027 or instructor consent

## 3D Animation I <br> VCT 2025

## 3 Credits

In this hands-on, project-oriented course, students will design and create 3D animation projects using the industry-standard 3ds max application. The concepts of 3D design and animation will be covered including 3D object creation, modeling, lighting, texture creation and application, as well as 3D animation of objects and cameras. Prerequisite: VCT 1018 or consent of instructor.

## 3D Animation II VCT 2026

 3 CreditsIn this hands-on, project-oriented course, students will design and create advanced 3D animation projects emphasizing character modeling and animation. Using the industrystandard 3ds max application, projects will involve the use of advanced 3D modeling and character animation technues, compound objects, subdivision surface modeling, the creation and application of textures, advanced camera and lighting techniques, and the application of advanced particle systems and space warps. Prerequisite: VCT 2025.

## 7 Course Descriptions



## Responsive Web Design for Desktop \& Mobile Devices VCT 2028 <br> 3 Credits

This course will cover the design of Responsive Web sites that display equally well on all formats from desktop computers to mobile devices such as tablets and smart phones. In this hands-on, project-oriented course, students will explore the concepts, design issues, and techniques of planning, designing, and creating Responsive Web sites. Projects will include the design and creation of multiple Responsive Web sites. Prerequisite:
VCT 1027 or instructor consent

## Portfolio Development - Interactive Media <br> VCT 20291 Credit

In this hands-on, project-oriented course, students improve their digital interactive portfolio created in the Flash Interactive Media II class. This goal will be achieved by assembling/creating content from advanced courses. The portfolio will then be prepared for delivery on both the Internet and CD/DVD-ROM. Presentation techniques, identifying portfolio-worthy content, and rsum suggestions will be stressed. Prerequisite: VCT 1027, VCT 2021, VCT 2026 (or concurrent enrollment) or consent of instructor.

## Video II <br> VCT 2030 <br> 3 Credits

This advanced course covers the principles of multi-camera production primarily in a
studio setting. This course will continue teaching students production techniques, lighting, camera operations, waveform/ vectorscope monitors, audio, switching, and editing. Students will plan and produce a live production as their final group project. Note: Some course assignments require students to move, lift, and carry video equipment. Prerequisite: VCT 1030 or instructor consent.

## Video Production I <br> VCT $2031 \quad 3$ Credits

This course applies previously learned pre-production, production, and post-production techniques to real-world projects. Digital editing processes will be integrated with camera, lighting, and audio operation. Students are guided through the process of planning, shooting, and editing video productions. Note: Some course assignments require students to move, lift, and carry video equipment. Prerequisite: VCT 1035.

## Video Production II VCT 2032 <br> 3 Credits

This course applies previously learned pre-production, production, and post-production techniques to advanced video projects. Advanced digital editing processes will be integrated with camera, lighting, and audio operation. Students will plan, shoot, and edit several video productions. Note: Some course assignments require students to move,
lift, and carry video equipment. Prerequisite: VCT 2031 or consent of instructor.

## Motion Graphics for Video VCT 2033 <br> 3 Credits

This course delves into Adobe After Effects and Apple Motion, the primary software packages used by video motion graphics professionals. These applications incorporate current visual effect techniques with Final Cut Pro editing software. Topics include chroma key, animation, compositing, particle systems, and motion tracking. Prerequisite: VCT 1035 or instructor consent.

## Digital Editing II VCT 2035

## 3 Credits

This course covers advanced video editing techniques, aesthetics, and storytelling using digital editing software and equipment. Topics include editing for various genres, advanced color correction, sound design, advanced motion graphics, DVD authoring, and distribution (including Podcasting). Prerequisite: VCT 1035.

## Portfolio Development - Digital Video VCT 2037 1 Credit

In this course, students will design their own video "demo reel", resume, and support material in consultation with the instructor. The work produced should be of such quality and interest that students can use this as the major part of their portfolio. Prerequisite: VCT 2035 or consent of instructor.

## Electronic Publishing II VCT 2061

## 3 Credits

This course is a continuation of the concepts and skills learned in Electronic Publishing I. Students will hone their abilities to articulate their clients' needs through continued written statements, research, thumbnail drawings, and computer comps. Students continue to learn more advanced features of InDesign by developing sophisticated portfolio-level projects for a variety of clients. Prerequisite: VCT 1061.

## Electronic Publishing III VCT 2062

## 3 Credits

This course is last in a sequence of design courses in the Graphic Design specialty area. Its primary purpose is to give students an opportunity to use the concepts and skills they have learned by developing and creating a real-life project from concept to print. This client-based project will be a focal point for their portfolios. Additionally, students
will develop and create mockups for several package design concepts. Prerequisite: VCT 2061.

## Print Production VCT 2064 <br> 3 Credits

This advanced course in print production reveals the challenges and limitations of desktop publishing and the subsequent printing process. Instruction will focus on how students can plan and design projects that print efficiently and with the least amount of trouble. The course will also cover how to prepare, troubleshoot, and repair document files for specific printing conditions. Prerequisite: VCT 2062 or concurrent enrollment.

## Portfolio Development - Graphic Design VCT 2066 1 Credit

Preparing a professional graphic design portfolio is an important step in landing that first job. In this class, students can learn important skills in presentation, editing, rsum writing, and developing their personal brand. Creating and presenting an actual portfolio is the goal of this course. Prerequisite: VCT 2062 or concurrent enrollment.

## Color Concepts in Graphic Design VCT 2067 3 Credits

This course begins with an in-depth study of color as a product of viewer, object, and light source and moves into the practical application of color management and how to create output that consistently matches the appearance on the display screen. In addition, this course will address digital image color correction and the step-by-step process for creating professional quality output. Students will work on projects using a variety of techniques including evaluation, tone targeting to a specific output device, color cast removal, retouching, sharpening, and proofing. Prerequisite: VCT 1018

## Information Graphics <br> VCT 2069

3 Credits
This course begins with a historical overview of the origins of representing statistical data. The content includes the process for developing thoughtful information graphics, allowing viewers to evaluate, interpret, and compare data in a meaningful way. The course explores a variety of graphic solutions in communicating complex sets of data by analyzing human perception and presenting these graphic messages in the most efficient way possible. Prerequisite: VCT 2062

## Advanced Lighting and Photography VCT 20713 Credits

This course builds upon the intermediate skills in VCT 1078 Intermediate Lighting and Photography. Advanced techniques and equipment will be explored in both studio and location shooting. This course covers painting with light, light gels, neutral density filters, mixing light sources, and photographing a group. Prerequisite: VCT 1078 with a grade of C or higher.

## Advanced Image Processing VCT 20733 Credits

This course covers advanced editing techniques within Adobe Photoshop and Adobe Lightroom for output of web- and print-ready images while using an effective workflow. This course covers digital workflow, global corrections using Adobe Lightroom, and advanced artistic editing techniques using Adobe Photoshop. Prerequisite: VCT 1018 and VCT 1071 with a grade of $C$ or higher.

## Photography Business and Profession VCT 20753 Credits

For successful photographers, business skills are just as important as creative skills. This course covers essential business topics that professional photographers need to know in order to succeed. Content includes photography contracts, managing clientele, event photography, pricing, and selling work. Prerequisite: VCT 1073 with a grade of $C$ or higher.

## Portfolio Development - Marketing Communication VCT 20761 Credit

Preparing a portfolio in marketing communications offers students an opportunity to gather, assess, modify, and assemble work into a cohesive arrangement. Presentation techniques, editing, and resume suggestions will be included in this course. Developing a professional portfolio is the goal of this course. Prerequisite: Consent of instructor.

## Photography Presentation Design VCT $2078 \quad 3$ Credits

This course covers essential presentation methods used in the photography industry. This project-oriented course includes album design, web presentation, online client proofing, and relationship marketing through social media used by the professional photographer. Prerequisite: VCT 1078 and VCT 2073 with a grade of C or higher.

## Portfolio Development - Photography VCT 2079 <br> 1 Credit

In this course students will prepare a portfolio highlighting their photography skills culminating in the presentation of students work in the VCT Portfolio show. Prerequisite: VCT 1078 and VCT 2073 with a grade of C or higher.

## Advanced Modeling for 3D Animation VCT $2084 \quad 3$ Credits



## 7 Course Descriptions



In this advanced 3D modeling course, students will use complex subdivision surface modeling techniques to create highly developed 3D character and environment models for animation. Human anatomy for artists, as it applies to 3D modeling, will be covered to develop an understanding of character form. Using industry-standard Autodesk applications such as 3ds Max and Mudbox, projects will involve conceptualizing, designing, and modeling a character and its environment. Prerequisite: VCT 2026 or consent of instructor.

## Advanced Texturing for 3D Animation VCT 2085 3 Credits

In this advanced 3D texturing course, students will use intricate UVW mapping techniques, as well as specific digital imaging skills to create detailed textures to be applied to 3D characters and environments prepared for animation. Advanced lighting techniques intended to enhance textures in a 3D scene will also be covered. Using industry-standard
applications such as Adobe Photoshop and Autodesks 3ds Max and Mudbox, projects will involve researching, mapping, creating, and applying textures to characters and environments. Prerequisite: VCT 2026 or consent of instructor.

## Advanced 3D Animation Project VCT 2087 3 Credits

In this advanced 3D Animation Project course, students will use complex rigging, motion-capture data, and freeform animation techniques to animate 3D characters. Advanced special effects using particle systems and space warps for environmental effects will also be covered. Using industrystandard applications such as Autodesks 3ds Max, Mudbox and Motionbuilder, students will design, create, and produce a character and environment, and utilize advanced animation techniques to create a high-quality 3D animation portfolio project. Prerequisite: VCT 2084 and VCT 2085 or consent of instructor.

## Portfolio Development 3D Animation VCT 2089 <br> 1 Credit

In this hands-on, project-oriented course, students will assemble a portfolio containing their concept art, storyboards, and a demo reel of their 3D animations. Presentation techniques, identifying portfolio-worthy content, and résumé suggestions will be emphasized. The portfolio will then be prepared for delivery on both the Internet and DVD-ROM. The culmination of the students efforts will be presented at the Annual VCT Program Portfolio Show. Prerequisite: VCT 2033 and VCT 2087 or concurrent enrollment, or instructor consent

## VCT Internship <br> VCT 2780

## 1-6 Credits

This course is designed to provide students with the opportunity to apply knowledge and skills learned in the Visual Communications Technologies program in a career field. Students will work in a professional
environment while applying and learning a variety of communication, business, and technical skills. Prerequisite: Consent of instructor.

## VCT Independent Study <br> VCT 2792 <br> 1-6 Credits

In this course, students will have the opportunity to research and design their own project. In consultation with their instructor beyond the regular VCT curriculum, students will create an outline of objectives, goals and timelines in a detailed plan, and will be held accountable for the project. Prerequisite: Consent of instructor and dean.

## Illustrator for Industry <br> VCT 2951 <br> 3 Credits

This course covers the concepts and features of digital artwork within the framework of Adobe Illustrator. Students will advance their design skills using the drawing tools and filters to create original drawings. Macintosh computers will be used to complete hands-on coursework. Prerequisite: VCT 1013, VCT 1018 or consent of instructor.

## Welding

## Introduction to Oxyacetylene Welding WLD 1001 2 Credits

In this course, students will identify personal safety rules, demonstrate shop equipment procedures, and focus on developing welding skills with sheet metal in the flat position with the oxyacetylene process. Students will use oxyacetylene and plasma cutting equipment on plate and sheet metal. Students must be able to perform physical tasks in order to complete course requirements.

## Advanced Oxyacetylene Welding I WLD 1002 2 Credits

This course focuses on developing gas welding skills necessary for welding in the horizontal and vertical down positions. Students will perform beads, butt, lap, corner, and tee welds on sheet metal using the oxyacetylene welding process. Students must be able to perform physical tasks to complete course requirements. Prerequisite: WLDG 1001 or consent of instructor.

## Advanced Oxyacetylene Welding II WLD 1005 2 Credits

This course focuses on developing gas welding skills necessary for welding in the vertical up and overhead positions. Students will perform beads, butt, lap, corner, and tee welds on sheet metal using the oxyacetylene welding process. Students must be able to perform physical tasks to complete course requirements. Prerequisite: WLDG 1001 or consent of instructor.

## Introduction to Gas Tungsten Arc Welding <br> WLD 1007 <br> 3 Credits

This course will focus on gas tungsten arc welding (GTAW) while developing skills with sheet metal, aluminum, and stainless steel in the flat position. Additional topics will include personal safety rules and shop equipment procedures. Students must be able to perform physical tasks to complete course requirements.

## Introduction to Metal Inert Gas Welding WLD $1011 \quad 1$ Credit

In this course, students identify personal safety rules, shop equipment procedures, and will focus on developing welding skills on sheet and plate metal in the flat position with the metal inert gas process. Students must be able to perform physical tasks to complete course requirements.

## Advanced Metal Inert Gas Welding I WLD 1012 2 Credits

This course requires students to identify personal safety rules and to focus on developing welding skills in the horizontal and vertical up position on sheet and plate metal using the metal inert gas (MIG) process. Students must be able to perform physical tasks to complete course requirements. Prerequisite: WLDG 1011 or consent of instructor.

## Advanced Metal Inert Gas Welding II WLD 1015 <br> 2 Credits

In this course students will identify shop, machine, and personal safety rules. In addition, this course will focus on developing welding skills in the vertical down and overhead position with the MIG welding process. Students must be able to perform physical tasks in order to complete course requirements. Prerequisite: WLDG 1011 or consent of instructor.

## Flux Cored Arc Welding WLD 1019

3 Credits
This course is designed for students to develop welding skills using flux cored arc welding. Topics include shop, machine, and personal safety rules. Course emphasis is on the flat, vertical, horizontal, and overhead positions with the flux cored arc welding process. Students must be able to perform physical tasks in order to complete course requirements. Prerequisite: WLDG 1011.

## Introduction to ARC Welding <br> WLD $1021 \quad 1$ Credit

This course covers shielded metal arc safety and basic shielded metal arc procedures. Students will weld various joints in the flat position with 6013 and 6011 rod using the arc welding process. Students must be able to perform physical tasks in order to complete course requirements.

## Advanced ARC Welding I WLD 1022 <br> 2 Credits

This course focuses on developing welding skills in the horizontal and vertical up positions with 6011 and 6013 rods using the arc welding process. Students must be able to perform physical tasks in order to complete course requirements. Prerequisite: WLDG 1021 or consent of instructor.

## Advanced ARC Welding II WLD 1025

2 Credits
This course focuses on developing welding skills in the vertical down and overhead positions with 6011 and 6013 rods using the arc welding process. Students must be able to perform physical tasks in order to complete course requirements. Prerequisite: WLDG 1021 or consent of instructor.

## Chapter 8

## Continuing Education \& Customized Training

## Mission

Learning that works; personal, professional and workforce development.

## Vision

To become nationally recognized for quality, innovative and responsive programming that transforms lives, develops the workforce and serves the community.
Century College's Continuing Education and Customized Training division (CECT) serves more than 8,000 individuals annually.

We serve the business sector and our diverse community through:

- Customized services to business and industry
- Professional continuing education
- Career training opportunities
- Certification preparation
- Workforce skills gap training

Training can be delivered in a variety of formats:

- Our location
- Your location
- Online
- Correspondence

Why Century College?

- Hands-on training
- Individual attention
- 95 percent pass rate
- Exceptional instructors
- Flexible and affordable
- Customized solutions



## Customized Services to

 Business and Industry- City of Saint Paul
- Dakota County
- HealthEast
- Hennepin County
- Heraeus Medical Components
- International Paper
- Johanna Shores
- Kraus-Anderson
- Metro Transit
- Medtronic
- Minnesota Department of Corrections
- Minnesota Department of Human Resources
- Minnesota Department of Natural Resources
- Minnesota Department of Transportation
- MME group
- Modernistic
- Northern Tier Energy
- Precision, Inc.
- Ramsey County
- Washington County
- Walgreens

Clients have given Century a 99 percent satisfaction rating

## Professional Continuing Education

Choose from a wide variety of noncredit classes, workshops, and seminars designed for adults needing to satisfy professional credentialing requirements or seeking career advancement, job mobility, or professional growth. We specialize in training for:

- Business
- Healthcare
- Human services
- Manufacturing
- Fire/Public safety
- Trades
- Transportation

These offerings change continually in response to current trends, professional requirements, and participant interest. Continuing education courses are offered in the evening or as daytime seminars, both on and off campus. Fees vary according to instructional costs. Enrolled students earn continuing education units (CEUs) in recognition of their participation.

One CEU is defined as ten contact hours of participation in an organized continuing education experience under responsible sponsorship, capable direction, and qualified instruction. Nationally recognized, the CEU provides a standardized measure for accumulating, recording, and credentialing work completed through continuing education programs. Earned CEUs are recorded on a transcript. Certificates of attendance are awarded upon completion of the classes/ workshops.

## Career Training Opportunities

## Certificate Programs

Certificate programs provide a way for current practitioners to earn advanced credentials. A certificate is also a great way to transition
into a new industry or career goal. Below is a summary of some of certificates offered through Century continuing education.

- Accounting
- Administrative Professional
- CDL Truck Driver Training
- Computer Proficiency
- Graphic Design
- Fire Officer
- Leadership
- Medical Billing/Coding
- Nursing Assistant
- Pharmacy Technician
- Phlebotomy Technician
- Project Management
- Quickbooks
- Supervisory/Management
- Web Design
- Welding


## Health Careers

Century provides entry-level career training for nursing assistants, home health care workers, trained medication aides, health unit coordinators and pharmacy technicians. Training is also offered for phlebotomy technicians, emergency medical technicians, medical coding specialists, and health unit coordinator (HUC).

## Commercial Driver's License (CDL)

Century College offers commercial truck driver training in preparation for the Class A and Class B license exams. Upon successful completion, students have the opportunity to take the skills portion of the respective exam. Century also offers individual/small group instruction to continue to build driving skills which can benefit experienced drivers.

## Leadership Program for Supervisors

This credit or noncredit program is practical, highly interactive and workplace relevant. Courses address a full range of skills such as leadership, interpersonal communication, performance management, intercultural competence, managing change, budgeting and more! Courses can be customized to meet the
needs of your organization and can lead to a certificate, a diploma, or a degree.

## Testimonials

"The instructors, state-of-the-art facility and one-on-one training are phenomenal. They gave me every skill I needed to enter the workforce."

Mark Catlin went from 14 months of unemployment to a new career by earning his Commercial

Driver's License (CDL).
"Maintaining the equipment in today's automated manufacturing environment requires employees with a diverse and ever evolving set of skills and knowledge. International Paper has depended on Century College to provide vital training/education in several technical areas for our skilled employees."

## Scott Smith, International Paper

"Experience in a nursing home and postacute setting allows students to see a large population they will serve once they complete their education. Our residents love the students, and have been spoiled by the individual attention!"

## Barb Jordahl, Human Resources, Cerenity <br> Senior Care of White Bear Lake

"The Century College Leadership Program was a very rewarding program which really challenged me and changed my outlook on how I look at management and the decisions they make in my profession. I took away many new techniques. I think the Leadership Certificate Program will definitely help me in my goals for career advancement and will put me at the top of the list during the next promotional process."

Trooper Michael Eck, MN State Patrol

## Chapter 9

## College Administration \& Faculty

## College Administration

## Ron Anderson

President
B.A. St. Olaf College
M.A. University of Minnesota

Ph.D. University of Minnesota

## Michael Berndt

Vice President of Academic Affairs
B.A. University of Minnesota
M.A. Southern Illinois University at Carbondale

## Michael Bruner

Vice President of Student Services
B.A. Texas Tech University
M.A. Sul Ross State University

Ed.D. Texas A \& M University

## Jeralyn Jargo

Vice President of Continuing Education and Customized Training
B.S. University of lowa
M.Ed. University of North Dakota

## Patrick Opatz

Vice President of Finance and Administration
B.A. St. Mary's University
M.A. University of Minnesota

Ph.D. University of Minnesota

## John Rohleder

Associate Vice President of Information
Technology/Administrative Services
B.A. University of St. Thomas
M.Ed University of Minnesota

## Kathleen Bell

Academic Dean
A.D. Anoka-Ramsey Community College
B.A. University of Minnesota
M.S. University of Minnesota

## Jennifer Eccles

Nursing Director
B.S.N. Lakehead University
M.Ed. Lakehead University
M.S. University of Ottawa

## Michael Houfer

Physical Plant Manager
DIP Jackson Area Vo-Tech
DIP Southwest Technical College
DIP Riverside Technical College

## Brenda Lyseng

Academic Dean
B.A. Concordia College, Moorhead
M.S. $\quad$ University of Minnesota

## Andrew Nesset

Academic Dean
B.A. Luther College
M.A. Idaho State University

## Jane Nicholson

Academic Dean
B.A. University of Minnesota
M.Ed. University of Minnesota

License: Social Worker
University of Wisconsin

## Jason Cardinal

Dean of Student Services

| B.A. | University of Minnesota |
| :--- | :--- |
| M.A. | St. Mary's University |

## Kristin Hageman

Dean of Student Services

| B.A. | University of St. Thomas |
| :--- | :--- |
| M.A. | University of St. Thomas |
| License: | Technical College Counselor |

## Andrea Rystrom

Dean of Student Services
A.A. Golden Valley Lutheran College
B.S. St. Cloud State University
M.S. St. Cloud State University

## Velvet Walker

Dean of Continuing Education/
Customized Training
B.A. University of lowa

## Jill Greenhalgh

Executive Director, Foundation
B.A. St. Olaf College

MBA University of St. Thomas

## Donald Long

Director of Resource Development
B.S. Grand Canyon College
M.S.Ed. University of Kentucky
M.DIV Southern Baptist Seminary

## Bonnie Meyers

Director of Finance
B.A. Augsburg College
M.A. Metro State

Mary Nienaber
Human Resources Director
B.A. University of Minnesota
M.A. University of Minnesota

## Lisa Schlotterhausen

Dean of Institutional Effectiveness
B.A. Drew University
M.A. New York University
M.Phil. New York University

Ph.D. New York University

## Faculty

## Adie, John

Criminal Justice
B.S. Kent State University
M.E.D. Kent State University

Ed.S. Kent State University

## Aladejebi, Israel

Computer Forensics
A.S. Ogun State Polytechnic

Advanced Diploma:
The Polytechnic Ibadam
Post Graduate Diploma:
Federal University of Technology
B.S.C. Federal University of Technology Certificate: Microsoft

## Anderl, John

Communication
B.A. Bethel University
M.A. Bethel University

## Anderson, Steven

Reading/Student Success
B.A. St. Cloud State University
M.A. St. Cloud State University

## Aspelund, Allan

Accounting
B.S. St. Cloud State University
M.Ed. University of Minnesota

License: Accounting
License: Administrative Services

## Auld, Carol

Radiologic Technology
B.S. Cardinal Stritch University
M.A. Cardinal Stritch University

Diploma: Radiologic Technology

| Baltikauskas, Ida |  |
| :--- | :--- |
| Philosophy |  |
| B.A. | Fort Wright College |
| M.A. | University of Minnesota |
| Ph.D. | University of Minnesota |

Baughman-Terry, Linda
Counseling
B.A. Western Michigan University
M.A. University of St. Thomas
M.S. University of Wisconsin

## Bell, Jessica <br> Biology <br> B.S. Gustavus Adolphus College <br> Ph.D. University of Minnesota

Bellis, Karen
Radiologic Technology
B.A. Metropolitan State University

License: Radiologic Technology
Birkeland, Darlene
Dental Assisting
Certified Dental Assistant
License: Dental Assisting

## Blackburn, David

Chemistry
B.A. Carleton College

Ph.D. University of Minnesota

## Blesi, Michelle

| Medical | Assisting |
| :--- | :--- |
| A.A. | Anoka Ramsey Community College |
| B.A. | Metropolitan State University |
| M.A. | Metropolitan State University |
| Diploma: | Medical Institute of Minnesota |
| CMA (AAMA) |  |
| License: | Medical Assisting/Office Component |

## Borden, Susan

## English

B.A. University of lowa
M.A./W University of lowa

Ph.D. University of Minnesota

## Bordenave, Melissa

Nursing
B.S.N. College of St. Benedict
M.S.N. University of Phoenix

## Borman, Melissa

Art
B.A. Monroe Community College
M.F.A. San Francisco Art Institute

## Borrelli, Holly

VCT

$$
\begin{array}{ll}
\text { A.A.S. } & \text { Monroe Community College } \\
\text { B.S. } & \text { St. Cloud State University }
\end{array}
$$

## Borrett, David

EMS/Paramedic
B.A. Metropolitan State University

License: Paramedic
Nationally Registered Emergency Medical
Technician-Paramedic

## Bowden, Robin

History
B.A. Kent State University
M.A. Kent State University

Ph.D. Kent State University

| Bratager Fernandez, Mary |  |
| :--- | ---: |
| English | Bemidji State University |
| B.A. | Bemidji State University |

## Brennan, Jean-Marie

Counseling

| B.A. | Idaho State University |
| :--- | :--- |
| B.S. | Idaho State University |
| M.A. | Idaho State University |

## Breyer, Jessie

Psychology

| B.A. | University of Minnesota |
| :--- | :--- |
| M.A. | University of St. Thomas |
| Psy.D. | University of St. Thomas |

## Burns, Cullen Bailey

English
B.A. Western Michigan University
M.A. Western Michigan University

MFA Western Michigan University
Cadwell, Jill
English
B.A. St. Cloud State University
M.A. St. Cloud State University

## Canavan, Amelia

Mathematics
B.S. Metro State College, Denver, CO
B.A. Metro State College, Denver, CO
M.S. University of Washington

| Carter, Erin |  |
| :--- | :--- |
| Biology | Minnesota State University- |
| B.S. | Mankato |
| M.A. | Minnesota State University- <br> Mankato |
|  |  |

## Caulkins, Chris

EMS/Paramedic
A.A. Inver Hills Community College
A.A.S. Century College
B.S. American College of Prehospital Medicine
M.P.H. American Military University

Certificate University of Minnesota
Certified Paramedic
Certified Emergency Manager (MN)
B.A. Metropolitan State University
M.A. Metropolitan State University

## Cedarleaf, Joy

Biology
B.S. Brigham Young University
M.S. Brigham Young University

## Charest, Richard

Facility Systems Technology

| B.A. | Metropolitan State University |
| :--- | :--- |
| M.Ed. | University of Minnesota |
| License: |  |
| License: | Refrigeration |
| Construction Electrician |  |
| License: | Building Utilities Mechanic |
| License: | Electric Maintenance \& Repair |

## Chung, Carl

Philosophy
A.B. Occidental College

Ph.D. University of Minnesota

Clemens, Linda
English
B.A. Hamline University
M.A. University of Minnesota

## Coffey, Andrea

Education
B.S. Appalachian State University
M.A. East Tennessee State University

Ed.D. East Tennessee State University
Coleman, Todd
Physics
B.A. Wittenberg University

Ph.D. University of Wisconsin
Colonna, Carrie
Dental Assisting
Diploma: Northeast Metro Technical College
A.A.S. Century College
B.A. Metropolitan State University
M.S. Bemidji State University

Certified: Dental Assistant
Licensed: Dental Assistant Restorative Functions
Registered: Dental Hygienist
Cook, Carolyn
Health/Physical Education
B.S. Minnesota State University
M.E.D. Hardin-Simmons University

## Costa, Thomas

Cosmetology
License: Cosmetology
A.A. Century College
B.A. Metro State

## Counce, Steve

Auto Body Technology
Diploma: Indiana Technical College
Diploma: Ivy Technical College
License: Automotive Body Mechanic

## Cramer, Patrick

Heating/Air Conditioning Technology
Cert Minneapolis Community \&
Technical College
DIP Minneapolis Community \&
Technical College
Crea, Catherine
Reading/Study Skills
B.A. University of Minnesota - Morris
M.A. University of St. Thomas

## Daniels, Julie

English

| A.B.D. | University of Minnesota |
| :--- | :--- |
| B.A. | College of Saint Catherine |
| M.A. | Pennsylvania State University |

Davis, Jermaine
Speech-Communication
B.A. Elmhurst College
M.A. University of Wisconsin

## Doh, Emmanuel

English
B.A. University of Ibadan, Nigeria
M.A. University of Ibadan, Nigeria

Ph.D. University of Ibadan, Nigeria

## 9 College Administration \& Faculty

| Dolance, Susannah |  |
| :--- | :--- |
| Sociology |  |
| B.A. | Texas Tech University |
| M.A. | University of Michigan |
| Ph.D. | University of Michigan |

## Donahue, Kelly

English
B.A. Augsburg College
M.A. Utah State University

## Dornbush, Martha

English as a Second Language
B.A. Wheaton College
M.A. University of Minnesota

## Downs, Brian

Computer Science

| B.A. | Millikin University |
| :--- | :--- |
| M.S. | University of Illinois |
| M.S. | University of Rhode Island |

## DuBose, Rose Marie

Reading/Student Success
B.A. University of Wisconsin-Stout
M.A. Hamline University

Dykes, Paul

## Biology

B.S. Kansas State University of Agriculture
M.S. University of Minnesota

Eddy, Michael
VCT
B.A. Gustavus Adolphus College

## Elliott, Jodi

Reading/Student Success
B.S. University of Minnesota Moorhead
M.S. Bethel College

Engelen-Eigles, Deborah

| Sociology | Wesleyan University |
| :--- | :--- |
| B.A. | Virginia Polytechnic Institute \& State |
| M.A. | University |
| Ph.D. | University of Minnesota |

## Fabro, Kathy

Nursing
B.A.

College of St. Catherine
Bethel University
Finlayson, Janet
Counseling
B.S. Moorhead State University
B.A. Moorhead State University
M.Ed. North Dakota State University

## Fleury-Evans, Diane

Radiologic Technology
B.S. University of Health/Sciences,
M.A. The Ohio State University

Gaffney, Kimberly
English
B.A. University of Illinois at

Urbana-Champaign
M.P.H. University of Minnesota
M.A. University of St. Thomas

## Gaffney, Michael

Computer Science
B.A. University of Notre Dame
M.A. $\quad$ University of Wisconsin

## Gates, Kathy

Health/Physical Education
B.S. University of Minnesota
M.A. University of St. Thomas

## Gerriets, Carl

English
B.S. Emporia State University
M.A. University of Louisville

## Gfrerer, Chery

English
A.A. Lakewood Community College
B.A. University of Minnesota
M.A. University of Minnesota

## Gingerich, John

Mathematics
Diploma Hennepin Technical College
Diploma St. Paul College
B.S. Winona State University
M.S. University of Wisconsin

## Gits, Peter

Mathematics
B.A. St. John's University
M.A. University of Minnesota

## Goebel, Dawn

Cosmetology
Cert. Century College
B.A. Metro State University
M.A. Bemidji State University

## Goerisch, Lynda

| Emergency | Medical Services |
| :--- | :--- |
| A.S. | Mankato State University |
| B.A. | Metropolitan State University |
| M.A. | Concordia University |
| License: | Emergency Medical Technician |
| License: | Paramedic |
|  | Nationally Registered Paramedic |

## Gordon, Rita

Dental Assisting
B.S. University of Minnesota

Certified: Dental Assistant
Licensed: Dental Assistant
Registered: Dental Assistant
Restorative Functions

| Graham, Eric |  |
| :--- | :--- |
| Music |  |
| B.A. | University of Alaska |
| M.M. | John Hopkins University |
| M.A. | St. Mary's University |

## Grebner, Timothy

Engineering/Computer Science
B.S. University of lowa
M.S. University of Minnesota

## Gregg, Scott

Reading/Study Skills
B.A. University of Minnesota
B.A.A. University of Minnesota
M.A. University of Minnesota

Gregory, Antone
Chemistry

| B.S. | University of Virginia |
| :--- | :--- |
| M.E. | University of Virginia |
| License: | Professional Engineer |

Gryczman, Anna

| Nursing |  |
| :--- | :--- |
| A.D.N. | Inver Hills Community College |
| B.S.N. | Metropolitan State University |
| M.S.N. | University of Minnesota |
| D.N.P. | Metropolitan State University |
| Certificate: | Public Health Nursing |
| Certificate: | Advanced Holistic Nursing |
| Certificate: | Certified Nurse Educator |

Gu, Xue Min
Physics/Engineering

| B.S. | East China Normal University |
| :--- | :--- |
| M.S. | University of Minnesota |
| Ph.D. | University of Minnesota |

## Guenthner, Scott

English
B.A. Nebraska Wesleyan University
M.S. Northern Arizona University

## Gunderson, Sheila

Human Services
B.S. University of Wisconsin-Superior
M.S. University of Wisconsin-Superior

## Gwizdala, Joyce

Mathematics
$\begin{array}{ll}\text { B.A. } & \text { College of St. Catherine } \\ \text { M.A. } & \text { Central Michigan Universit }\end{array}$

## Hankes, Jason

Health
B.S. University of Wisconsin, River Falls
M.Ed. University of Minnesota

## Harmon, Eric

English
B.A. Fisk University
M.A. Vanderbilt University

## Hathaway, Robert

English

| B.A. | Concordia Senior College |
| :--- | :--- |
| M.A. | Mankato State College |

Hauer, Justin
Counseling
M.S. University of Wisconsin

Hayne, JoAnn
Nursing
A.S.

Anoka Ramsey Community College
B.S. University of Minnesota
M.S.N. University of Minnesota

Hentges, Elizabeth
Mathematics
B.A. College of St. Benedict
M.S. Michigan State University

## Herold, Katherine

Psychology
B.A. University of California, Los Angeles
M.A. San Francisco State University

Ph.D. University of California, Santa Cruz

Hildebrandt, Jill
Communication

| B.S. | Minnesota State University |
| :--- | :--- |
| M.A. | Minnesota State University |
| Ph.D. | Southern Illinois University |

## Hinrichs, Bruce <br> Psychology <br> $\begin{array}{ll}\text { B.A. } & \text { University of Minnesota } \\ \text { M.A. } & \text { University of Minnesota }\end{array}$

## Hipp, Susan

Reading/Study Skills
B.A. University of Minnesota
B.S. University of Minnesota
M.S. University of Wisconsin-LaCrosse

## Humphrey, Alexandra

Reading/Study Skills
B.A. University of Minnesota
Ph.D. $\quad$ University of Minnesota

## Hunt, Stewart <br> Mathematics <br> B.S. Bemidji State University <br> M.S. Florida State University <br> M.S. Purdue University

## Jacobson, Carol

English
B.S. Bemidji State University
M.A. University of North Dakota

## Jahnke, Jeffrey <br> Engineering CAD Technology <br> A.A.S. Milwaukee Area Technical College <br> License: Mechanical Drafting

## Jakubic, Jennifer

English as a Second Language
B.A. Gustavus Adolphus College
M.A. University of Minnesota

## Jenson, Brian

Mathematics
B.S. University of North Dakota
M.S. University of North Dakota

## Jentzsch, Teresa <br> Chemistry <br> B.S. University of Wisconsin- Eau Claire <br> Ph.D. University of Minnesota

| Jersak, Michele |  |
| :--- | :--- |
| Counseling |  |
| A.A. | North Hennepin Community College |
| B.A. | University of Minnesota |
| M.A. | University of Minnesota |

## Jersak, Robert

Communication

| B.A. | Hamline University |
| :--- | :--- |
| M.A. | Minnesota State University-Mankato |

[^1]Kane, Rahul

| Biology |  |
| :--- | :--- |
| B.S. | Devi Ahilya University, India |
| M.S. | St. Cloud State University |

## Keenan, Kerry

Nursing
A.A.D. Century/Lakewood College
L.P.N. Anoka-Hennepin Technical College
R.N./A.S.D. Anoka Ramsey Community College
B.S.N. College of St. Catherine
M.A. Bethel University

## Keller, David

Microcomputer Support Technology
B.S. Minnesota State UniversityMankato

## Kennedy, Barbara

Spanish
B.A. Macalester College
M.A. University of Minnesota

## Kennedy, Craig

Building Utilities Mechanic
Cert. Minneapolis Community \& Technical College
A.A. Hennepin Technical College
B.A. Minnesota State University, Moorhead

## Kerschner, Dennis

Heating/Air Conditioning Technology
License: Heating, Air Conditioning \&
Refrigeration

## Kessen, Ann

Biology
B.A. University of Dayton

Ph.D. University of Minnesota

## Klindworth, Robert

Physics
B.A. Gustavus Adolphus College

Ph.D. New Mexico State University

## Knapton, Mel

Horticulture

| B.S. | University of Minnesota |
| :--- | :--- |
| License: | Horticulture |
| License: | Landscaping |

## Koch, Jody

Reading/Study Skills
B.S. University of Wisconsin - Eau Claire
M.S. University of Wisconsin - River Falls

## Koehn, Janice

Cosmetology
Diploma: 916 Vo-Tech
License: Cosmetology
Kotasek, Richard
Chemical Dependency
B.A. University of St. Thomas
M.A. University of St. Thomas
A.A. Normandale Community College

## Kothera, John

Visual Communications Technology
B.A. Cleveland State University
M.F.A. Tyler School of Art

License: Graphic Arts

## Kotila, Dwight

Physical Education

| A.A. | Willmar Community College |
| :--- | :--- |
| B.S. | St. Cloud State University |
| M.S. | St. Cloud State University |

## Krohn, Margaret

Interior Design
B.S. Mankato State University

Certificate: Architectural Drafting Technician
Certified: Association of Interior Design
Certified: Kitchen Designer
Certified: National Council for Interior Design Qualification
License: Interior Design

## Kruszka, Edward

Mathematics
B.A. Saint Xavier College
M.S. Northeastern Illinois University

## Kuczenski, Jessica <br> Engineering <br> M.S. University of Notre Dame <br> Ph.D. University of Notre Dame <br> B.S. lowa State University

## Kuny, Tracy

Dental Hygiene
A.S. Normandale Community College
D.H. Metro State

## Kupfer, Julie

Dental Assisting
Certified: Dental Assistant
Licensed: Dental Assistant
B.A. Metro State

## Kuss, Richard

English
B.A. University of Wisconsin
M.A.T. University of Wisconsin

Lanning, Elizabeth
Psychology
B.S. Bowling Green State University
M.E.D. Bowling Green State University

Le, Thanh
Economics
B.S. University of Minnesota

Ph.D. University of Minnesota

## LeBeau, Michelle

Biology
B.A. University of Minnesota

Ph.D. University of Minnesota
LeMay, Dana
English
M.A. Minnesota State University, Mankato

## Lewis, Brian

English
B.A. Wayne State University
M.A. Wayne State University

Ph.D. Michigan State University

## Libson, Carol

Office Technology
$\begin{array}{ll}\text { B.S. } & \text { Bemidji State University } \\ \text { M.S. } & \text { Mankato State University }\end{array}$
License: Administrative Support

## 9 College Administration \& Faculty

## Littleton, Laura

Radiologic Technology
Diploma: Radiologic Technology
B.A. Metropolitan State University
$\begin{array}{ll}\text { Loomis, Kim } \\ \text { Chemistry } & \\ \text { B.S. } & \text { University of Denver } \\ \text { M.S. } & \text { Colorado State University }\end{array}$

| Lyons, David |  |
| :--- | :--- |
| Geography |  |
| B.A. University of Minnesota |  |
| M.S. $\quad$ University of Wisconsin |  |

Madisen, Randi
Library
B.A. $\quad$ Carleton College
M.L.S. University of Michigan
Maeckelbergh, Kenneth
Art
B.S. $\quad$ University of Minnesota
M.A. $\quad$ California State University

## Mathews, Carol

| Sociology |  |
| :--- | :--- |
| B.A. | College of Saint Catherine |
| M.A. | University of Minnesota |

Ph.D. University of Minnesota
Mayer, Beth
English
B.A. University of St. Thomas
M.F.A. $\quad$ Hamline University

## Mazzei, Cristiano

Linguistics, Translation, and Interpreting

| B.A. Unibero-Centro Universitario- |  |
| :--- | :--- |
| M.A. | Sao Paulo |
| University of Massachusetts |  |

U. Uni Massachusets

Micko, Timothy
Auto Mechanics
Diploma: Northeast Metro Technical College
License: Auto Mechanics
A.A.S. Century College

| Mier, Shirley |  |
| :--- | :--- |
| Music |  |
| Brinnell College |  |
| M.A. | University of Minnesota |
| Ph.D | University of Minnesota |

## Milner, Janice

## Sociology

| B.A. | University of Minnesota |
| :--- | :--- |
| M.A. | University of Montana |
| Ph.D. | University of Montana |


| Moran, Craig |  |
| :--- | :--- |
| History |  |
| B.A. | Dana College |
| M.Div. | Wartburg Seminary |
| M.A. | University of Michigan |
| Ph.D. | University of Michigan |

## Mulcahy, Gregory

English
B.A. University of Minnesota
M.A. University of Southern Mississippi

## Naughton, Gerry

Mathematics
$\begin{array}{ll}\text { B.S. } & \text { University of North Texas } \\ \text { M.A. } & \text { University of North Texas } \\ \text { Ph.D. } & \text { University of Minnesota }\end{array}$

## Nelson, Rick

Physical Education
A.A. $\quad$ Northland Community College
B.S. Bemidji State University
M.S. Bemidji State University

| Niemann, Robert |  |
| :--- | :--- |
| Computer | Science |
| B.S. | University of Arizona |
| M.S. $\quad$ University of Minnesota |  |
| Nordstrom, |  |
| Charlotte |  |
| Counseling |  |
| B.A. Gustavus Adolphus College |  |
| M.S. $\quad$ Moorhead State University |  |

## O'Connor, Stanley

| Prosthetics |  |
| :--- | :--- |
| A.A. | Minneapolis Community College |
| B.S. | Crown College |
| M.Ed. | Bethel College |
| License: | Prosthetics Technician |
| License: | Prosthetics Practitioner |

## Odmark, Steve

Philosophy

| B.A. | University of Utah |
| :--- | :--- |
| M.A. | Biola University |
| M.A. | University of Nebraska |
| Ph.D. | University of Nebraska |

## Olson, Amanda

Communication

| B.A. | University of Minnesota |
| :--- | :--- |
| M.A. | Kansas State University |
| Ph.D. | Ohio University |

## Olson, Bob

Automotive Service Technology
Diploma: Northeast Metro Technical College
License: Auto Mechanics

## Osborn, Joseph

## Natural Science

B.A. University of Wisconsin, Madison
M.A. New School for Social Research
M.S.Ed. University of Wisconsin, Madison

## Pearson, Pam <br> Nursing <br> A.S. Lakewood Community College <br> B.A. Metropolitan State University <br> M.A. Bethel University

## Pehoski, Tony

Orthotics
A.A.

License: Orthotics Technican
License: Orthotics Practitioner

## Peleg, Kristine

English

| B.A. | Hebrew University |
| :--- | :--- |
| M.A. | Hebrew University |
| Ph.D. | University of Arizona |

## Peterman, Brian

Mathematics
B.S. Wheaton College
M.A. University of Minnesota

| Pfeiffer, Joann |  |
| :--- | :--- |
| Chemistry |  |
| B.A. Benedict College |  |
| Ph.D. $\quad$ University of Wisconsin |  |

Powell, Susan M.
Nursing
B.S.N. Oakland University
M.S.N. University of Minnesota

PHN Certified Public Health Nurse
CHPN Certified Hospice and
Palliative Care Nurse
CNE Certified Nurse Educator
Rafter, Amy
Dental Hygiene
B.S. University of Minnesota
M.S. Bemidji State University

| Raleigh, Rose |  |
| :--- | ---: |
| Nursing |  |
| B.S. | College of St. Benedict |
| M.S. | University of Minnesota |

Ramsey, Steven
Business Management
B.S. University of Minnesota-Duluth
J.D. William Mitchell College of Law

Raney, Michael
Mathematics
B.A. St. Cloud State University
M.S. University of North Dakota

## Rawson, Amy <br> Communication <br> B.S. Illinois State University <br> M.S. Illinois State University

## Reedich, Kurt

Mathematics
B.S. University of Wisconsin
M.S. University of Wisconsin

## Roach, Paul

Anthropology
$\begin{array}{ll}\text { B.S. } & \text { California Polytechnic State } \\ \text { M.S. } & \text { University } \\ \text { University of Oregon }\end{array}$

## Robey, Jennifer

Reading/Study Skills
$\begin{array}{ll}\text { B.A. } & \text { University of Nebraska } \\ \text { Ph.D. } & \text { University of Minnesota } \\ \text { Certificate: } & \text { Advanced Literary }\end{array}$
Cetticate: Advanced Literary
Rosik, Greg
Mathematics
B.S. University of Wisconsin
M.S. Marquette University

## Roy, Judith

History
B.A. University of Colorado
M.A. University of Colorado

## Ruggles, Gary

Visual Communications Technology
B.F.A. Lamar University
M.F.A. California State University

License: Commercial Art

License: Media Production

| Rynders, | Beth |
| :--- | :--- |
| Dental Assisting |  |
| B.S. | University of Minnesota |
| M.Ed. | University of Minnesota |
| Certified: | Industrial Relations |
| Certified: | Expanded Functions in Dental |
|  | Assisting Program |
| Certificate: | Dental Assistant |
| Licensed: | Dental Assistant |
| Restorative | Functions Dental Assistant |

## Saks, Dawn

Art
B.F.A. Colorado State University
M.F.A. University of Illinois

## Samuel, Delia

Mathematics
B.S. University of the West Indies,
Marbados

M.Phil. | University of the West Indies, |
| :--- |
| Barbados |

M.S. | University of the Minnesota |
| :--- |
| Ph.D. University of the Minnesota |

## Saylor, Katherine <br> English <br> B.A. South Dakota State University <br> M.A. South Dakota State University

Schmitzer, Kimberly
EMS/Paramedics
A.S. Inver Hills Community College
A.A.S. Century College
B.A. Bethel College
M.A. Bethel University

License: Paramedic
Certified: Nationally Registered Paramedic
Schultz, Frank
Counseling
B.S. University of Minnesota
M.Ed. University of Minnesota
M.Ed. University of Wisconsin

License: Quality Control Technician

## Simenson, Scott <br> Information \& Telecommunication <br> B.S. University of Wisconsin

## Simmel, Donald

Auto Service Technology
DIP St. Paul College
B.A. University of Minnesota

## Simons, Angela

Mathematics
B.A. Macalester College
M.Ed. University of Minnesota

## Sklaney, Lawrence

English
B.A. Bucknelll University
M.A. University of Illinois
A.B.D. University of Illinois

## Skogstrom-Rodriquez, Sarah

Interior Design
B.S. University of Wisconsin

## Smaagaard, Lynn

Marketing
B.S. University of Minnesota
M.S. Bemidji State University

## Smeltzer, Mark

Speech-Communication

| B.A. | University of Washington |
| :--- | :--- |
| M.A. | University of Washington |
| Ph.D. | University of Minnesota |

Smith, Chad
Orthotics Practitioner
DIP Century College
A.A.S. Century College
B.S. Metro State

## Smith, Garett

English as a Second Language
B.A. University of St Thomas
M.A. University of Minnesota

## Smith, Patricia

Philosophy
B.G.S.U. University of Nebraska
M.A. University of Nebraska

Ph.D. University of Nebraska
Stack, Constance
Health
B.S. Metropolitan State University
M.S. Minnesota State University-Mankato

## Steffen, Nancy <br> Nursing (RN) <br> A.D.N. Northeast lowa Community College <br> B.S.N. Upper lowa University <br> M.S.N. Drake University

## Stolberg, Steven

Prosthetics
A.S. Lakewood Community College
B.S. University of Minnesota

Certified: Prosthetics
Certified: Prosthetics Practitioner
License: Prosthetics Technician
Prosthetics Practitioner
Tessier, Theodore
Chemical Dependency
B.S. Metro State

Thinesen, Pamela
Biology
B.S. St. Cloud State University
M.S. Portland State University

Certificate: Secondary Teaching
Thrun, Lori
Biology
B.S. University of Michigan

Ph.D. University of Michigan
Villegas, Cynthia
English
B.A. Westmont College
M.A. Northern Arizona University

| Voss, Catherine |  |
| :--- | :--- |
| Orthotics |  |
| Certificate: 916 Vo-Tech |  |
| A.A.S. $\quad$ Anoka-Ramsey Community College |  |
| B.A. $\quad$ Metropolitan State University |  |

## Voth, Kristine

Counselor
M.S. Capella University

## Wacker, Janet

Counseling

| B.A. | University of North Dakota |
| :--- | :--- |
| B.S. | University of Mary |
| M.S. | Minnesota State University- |
| License: | Mankato |
| Technical College Counselor |  |


| Wagner, Roger |  |
| :--- | :--- |
| Prosthetics |  |
| Diploma: | Century College |
| A.A.S. | Century College |
| B.A. | Metropolitan State University |
| Certified: | Prosthetist-Orthotist |

## Walker, Kathleen

Counseling
A.A./A.S. Hibbing Community College
B.S. University of Wisconsin
M.S.E. University of Wisconsin

Certificate: Professional Development in Distance Education

## Wendt, Jon R.

Communication
B.A. University of Delaware
M.A. University of Minnesota

Wilbur, Gail
Reading/Student Success
B.A. St. Olaf College
M.A. University of St. Thomas

## Wilcox, Elliot

Music
B.S. University of Wisconsin
M.M. Northwestern University
M.A. University of Minnesota

## Wollersheim, Ruth

English
B.S. St. Cloud State University
M.A. University of Wisconsin

Wollschlager, Stacey
Reading/Student Success
B.S. St. Catherine University
M.A. Hamline University

## Wood, LuAnn

Reading/Study Skills
B.A. College of St. Benedict/ St. John's University
M.S. University of Wisconsin

Certificate: Reading
Wyman, Tracey
Human Services
B.S. University of Wisconsin
M.S. University of Wisconsin

## Young, Jane

Library
B.A. State University of New York
M.L.S. Drexel University

## Young, William

Mathematics
B.A. University of Minnesota
M.S. Ohio University
M.S. Minnesota State University,

Mankato

## Chapter 10

## Minnesota State Colleges \& Universities

```
MnSCU
Anyone interested in inquiring about the courses and services provided by Minnesota State Colleges and Universities (MnSCU) should contact the college and direct inquiries to the Office of Admissions.
```


## Alexandria Technical \& <br> Community College <br> alextech.edu

Anoka-Ramsey Community College
anokaramsey.edu
Anoka Technical College
anokatech.edu
Bemidji State University
bemidjistate.edu
Central Lakes College
clcmn.edu

Century College
century.edu
Dakota County Technical College
dctc.edu
Fond du Lac Tribal \& Community College fdltcc.edu

Hennepin Technical College
hennepintech.edu
Hibbing Community College
hibbing.edu

Inver Hills Community College
inverhills.edu

Itasca Community College
itascacc.edu
Lake Superior College
Isc.edu
Mesabi Range College
mesabirange.edu
Metropolitan State University
metrostate.edu
Minneapolis Community
\& Technical College
minneapolis.edu
Minnesota State College -
Southeast Technical
southeastmn.edu
Minnesota State Community
\& Technical College
minnesota.edu
Minnesota State University, Mankato mnsu.edu

Minnesota State University Moorhead go.mnstate.edu

Minnesota West Community
\& Technical College
mnwest.edu
Normandale Community College normandale.edu

North Hennepin Community College nhcc.edu

Northland Community
\& Technical College
northlandcollege.edu

Northwest Technical College
ntcmn.edu
Pine Technical and Community College pine.edu

Rainy River Community College
rainyriver.edu
Ridgewater College
ridgewater.edu
Riverland Community College
riverland.edu
Rochester Community \& Technical College rctc.edu

St. Cloud State University
stcloudstate.edu

St. Cloud Technical
\& Community College
sctcc.edu
Saint Paul College
saintpaul.edu
South Central College
southcentral.edu
Southwest Minnesota State University smsu.edu
Vermilion Community College vcc.edu

Winona State University
winona.edu

## Chapter 11

## Student Handbook

## Introduction

The Student Handbook has been developed to give students an overview of various activities, rules, regulations, and policies that have direct impact on them at Century. Further information concerning any of these areas may be obtained from the Dean of Student Services, located in room 1480 west campus, or by calling 651.773.1780.

## Student Life

## Program

The Student Life Program is designed to provide opportunities for student growth through students' extracurricular activities. This program enriches higher education for students by providing both educational and social events. By becoming involved in activities such as academic-related events, cultural diversity programs, health and fitness programs, campus clubs, student publications, fine arts, and the intramural/recreation program, students will share in the ownership and leadership of such programs and experience a positive connection to Century College. Although the Student Life Program provides many avenues for student growth, the decision to participate is based on personal desire.


## Student Activities Program

## Student Club Center

The Student Club Center, room 1210 west campus, is where great beginnings take place. It is an area for student activities. One of its main functions is to assist various clubs and organizations with their planned events. In addition, many campus-wide events are sponsored by the Office of Student Life. Any students should feel free to drop in and present new ideas or suggestions that will enhance student activities on campus.

## Game Room

Free time between classes, at the beginning or end of the day? Located in room 1205 west campus, the Game Room is a great place to unwind and enjoy recreational game activities. Table tennis and televisions are available for students' enjoyment. Tournaments in various activities are also conducted each semester. The Game Room is also a great place to relax, enjoy a cup of coffee, watch television, meet old friends, and make new friends.

## Student Clubs and Organizations

## How to Get Involved

There are over 25 clubs and organizations for students to participate in at Century College. There are special interest clubs, cultural organizations, and program specific groups. For a complete list of clubs please consult our web site at century.edu/currentstudents/ studentlife.

Are you looking to start a new club or get involved in one of the current clubs or organizations at Century? Please contact the Director of Student Life and Leadership Development at 651.747.4015 or the Student Senate Office at 651.779.3317.

## STUDENT LIFE COMMITTEE

This committee consists of student, faculty and staff representatives that make decisions regarding the student life budget, expenditures, and the student life activity fee.

## 11 Student Handbook

## STUDENT PHOTO ID

Students will need a Century photo ID to use the library, fitness center, to check out game room and recreation equipment, and to use the mathematics, English or reading labs. The first photo ID card is free. Lost or replacement cards are $\$ 5.00$ (payable at the Business Office).

To obtain a Century College photo ID you will need a copy of your current course schedule along with a driver's license or other government-issued photo ID. This service is located at the Records Office, room 2221 west campus.

## STUDENT PUBLICATIONS

The All-Student Email is sent weekly to inform students of activities for the week, services that are available and information of importance. For further information call 651.748.2608.

The Century Times is a student run newspaper that is published twice a semester. It is distributed throughout campus with information relevant to the Century community. For more information call 651.747.4015

## STUDENT SENATE

The Student Senate is the official representative student government of Century College. It operates under a constitution that has been approved by the student body and consists of volunteer senators and an elected executive board. The purpose of the senate is to work to improve the quality of education and of campus life for students at Century. One way the senate accomplishes this is by influencing the College's decisionmaking process through working closely as a liaison between the student body and the administration and faculty. In order to address all issues of concern to students, the Student Senate must consider not only campus issues, but state legislation as well. Through its participation with the Minnesota State College Student Association, the Century Student Senate has a direct channel to issues and concerns on the state level.

The effectiveness of the senate depends on the quality of direct student involvement. Participation in the organization is an excellent opportunity to learn about the political
process, become acquainted with the college system, and build leadership skills. For more information call 651.747.4015.

## THE CONNECTION

Located in room 1205 west campus, The Connection is a great place to get involved in the many happenings at Century College. The Connection provides discount ticket prices, food, bus passes, a local fax machine and much more. It can also connect you to the many student groups and their events on campus including the Planning Activities Committee which sponsors events such as Wood Duck Days, Blizzard Blast and the Fright Walk. Contact The Connection at 651.779.3358, by email at Connection@ Century.edu or on our eFolio web site at centuryconnection.project.mnscu.edu .

The Connection is also the home of the outdoor recreation equipment. There is seasonal equipment that is available for check out including but not limited to in-line skates and protective equipment, snowshoes, fishing poles and equipment, cross-country skis, backpacks and tents.

## Intercollegiate Athletics

Century College is a member of the Minnesota College Conference (MCC) and the National Junior College Athletic Association (NJCAA). Century College offers intercollegiate men's and women's soccer and baseball and softball. For more information call 651.779.3325. Intramural/ Recreation Programs

## Fitness Center

Located in Room 1605 on the West Campus, the Fitness Center provides a full complement of weight training and aerobic machines for use by current Century students and staff. Watch for on-going fitness workshops.

## Intramural Sports

Open to all students interested in a variety of team and individual sports. Activities include soccer, badminton, volleyball, basketball, softball, and golf to name just a few. The Intramural Sports Program provides a diverse spectrum of recreational activities for Century students and staff. For more information call 651.779.3358.

## Gymnasium

The gymnasium is available for a variety of activities (i.e. basketball, volleyball, and badminton).

## Outdoor Volleyball, Basketball Courts, and Golf Practice Green

The courts and golf green are available for all to use and are located behind west campus. Balls are available through The Connection in room 1205 west campus.

## Wood Duck Walking Trail

Enjoy a beautiful walk through nature on this paved trail located behind west campus.

## Locker Rooms

Locker room facilities, located near the gymnasium (men on first floor, women on third floor) are available for those participating in intramural, recreation, and fitness activities. Students must provide their own towel and lock. Locks must be removed daily.

## Fine Arts

## Art Gallery

The purpose of the art gallery is to provide students and community residents the opportunity to view and appreciate the work of professional and student artists in a gallery setting. For more information call 651.773.1792.

## Performing Arts

All students are welcome to participate in the Performing Arts program. Students have the choice of earning credit for participation or joining without credit.

## - Century College Choir -

A choral ensemble open to students without singing experience as an activity or for academic credit. One concert per semester. Jocelyn Kalajian, room 1092 west campus, 651.779.3212.

## - Century Chamber Orchestra -

A chamber-size orchestra open to students with previous orchestral experience as an activity or for academic credit. Study and performance of standard orchestra literature. Elliot Wilcox, room 2048 west campus, 651.779.3214.

## - Theatre Productions -

Students may participate in college theatrical productions using their talents in acting, stagecraft, stage makeup and/or scenery design. Will Slayden, W1052, 651.779.3211.

## - Century Concert Band -

The study and performance of instrumental literature. No audition. Open to students as an activity or for academic credit. Charles Preis, room 2043 west campus, 651.747-4033.

## - Century Jazz Ensemble -

The study and performance of high level jazz arrangements with an emphasis on improvisation. Audition required. Open to students as an activity or for academic credit or through Continuing Education. Larry Neumann, room 2043 west campus, 651.747.4033.

## - Shakespeare and Company -

Provides students and community residents the opportunity to view and appreciate summer repertory theatre at Century's outdoor theatre complex. Participation is noncredit, by audition only. shakespeareandcompany.org

## Collegewide Events

## Student Activities Fair

Early each semester Student Life sponsors a Club/Activity Fair. Each club and organization on campus is invited to set up a table displaying information about their activities. This provides an excellent opportunity for all students to find a group that may interest them.

## Blizzard Blast

Blizzard Blast is a winter event held on campus during the last week in February. Students, faculty, and staff have the opportunity to socially interact at the various events. A variety of indoor and outdoor activities are offered.

## Wood Duck Days

Wood Duck Days, a school-wide event, is held each spring on the west campus in May. This day is filled with music, good food, prizes, and activities. Century's various clubs work together to sponsor the event.

## Orientation

Orientation provides new students with an opportunity to get acquainted with Century College. To help facilitate a successful transition to college life, students will have an opportunity to meet with a counselor, advisor or education planner for help with course selection, receive assistance with Century technology, attend workshops, and take a tour of the campus. After attending orientation, students will feel prepared to begin their first semester at Century.

## College Policies

These policies and statements are not an irrevocable contract, and the College reserves the right to change any policy without notice.

## Compliance, Safety and Security Report

The Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act, requires higher education institutions to give timely warnings of crimes that represent a threat to the safety of students or employees, and to make public their campus security policies. It also requires that crime data is collected, reported, and disseminated to the campus community and is also submitted to the Department of Education. The goal of the Clery Act is to provide students and their families, as higher education consumers, with accurate, complete and timely information about safety on campus so that they can make informed decisions.
Century College is committed to the well-being of our campus community including students, employees, and visitors. The college has taken numerous steps to maintain a safe learning environment for all. The college also encourages students, faculty, staff and visitors to take appropriate steps to insure their own personal safety. We encourage all to report suspicious individuals, activities, or hazardous conditions immediately.
The Compliance, Safety and Security Report is available in the Advising, Counseling, \& Career Center, room 2410 west campus, Human Resources, room 1395 east campus, by calling 651.779.3929 and at century.edu/ employees/publicsafety/default.aspx

## Copyright and File Sharing Policy

Downloading or distributing copyrighted material, including through peer-to-peer file sharing, without the permission of the copyright owner is against the law. Illegal downloading or distribution of copyrighted materials can result in you being prosecuted in criminal court and/or sued for damages in civil court. Criminal penalties for first-time offenders can be as high as five years in prison and $\$ 250,000$ in fines. If sued in civil court, you may be responsible for monetary damages, attorneys' fees and civil penalties up to $\$ 150,000$ per work distributed.

Use of Century College technology resources (including accessing the Century College network from your personal computer) for unauthorized distribution of copyrighted materials is prohibited.
By your use of Century College technology resources, you formally acknowledge that you have been informed of the rules regarding illegal file sharing and the consequences that can come from inappropriate use of computers and network resources belonging to Century College, located in White Bear Lake, MN.
If Century College receives information about potential illegal file sharing linked to your student account, the Information Technology Services department shall notify you via your Century College student e-mail account and ask you to sign and return a form acknowledging that you will no longer share files. Failure to return the signed form in the time allotted and/or repeated infractions by the same student will result in a student code of conduct notification and associated penalties, including restrictions from using Century College technology resources.
For further information about illegal file sharing, please visit:

1. MnSCU Board Procedure 5.22.1, Acceptable Use of Computers and Information Technology Resources. http://www.mnscu. edu/board/procedure/522p1.html
2. HEOA (Higher Education Opportunity Act) dealing with unauthorized file sharing on campus networks: http://www2.ed.gov/ policy/highered/leg/hea08/index.html
3. Legal Online Music Sharing Locations: http://www.whymusicmatters.com/

## 11 Student Handbook

## Drug and Alcohol-Free Campus Policy

The standards of conduct at Century College clearly prohibit the possession, use or distribution of drugs and alcohol by students and staff on the campus premises or in conjunction with any college-sponsored activity or event whether on- or off-campus. Please read the Compliance, Safety and Security Report for specific information on the state and federal laws regarding drugs and alcohol on a college campus.

The College will take steps to educate its community regarding the health risks associated with alcohol and drug abuse. Appropriate referrals to counseling and health agencies will be made to individuals as needed.

The College will impose sanctions on students and employees who violate this policy. Disciplinary action may include, but is not limited to, the following:

- completion of an education program;
- completion of community service hours;
- referral to law enforcement agencies for prosecution of felony, gross misdemeanor or misdemeanor charges;
- referral to the Advising, Counseling, \& Career Center or other appropriate department;
- suspension or separation from the College;
- expulsion from the College.

The Compliance, Safety and Security Report lists health risks associated with abuse of alcohol and drugs; and if anyone needs assistance with a drug or alcohol problem, a list of services is available.

## Tobacco-Free Policy

Century College is a tobacco-free campus. Smoking, tobacco use, electronic cigarettes, and tobacco sales (including the use or sale of smokeless tobacco products) are prohibited on college owned, operated, or leased property including college vehicles. This policy applies to all persons on college property. Noncompliance is punishable by fine and/or disciplinary action.
Exception: Tobacco use inside privately owned vehicles while on campus property is permitted.

## HARASSMENT AND DISCRIMINATION

For policy and process information, please access the Student Concern Process through the myCentury student portal or call the Dean of Student Services at 651.779.3469.

## Harassment Officer: <br> Jason Cardinal Dean of Student Services jason.cardinal@century.edu 651.779.3469 West Campus - W1480

Century College and the Minnesota State Colleges and Universities system is committed to a policy of nondiscrimination in employment and education opportunity.

No person shall be discriminated against in the terms and conditions of employment, personnel practices, or access to and participation in, programs, services, and activities with regard to race, sex, color, creed, religion, age, national origin, disability, marital status, status with regard to public assistance, or sexual orientation, gender identity, or gender expression. In addition, discrimination in employment based on membership or activity in a local commission as defined by law is prohibited.

Harassment on the basis of race, sex, color, creed, religion, age, national origin, disability, marital status, status with regard to public assistance, or sexual orientation, gender identity, or gender expression is prohibited. Harassment may occur in a variety of relationships, including faculty and student, supervisor and employee, student and student, staff and student, employee and employee, and other relationships with persons having business at, or visiting the educational or working environment.

This policy is directed at verbal or physical conduct that constitutes discrimination/ harassment under state and federal law and is not directed at the content of speech. In cases in which verbal statements and other forms of expression are involved, Century College and the Minnesota State Colleges and Universities will give due consideration to an individual's constitutionally protected right to free speech and academic freedom. However, discrimination and harassment are not within the protections of academic freedom or free speech.

The system office, colleges, and universities shall maintain and encourage full freedom, within the law, of expression, inquiry, teaching and research. Academic freedom comes with a responsibility that all members of our education community benefit from it without intimidation, exploitation or coercion.

This policy shall apply to all individuals affiliated with Century College and the Minnesota State Colleges and Universities
system, including but not limited to, its students, employees, applicants, volunteers, agents, and Board of Trustees, and is intended to protect the rights and privacy of both the complainant and respondent and other involved individuals, as well as to prevent retaliation or reprisal. Individuals who violate this policy shall be subject to disciplinary or other corrective action.

A copy of this policy is available in the Advising, Counseling, \& Career Center, in the Compliance, Safety and Security Report and online at mnscu.edu/board/policy/1b01.html.

## STUDENT CONDUCT/ ACADEMIC HONESTY

For policy and process information, please access the Student Concern Process through the myCentury student portal or call the Dean of Student Services at 651.779.3469.

## Student Conduct

Each student at Century College has the right to an education, and it is the responsibility of the College to provide an environment that promotes learning. Any action by a student that interferes with the education of any other student or interferes with the operations of the college in caryying out its responsibility to provide an education will be considered a violation of this code. Disciplinary action will be handled in an expeditious manner while providing due process. The provisions of this policy do not affect the rights of persons in authority to take any immediate and temporary actions
necessary to retain the classroom, campus or program atmosphere, and to uphold established policies, regulations, and laws.
Violations, the informal and formal processes, the appeals process, and sanctions are described in the Student Conduct Policy available in the Advising, Counseling, \& Career Center, room 2410 west campus.

Also, for more information, see the Dean of Student Services, room 1480 west campus, 651.779.3469.

## Academic Honesty

The primary academic mission of Century College is the exploration and dissemination of knowledge. Academic honesty and integrity are integral to the academic process. Academic dishonesty is a serious offense which undermines the educational process and the learning experience for the entire College community.

It is expected that Century College students will understand and adhere to the concept of academic integrity and to the standards of conduct prescribed by the College's Academic Honesty Policy. It is expected that each student will assume responsibility for his/ her work and that materials submitted in fulfillment of course, program, and college academic requirements must represent the student's own efforts. Any act of academic dishonesty attempted by a student at Century College is unacceptable and will not be tolerated.

The Student Conduct and Academic Honesty Policy is available in the Advising, Counseling, \& Career Center, room 2410 west campus, or from the Dean of Student Services, room 1480 west campus, 651.779.3469.

## STUDENT COMPLAINT/ GRIEVANCE POLICY

For policy and process information, please access the Student Concern Process through the myCentury student portal or call the Dean of Student Services at 651.779.3469.

## Student Complaint Process

(Unfair Treatment by College Employee) Students may file a complaint concerning alleged improper, unfair, arbitrary, or discriminatory treatment and discuss it with the appropriate employee or with the employee's supervisor. They may use an informal situation resolution form or follow the grievance process below.

## Student Grievance Process (Policy Violation)

To initiate a grievance (formal written claim), students may carry an official grievance through the following steps, if necessary:

1. to the employee being grieved.
2. to the appropriate supervisor to whom that employee reports.
3. to the appropriate dean or administrator
4. to the appropriate Vice-President
5. to the College President - This is the final step in the appeal process however, if the violation involves a MnSCU Board policy, a student may carry the grievance to a sixth step
6. to the Chancellor -- the decision of the Chancellor is final and binding

Copies of the grievance policy and forms are available in the Advising, Counseling, \& Career Center, room 2410 west campus. For more information contact the Dean of Student Services, 651.779.3469.

## Student Data Privacy

Century College, in compliance with the Federal Education Rights and Privacy Act (FERPA), affords students certain rights with respect to their educational records. Students can inspect and view their records within 45 days of the day the college Registrar (Records Office) receives a written request for access. Students may ask the College to amend a record by writing to the Registrar and clearly identifying what part of the record is inaccurate and why it is inaccurate. Certain educational records will not be released to other persons without permission from the students with the exception of disclosure to school officials with legitimate educational interests. A school official is a person employed by the college in an administrative, supervisory, academic or research, support staff position (including law enforcement unit personnell); students serving on official College committees or assisting another school official in performing his or her tasks assisting qualified officials; a person or company with whom the college has contracted, such as an attorney, auditor, or collection agent; a person serving on the MnSCU Board of Trustees, or the Century Foundation. A school official has legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility.

The following information has been designated as "directory information" and, as such, is available to the general public: students' names, most recent previous school attended, dates of attendance, major field of study, degrees, certificates and awards received, birth dates, full- or part-time status, Dean's list, and photographs. To prevent release of this information outside of the College, the students should contact the Registrar by the 5th class day of the term. See the complete Student Data Policy below.

## Student Data Practices Policy

In accumulating this information, the College provides the following assurances:

1. Student records are official records of Century College and will be used for educational purposes according to Minnesota and federal student data laws.
2. The purpose and intended use of the data will be explained upon request as well as consequences of refusing to supply private or confidential information.
3. The Registrar, Director of Admissions, advisers/counselors, and financial aid officers, under the direction of the Vice President of Student Services, who is responsible authority, are responsible for the confidentiality and security of the information. Information maintained on students is listed in the following categories.

## Public Student Data-Directory Information

Public student data is accessible to any member of the public for any reason and includes the following items:

1. Name
2. Birth date
3. Dates of attendance
4. Degrees, certificates and awards received
5. Major field of study
6. Most recent previous school attended
7. Status- full-time/part-time
8. Dean's List
9. Photographs (student I.D. photos are excluded)
10.Participation in clubs, activities, programs and sports

## 11 Student Handbook

## Records of Deceased Students

Upon a student's death, education records retain the same classification that applied prior to the student's death and shall be handled in accordance with privacy laws applicable to data on decedents including, but not limited to, Minn. Stat. §13.10. Rights of the deceased student who is the subject of private or confidential data may be exercised by the representative of the deceased student. Nonpublic data concerning a deceased student that is created or collected after death, are also accessible by the representative of the deceased student.

The Registrar's Office shall release nonpublic data on a deceased student under the following conditions:

1. Pursuant to a valid subpoena or court order;
2. To the executor or representative of the deceased student's estate or next of kin, if an executor or representative has not been appointed, upon showing applicable proof of the student's death (i.e., death certificate or obituary notice) and written authorization by or identification of the executor, representative or next of kin, as applicable.

## Private Student Information

Private student information is not accessible to the public. It is accessible to the subject of the data, to individuals or agencies authorized by law to gain access, and to any person or agency having the approval of the subject.

1. Address/e-mail address
2. Background information, including behavior, performance, traits
3. College and high school records
a) courses taken
b) credits attempted
c) credits earned
d) grades earned
e) high school rank.
4. Advising/Counseling records unless they contain information classified or confidential
5. Disciplinary record
6. Evaluations
7. Financial aid records
8. Medical information
9. Recommendations
10.Social security number
11.Telephone number
12.Test scores

## Confidential Information

This data is not accessible to the public or to the subject of the data. It is accessible only to individuals or agencies authorized by law to gain access.

1. Financial records and statements of a students' parents (however, these are accessible to the parents).
2. Investigation information collected for purposes of active or pending legal action, prior to such action.
3. Investigation information collected for purposes of anticipated suspension or expulsion of students for disciplinary reasons, prior to the formal action.
4. Psychological reports.

## Access to Private Student Data

Private student data will be disclosed only to the following:

1. The students who are the subject of the data.
2. Any persons or agencies if the students have given informed consent. Informed consent requires the signing of a statement that includes the following:
a) Date
b) Indication of the expiration date, usually not to exceed one year
c) Indication of who shall release and receive the information
d) Information written in plain language
e) Specifications of the nature of the data
f) Specifications of the purposes for which information may be used
3. Accrediting organizations in order to carry out their accrediting functions.
4. Appropriate health authorities, but only to the extent necessary to administer immunization programs.
5. Appropriate person or persons on the basis of a valid court order, or lawfully issued subpoena-but only after calling the court's attention, through proper channels, to the
statutory provisions, rules, or regulations which restrict the disclosure of such information.
6. Appropriate persons in connection with student's application for, or receipt of, financial aid.
7. Appropriate persons, if the knowledge of such information is necessary to protect the health or safety of the students or other persons.
8. School and system office officials who have a legitimate educational interest. School official is defined as any person employed by the college in an administrative, supervisory, academic or research, support staff position (including law enforcement unit personnel); students serving on official College committees or assisting another school official in performing his or her tasks assisting qualified officials; a person or company with whom the college has contracted, such as an attorney, auditor, or collection agent; a person serving on the MnSCU Board of Trustees, or the Century Foundation. A school official has legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility.
9. Federal or state authorities in connection with the audit and evaluation of federally supported educational programs.
10.Officials or to other schools, upon request of the students. See notice below.
11.Organizations conducting studies for or on behalf of Century College for the purpose of the following:
a) Administering student aid programs
b) Developing, validating, or
administering predictive tests
c) Improving instruction.
(These studies must be conducted in such a manner as will not permit the personal identification of students by persons other than representatives of such organizations, with the information to be destroyed when no longer needed for its purpose.)
10. State and local officials, as may be required by state statute existing prior to November 19, 1974.

Notice: If you seek or intend to enroll in another educational institution, your education records will be provided as requested by that institution. If applicable, while concurrently enrolled in or receiving services from more than one educational institution, your education records will be available to officials of those institutions as appropriate. Disclosures of your records under other circumstances may require your prior written consent.

You have the right to request a copy of records that have been disclosed. You also have the right to request a hearing to correct any inaccurate, incomplete, or misleading information in those disclosed records. For further information about your rights, please contact the Registrar at the college or university that supplied the records.

## Students Rights Regarding Personal Information

Students asked to supply private or confidential data concerning themselves shall be informed of the following rights:

1. Any known consequences arising from supplying or refusing to supply private or confidential data.
2. The identity of other persons or entities authorized by state or federal law to receive the data.
3. The purpose and intended use of the data.
4. To be informed as to what is classified as directory information and, on request, have it treated as private data.
5. To receive copies of private or public data (on self), the agency may charge a fee, which covers the actual costs involved for providing copies.
6. To review all private or public data (on self) without any charge.
7. Whether one may refuse or is legally required to supply the requested data.
8. Whether the College maintains any data on him or her and the classification of that data-this includes confidential data. (Students must be told upon request of this information.)
9. Students may, in writing, contest the accuracy or completeness of public or private data; the College shall within thirty days either correct the data found to be in error or
notify the students that the College believes the data to be correct. If data is found to be incorrect, the College shall attempt to notify the past recipients. The students may appeal an adverse determination of the College through the provisions of the administrative procedures act, relating to contested cases.
10.The permission or consent required of, and rights accorded to parents by statute or law, shall only be required for and accorded to the students.
11.Students will be notified annually of their rights under FERPA; the Notification of Rights will be published in the registration guide.

## College Terminology

Assessment - an assessment instrument given to new students. The results are used to assist advisors/counselors in determining academic ability in reading, writing, and mathematics.

Associate Degree - a two-year degree offered by colleges. Century College degrees: the Associate in Arts (AA), the Associate in Science (AS), the Associate in Fine Arts (AFA), and the Associate in Applied Science (AAS).

## Career/Occupational Programs

- programs designed to lead directly to employment or career advancement.

Certificate - an educational program and award focusing on career or occupational skills. Century College certificates are up to 30 credits in length.

Class Section - a group of students meeting to study a particular course at a definite time. Sections are identified by specific section numbers.
Course - a particular portion of a subject selected for study. A course is identified by a course number; for example, Psychology 1020.

Course Title - a phrase descriptive of course content; for example, the course Psychology 1020 has a course title of General Psychology.

Credit Hour - the amount of credit usually earned by attending a class for fifty minutes a week for 15 weeks.

Curriculum - a group of courses planned to lead to some specific competence in a field of study and to a certificate, diploma or associate degree; for example, the accounting curriculum.
Degree - a title conferred by a college or university upon completion of a particular program of academic work. Typical degrees are the Associate in Arts (AA), the Bachelor of Arts (BA), and the Master of Arts (MA).
Diploma - an educational program and award focusing on career or occupation skills longer in length than a certificate. Century College diplomas are 31 credits or more in length.

Discipline - the subject or department prefix (example: MATH, PSYC).
Drop - discontinuing a class within the drop/add period. A drop is not recorded on students' transcripts.
Drop/Add Period - a period at the beginning of each term when students may drop or add classes.

Elective - a nondesignated course within a program. An elective permits students to select some courses of their choice within their program.
Grade Point Average - a weighted numerical average which indicates how well students have done in college classes.
Grant - an outright award of funds, usually based on need, which does not have to be repaid.

Loan - a loan may be either federal, state, short-term or emergency awarding of money to students in need of financial assistance; it must be repaid.

## Minnesota General Education Transfer

Curriculum (MnTC) - a collaborative effort among all two and four year public colleges and universities in Minnesota to help students transfer their coursework in general education. 40 credits are required in ten goal areas. These courses are also used in the

## 11 Student Handbook

general education portion of the AA, AFA, AS, AAS, diploma and certificate programs.

Prerequisite - a prerequisite is a body of knowledge or level of competence students should have achieved to ensure readiness for a course. In special circumstances, a prerequisite may be waived by approval of the appropriate department. Students are not permitted to register for courses for which prerequisites have not been met. A prerequisite is met by earning credit in a course. Some courses may have specific grade requirements. See course description for prerequisites and grade requirements.

Quarter - term or period of time in an academic year. There are three quarters and two summer sessions in most quarter system schools. One quarter typically is 10 weeks long.

Registration - the process of selecting courses, completing college forms, and paying fees, all of which must be completed prior to the beginning of classes each term.

Scholarships - monetary awards given to students in recognition of outstanding academic achievement. Scholarships are sometimes based on financial need as well as academic performance.

Semester - term or period of time in an academic year. There are two semesters and one or two summer sessions in most semester system schools. One semester typically is 15 weeks long.

Transcript - a record of a students' academic standing and college courses and grades.

Transfer Programs - programs with courses leading to an Associate in Arts, Associate in Fine Arts, or Associate in Science degree
which are generally accepted in transfer to bachelor degree granting colleges and universities.

Tuition - an amount of money charged to students for each course.

Withdrawal - discontinuing a course after the drop/add period but before the withdrawal deadline. A withdrawal is recorded on the transcript as a W. Withdrawals do not influence GPA, but do negatively impact academic progress.
Work Study - a program created in 1964. The federal government and the college provide funds for part-time employment on campus. Part- or full-time students in need of financial assistance may apply in the Financial Aid office.


## Chapter 12

## Transfer Guide

The following information and guidelines are intended to provide the student with the ability to manage their own transfer process.

## Responsibilities

Students are responsible for collecting the necessary information that enables satisfactory transfer. This responsibility includes providing necessary supporting course information for review for transfer, such as a syllabus, course description, or reading list and becoming familiar with the requirements of the student's intended degree. The Minnesota Transfer Curriculum (MnTC), credits and credit hours. Definitions and resources contained in this section of the catalog will help to inform a student in the process of transfer.
Schools are responsible for providing the necessary information and resources to allow a student to plan transfer. This includes a clear outline of their MnTC requirements and information on the intended use of various degrees, certificates and diplomas. The school will also make available to a student a designated transfer specialist with expert knowledge in the process of transfer.


## Definitions

Transfer specialists are designated staff persons at both the sending institution and the receiving institution. To best understand the transfer process, students planning to transfer should contact the transfer specialist at their current school and at the school to which they plan to transfer. Transfer specialists for Minnesota schools may be found at mntransfer.org under "Transfer Resources."

MnSCU is the acronym for the Minnesota State Colleges and Universities. MnSCU includes Minnesota's state supported universities, community colleges, technical colleges and the consolidated community and technical colleges.
$\mathbf{U}$ of $\mathbf{M}$ is the University of Minnesota. Their five campuses are separate from MnSCU and are in Minneapolis, St. Paul, Crookston, Duluth and Morris.

Private colleges and universities are the other category of schools within Minnesota. Private colleges are not state funded.

Minnesota Transfer Curriculum (MnTC)
is a set of common general education
requirements at all schools within the two systems. Students from MnSCU schools may assume individual MnTC courses taken at the sending school will be used in the same category at the receiving school.

Transfer articulation agreements are written documents that outline transfer arrangements between schools. Agreements may be within or between systems or between individual schools. An example of this sort of agreement is the Minnesota Transfer Curriculum (MnTC).

Technical credits are earned through courses taken in technical programs that are not part of the MnTC. Unless there is a transfer agreement or a course equivalence table outlining the transfer of technical credits between schools, credits will transfer as free electives, but may be reviewed by a student's major program to determine if they fit into degree requirements. Transfer of technical credits between combination community technical colleges and stand alone technical colleges will normally not limit the transfer of technical credits between like programs.

Official transcripts are transcripts sent by the Registrar of previously attended schools directly to the Admissions Office of the

## 12 Transfer Guide

school to which a student plans to transfer. Most schools require official transcripts be received from all previously attended schools prior to a decision being made on the application.

Sending institution is the school that is sending transcripts to another school transfer out.

Receiving institution is the school that is receiving transcripts from another school(s) transfer in.

Original document refers to the transcript prepared by each institution a student has attended. Most colleges and universities will request original documents from EACH school previously attended and use those documents to determine if courses transfer.

Accreditation is a system for recognizing education institutions and professional programs affiliated with those institutions for a level of performance, integrity, and quality that entitles them to the confidence of the education community and the public they serve. Accreditation is the process by which students are assured of the school's and/or program's quality.

Regional Accreditation is the institutional review held by schools in MnSCU, U of M system, and by most private colleges and
universities in Minnesota. This level of accreditation allows for the relative ease of transfer of general education and other
equivalent and comparable coursework. Accreditation can be a confusing issue and students should check with their transfer specialist if they have questions on accreditation. Also, at MnTransfer.org there are "Tips for Transfer" and "Frequently Asked Questions" sections that may further answer this question.

## Additional Sources of Credit

The following are additional ways that a student may have accumulated college or university level credits. The transfer
specialist, at the school from which a student plans to earn their final degree, would be able to answer questions on how credits from these sources will transfer. Many schools would have this information on the transfer portion of their website.

Experiential education is an attempt to translate an individual's life and work experiences into college level credit. All schools do not recognize experiential education credits or limit the number that may be used in a degree.

## College Level Examination Program

 (CLEP) is a nationally standardized exam generally taken before entering a college or university. Credit may be used in general education, subject matter areas and as elective credit.Advanced Placement (AP) is a nationally standardized program of advanced college level courses offered during a student's high school experience. Credit may be used in general education, subject matter areas and as elective credit.

International Baccalaureate (IB) is an internationally recognized program through which high school students complete a comprehensive curriculum of rigorous study and demonstrate performance on IB examinations. Credit may be used in general education, subject matter areas and as elective credit.

Military credits. College or university credit may be earned from education experiences completed while in the military.

## Others

International coursework is coursework completed at a college or university outside of the United States. Coursework could be completed by international students or by students who are legal residents of the U.S. International coursework may transfer to regionally accredited institutions if it was completed at a recognized or government sponsored school. Any student who has
completed or plans to take coursework from a school outside of the U.S. should contact the transfer specialist at the school where they plan to earn their final degree, to determine the school's policy on the transfer of international coursework.

Age of credit. Some schools and/or some majors/programs will place a time limitation on previously earned credits they will allow in transfer. This limit could apply to general education courses and to courses in a major.
State-to-state transfer processes would be similar to transfer within Minnesota. However, students should check with the transfer specialist at their current school to determine if there are any transfer agreements with schools in other states.

## Resources

## Degree Audit Reporting System (DARS)

indicates course completed at Century College along with transfer courses and which courses fulfill specific degree or program requirements.
MnTransfer.org is a website with a tremendous amount of information on transfer within Minnesota and links to other states' transfer sites. This website provides direct links to most other regionally accredited Minnesota schools and also provides resources about transfer planning.

Transfer specialists for Minnesota schools and selected Wisconsin schools may be found at MnTransfer.org under "Transfer Resources."

## Transferology Will My Courses Transfer?

Students who have completed courses in higher education want to know which colleges and universities will accept those courses and apply them to a degree. Transferology will provide quick answers from hundreds of institutions in a streamlined and dynamic interface. www.transferology.com


[^0]:    Career/Occupational Requirements: 19 credits
    FST 2050 Computerized Maintenance and

[^1]:    Jiang, Yanmei
    English
    M.A. Winona State University

    Johnston, Neil
    Art
    B.F.A. College of Visual Arts
    M.F.A. Minneapolis College of Art \& Design

