

College Catalog

2017-2018



METROPOLITAN
Community College

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2017-2018 CATALOG

This catalog is effective Fall quarter 2017. Every possible step has been taken to ensure its accuracy; however, sometimes changes must be made in the interest of the students or the College. Metropolitan Community College reserves the right to cancel or modify programs and courses. The official catalog is the PDF version found online. There is also an online version of the catalog and any minor changes made during the year are reflected in a catalog addendum document also found online.

THE COLLEGE

MCC is a comprehensive community college focused on providing opportunities for students to succeed in their education, career, and life. We offer an educational value and quality that is affordable, accessible, and convenient.

As you look through the catalog, we hope you find a program, class, or service to meet your needs. MCC offers an academic transfer program for students interested in getting a bachelor's degree as well as more than 200 degrees and awards in career and technical areas. High school students can begin their college experience by taking classes through the CollegeNOW!, Career Academy, and Dual Enrollment programs. Continuing Education provides opportunities for lifelong learners. Business and industry can arrange specialized training through MCC's Business & Training Services.

Classes are offered at a variety of times and at convenient locations throughout our service area of Dodge, Douglas, Sarpy, and Washington counties.

To accommodate students with busy schedules, MCC offers e-learning options that let students take classes at home, at the office, at a community site through Campus Share (course conferencing), or on the Internet. More than 500 online classes are offered each quarter.

Best wishes to you as you explore the opportunities that MCC has to offer!

Our Mission

MCC delivers relevant student-centered education to a diverse community of learners.

MCC's History

The present Nebraska community college system started in 1971 when the Nebraska Legislature created eight technical community college areas across the state. One of these new areas was called the Eastern Nebraska Technical Community College Area, which encompassed Dodge, Douglas, Sarpy, and Washington counties. An area vocational technical school operated by the Omaha Board of Education already served part of this area.

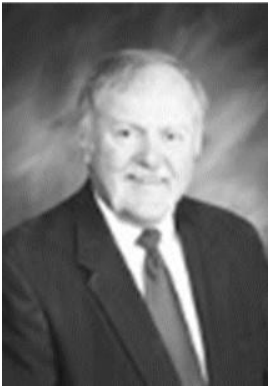
MCC was created in 1974 when the Legislature consolidated the original eight technical community college areas into six. That year, the programs, personnel, assets, and liabilities of the former Omaha Nebraska Technical Community College Area merged with the Eastern Nebraska Technical Community College Area under a new name stipulated by amended legislative statutes: the Metropolitan Technical Community College Area. In 1992, the Legislature voted to change the name to Metropolitan Community College Area.

Today, MCC is a comprehensive, full-service public community college supported by the taxpayers of Dodge, Douglas, Sarpy, and Washington counties. The College's mission is to deliver relevant student-centered education to a diverse community of learners.

MCC offers more than 200 one-year and two-year degrees and awards in business administration; computer and office technologies; culinary arts, hospitality, and horticulture; industrial and construction technologies; health and public services; social sciences and services; visual and electronic technologies; and academic transfer programs. General support courses, classes for business and industry, and continuing education courses are also important parts of the College's service to the community.

Since opening its doors in 1974 to 2,430 credit students, MCC has grown to become the second largest college in Nebraska.

Board of Governors 2017-2018



Phillip Klein
District 1



Linda McDermitt
District 1



Brad Ashby
District 2



Michael Young
District 2



Dave Pantos
District 3



Jim Monahan
District 3



Kara Eastman
District 4



Roger Garcia
District 4



Steve Grabowski
District 5



Michelle Nekuda
District 5



Ron Hug
At Large

College Accreditation

MCC is accredited by the Higher Learning Commission:

The Higher Learning Commission
 230 S. LaSalle St. Suite 7-500
 Chicago, IL 60604-1411
 800-621-7440; 312-263-0456
 Fax: 312-263-7462
 www.ncahlc.org

For further information on MCC accreditation, visit <https://www.mccneb.edu/About-MCC-Nebraska/About-MCC/Accreditations/Accreditation-History.aspx>

Program Accreditation

All College programs are approved by the Nebraska State Department of Education for veterans' educational benefits.

In addition, the accrediting bodies of various professional associations approve many MCC educational programs.

- The Accounting and Business programs are accredited by the Accreditation Council for Business Schools and Programs (ACBSP), 11520 W. 119th St, Overland Park, KS 66213.
- The Associate Degree Nursing program is accredited by the Accreditation Commission for Education in Nursing, Inc., 3343 Peachtree Road NE, Suite 850, Atlanta, GA 30326.
- The Associate Degree Nursing and Practical Nursing programs are approved by the Nebraska Board of Nursing, P.O. Box 95044, Lincoln, NE 68509.
- The Auto Collision Technology programs are accredited by the National Automotive Technicians Education Foundation (NATEF), 101 Blue Seal Drive, Suite 101, Leesburg, VA 20175.
- The Automotive Technology Program is an NC3 partner, NATEF Master Certified, and a member of Fiat Chrysler Automobiles CAP Local.
- The Culinary Arts and Management program is accredited by the American Culinary Federation Education Foundation Accrediting Commission (ACFEF), 10 San Bartola Drive, St. Augustine, FL 32086.
- The Dental Assisting program is accredited by the Commission on Dental Accreditation, 211 E. Chicago Ave., Chicago, IL 60611.
- The Diesel Technology program is an NC3 partner, offers NC3 certifications, and is a Daimler Trucks North America Get Ahead Program.
- The Early Childhood Education program is accredited by the National Association for the Education of Young Children (NAEYC), 1313 L Street NW, Suite 500, Washington, DC 20005.
- The Certified Financial Planning Certificate of Achievement in personal financial planning is a registered program with Certified Financial Planner Board of Standards, Inc., 1425 K Street NW #800, Washington, DC 20005.
- The Health Data and Information Management program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM), 233 N. Michigan Ave., 21st Floor, Chicago, IL 60601-5800.
- The Human Services (general) program is accredited by the Council for Standards in Human Service Education (CSHSE), 3337 Duke Street, Alexandria, VA 22314-5219.
- Insurance courses are approved by the Nebraska Department of Insurance, 941 O Street, P.O. Box 82089, Lincoln, NE 68501-2089.
- The Medical Assisting Program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Medical Assisting Education Review Board (MAERB), Commission on Accreditation of Allied Health Education Programs, 25400 US Hwy 19N, Ste 158, Clearwater, FL 33763, 727-210-2350.
- The Paralegal program is approved by the American Bar Association Standing Committee on Paralegals, 321 N. Clark St, Chicago, IL 60610.
- The Paramedicine program is accredited by the Commission on Accreditation of Allied Health Education Programs upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP). Commission on Accreditation of Allied Health Education Programs, 1361 Park Street, Clearwater, Florida 33756.
- The Precision Machine Technology program offers National Institute for Metalworking Skills (NIMS) credentials.
- Real Estate courses are approved by the Nebraska Real Estate Commission, 301 Centennial Mall South, P.O. Box 94667, Lincoln, NE 68509. All online real estate courses are approved by the Association of Real Estate License Law Officials (ARELLO), 150 North Wacker Drive, Suite 920, Chicago, IL 60606.
- The Respiratory Care Technology program is accredited by the Commission on Accreditation for Respiratory Care, 1248 Harwood Road, Bedford, TX 76021.
- Theatre Technology is a registered apprenticeship program approved to grant an apprenticeship certificate by the U.S. Department of Labor, Frances Perkins Building, 200 Constitution Ave. NW, Washington, D.C. 20210.

Outcomes Assessment

MCC values and encourages the systematic assessment and improvement of teaching and learning. The College's faculty-led Outcomes Assessment Committee has coordinated the implementation of a college-wide program for the assessment of student learning. The Outcomes Assessment Committee has stated the following purposes for the assessment of student learning:

- improving the teaching and learning process;
- improving programs and courses;
- providing accountability to the community; and
- providing data for informed decision making.

Every degree program at the College has a Program Assessment Plan that guides program faculty in the collection of data to improve curricula, teaching methodologies, and delivery methods. This assessment program is a continuous improvement process to enhance student learning. As the implementation of the assessment program progresses throughout the College and as more data are available for improvements in the teaching and learning process, the ultimate benefactors are the students.

Students complete assessment activities as part of this important assessment process.

Diversity

MCC believes that diversity, in many forms and expressions, is essential to its educational mission and to its success as an institution. MCC values the pluralistic nature of society and recognizes diversity that includes, but is not limited to, race, ethnicity, religion, culture, social class, age, gender, sexual orientation, and physical or mental capability. MCC respects the variety of ideas, experiences, and practices that such diversity entails. It is MCC's commitment to ensure equal opportunity and to sustain a climate of civility for all who work or study at MCC or who otherwise participate in the life of the College. MCC celebrates and embraces diversity as a way to promote respect and enhance academic experiences, making the College a welcoming place to learn and grow while meeting the needs of a diverse population.

Faculty and staff are committed to creating curriculum and learning environments that empower students to become contributing members of an increasingly multicultural and diverse society. The College provides workshops, seminars, publications, and projects that foster the understanding and benefits of diversity and enhance shared values. Staff are encouraged to nurture the sensitivity and mutual respect that is fundamental to valuing diversity. Through a supportive intellectual and social climate, MCC promotes freedom of thought, speech, innovation, and creativity.

MCC Foundation

The Metropolitan Community College Foundation was established in 1977 as a separate, not-for-profit, IRS-approved 501(c)3 corporation. The Foundation's mission is to provide financial support for students, faculty, staff, programs, and facilities and is promoted by a volunteer board of directors and development staff.

By connecting MCC with community supporters and alumni, the Foundation advances the College's mission and values and helps build the community it serves. From student scholarships to capital projects, the MCC Foundation offers prospective donors a wide array of giving opportunities to align their giving interests to the special projects underway at MCC.

The MCC Foundation accepts gifts of cash, life insurance, personal property, securities and stocks, or bequests. Gifts may be designated toward an existing fund, or donors may create a new fund that meets their giving criteria. The MCC Foundation also offers prospective donors the option of creating endowed funds of \$10,000 or more to provide annual and lasting gifts toward the project of their choice.

For more information on the MCC Foundation, visit www.mccneb.edu/foundation or call 531-622-2346.

ACADEMIC CALENDAR

Summer 2017 (17/SS)

Classes begin for 10-week and first five-week sessions	June 6 (Tu)
Census date for first five-week session*	June 12 (M)
Census date for 10-week session*	June 19 (M)
Independence Day recess (No classes)	July 4 (Tu)
Classes end for first five-week session	July 11 (Tu)
Classes begin for second five-week session	July 12 (W)
Census date for second five-week session*	July 18 (Tu)
Classes end for 10-week and second five-week sessions	Aug. 15 (Tu)

Fall 2017 (17/FA)

Labor Day (no classes)	Sept. 4 (M)
Classes begin	Sept. 5 (Tu)
Census date*	Sept. 18 (M)
Classes end	Nov. 20 (M)

Winter 2017–2018 (17/WI)

Thanksgiving Day recess (no classes)	Nov. 23–24 (Th–F)
Classes begin	Dec. 4 (M)
Census date*	Dec. 15 (F)
Last class day before holiday recess	Dec. 20 (W)
Holiday recess (no classes)	Dec. 25–Jan. 1 (M–M)
Holiday recess ends for staff/faculty report	Jan. 2 (Tu)
Holiday recess ends for students/classes resume	Jan. 4 (Th)
Martin Luther King Day Jr. recess (no classes)	Jan. 15 (M)
Classes end	Feb. 26 (M)

Spring 2018 (17/SP)

Classes begin	March 8 (Th)
Census date*	March 21 (W)
Spring recess (no classes)	March 31–April 1 (Sa–Su)
Classes resume after spring recess	April 2 (M)
Classes end	May 23 (W)
Memorial Day (no classes)	May 28 (M)

Summer 2018 (18/SS)

Classes begin for 10-week and first five-week sessions	June 6 (W)
Census date for first five-week session*	June 12 (Tu)
Census date for 10-week session*	June 19 (Tu)
Independence Day recess (no classes)	July 4 (W)
Classes end for first five-week session	July 11 (W)
Classes begin for second five-week session	July 12 (Th)
Census date for second five-week session*	July 18 (W)
Classes end for 10-week and second five-week sessions	Aug. 15 (W)

*Census dates are used by colleges to determine enrollment figures and to determine students' eligibility for financial aid disbursements.

MCC uses a quarter system with four academic quarters designated as FA (Fall), WI (Winter), SP (Spring), and SS (Summer). Academic quarters are 11 weeks in length (except for the Summer quarter with one 10-week and two five-week sessions).

Standard courses are full-quarter classes that begin and end within the designated academic quarter dates (see begin and end dates in the academic calendar). Non-standard courses may run for less than the full quarter, more than the full quarter, and/or may have non-standard begin and end dates not within the designated academic quarter dates.

ABOUT THE MCC CATALOG

Catalog Editions

Students must meet the program requirements in the catalog year in which they first attend (not enroll or register) unless they opt to meet the requirements in a later catalog in a year in which they attend. All requirements must be completed within four years of the initial or chosen catalog year. Those not completing within four years must select a later catalog in a year in which they attended and meet the requirements listed in that catalog.

Course prerequisites and/or the need for developmental work in English, math, reading, and/or science may extend the time necessary for completion of a degree, certificate of achievement, or career certificate.

Programs of Study

The catalog presents the complete program of study, or program requirements, needed to successfully complete a chosen degree, certificate of achievement, or career certificate.

General Education Requirements



All programs of study have general education requirements dedicated to educating the whole person. These courses broaden opportunities and enrich perspectives by preparing students for the ever-changing world outside the classroom.

Major Requirements

Associate degrees and certificates of achievement require completion of a specific set of courses designated as major requirements. These courses give students career skills or prepare students for transfer to other institutions.

Since some major requirement courses are offered once or twice a year, students should feel free to combine their general education courses with their major requirements to ensure timely graduation.

Course Descriptions

Descriptions of all courses currently taught at MCC can be found in the Courses section of this catalog. Each course description provides a brief summary of the course content. Requisites, lecture – lab – credit hours, and other pertinent course information can be found in this section. Courses marked with a  indicate the course is offered online; those marked with a  indicate a hybrid format (part classroom/part online).

Requisites

Many of the courses required to complete a major or to meet general education requirements have prerequisites. Course prerequisites comprise a course (or courses) or other criteria that must be completed prior to enrollment in that course. If a course has one or more prerequisites, they are noted under the course title in the course descriptions section. *(Note: Some prerequisites may have their own criteria that need to be completed.)*

When enrolling in a course, the prerequisites for the current catalog year are the ones that must be met even though students are graduating under the provisions of an earlier catalog.

A limited number of courses also have corequisites that are required to be taken at the same time as the course described. Corequisites appear beneath the prerequisites. In some cases, previous completion of the required corequisite is acceptable and noted.

Certain courses, proficiencies, or conditions may be recommended for the student prior to or at the same time as enrollment in a course. While these recommendations are suggested for student success in the course, they are not required.

New College Students

For those students who are just starting their college education or who are returning to college after a long absence, MCC offers a course titled College Success Strategies (RDLS 1200 (p. 337)). This course helps students in orienting to the college culture, setting personal and career goals, managing their time, and improving their study strategies (note-taking and test-taking skills). This course helps students better succeed in college and meet their academic, personal, and professional goals. RDLS 1200 (p. 337) has no prerequisites and may be used elective toward a degree or certificate when permitted.

Developmental Classes and Basic Skills Assessment

College-level English, math, reading, and science skills are essential to success at MCC. New students to MCC are expected to take the College's basic skills assessment in order to assist counselors and advisors in determining readiness for college-level coursework. Based on the skills assessment, students may then be required to take developmental courses prior to starting college-level coursework in some program areas.

ENROLLMENT

General enrollment requirements for new students

Any person may be enrolled who is at least 16 years of age* and wishes to benefit from a program of study at the College.

Students using financial aid are required to have a high school diploma or equivalent

MCC accepts high school diplomas from accredited high schools and those earned through the Correspondence High School online program offered by UNL and accredited by the Nebraska Department of Education; however, all other high school diplomas earned online are not accepted. Individuals who have not completed high school are encouraged to obtain their GED that has been developed by the General Educational Development Testing Service of the American Council on Education. More information on MCC's Adult Basic Education Program can be obtained at mccneb.edu/lws/ae/default.asp.

Enrollment at the College, however, does not mean admission to all courses or programs or guarantee financial aid. The College reserves the right to evaluate requests for admission into certain degree programs and to refuse admission to certain programs when considered to be in the best interest of the College. Students may be required to take developmental coursework or prerequisite credit courses/programs prior to entering select MCC classes.

The American College Testing (ACT) placement test is not required; however, students who have taken the ACT within the last two years may have the scores sent to MCC or bring a copy of the score report when meeting with MCC staff.

*For specific enrollment procedures for current high school students, see Admission Requirements (p. 14); international students should see Admission of international students (p. 14).

Enrollment Requirements

Application process

Metropolitan Community College is an open enrollment institution; however, the recommended first step to enroll is to complete our application 'Apply Now' at <https://www.mccneb.edu/Prospective-Students/Enrollment/Apply-Now.aspx>. This prompts specific information regarding your next steps in the enrollment process. You may also call the Contact Center for assistance with enrollment at 531-622-2400.

Admission to specific programs

Some programs have specific requirements and a formal admissions process. Among the items generally considered in determining the eligibility of students for admission to programs are educational and occupational experiences and other reasonable standards to ensure that the student possesses the potential to complete the program successfully. The College and programs reserve the right to deny admission to any students who would not be employable in their respective area of study.

The College may require students to provide a medical statement from a physician or background check for admission to a specific program or when it is otherwise in the best interest of the student and/or the College.

Students who do not meet the requirements for a specific program might become eligible after completing appropriate work in developmental studies or prerequisite credit classes.

Full-time vs. part-time status

Students enrolled in 12.0 or more credit hours during a quarter are considered full-time students. Students enrolled in less than 12.0 credit hours during a quarter are considered part-time students.

Students wishing to enroll in more than 25.0 credit hours need to meet with an academic advisor or advocacy or disability support services counselor to request permission. Generally, only students with a 2.5 or higher G.P.A. for the preceding quarters or demonstrated academic success are permitted to carry more than 25.0 credit hours.

Reservation of rights to enrollment

The College reserves the rights to limit the number of students enrolled at the College and/or to specific programs. Decisions regarding enrollment at the College and to specific programs are made in accordance with any lawful criteria and/or procedures, whether published or unpublished, as determined by the College or its officials.

Students with disabilities

MCC is committed to providing appropriate services and accommodations for any student with a documented disability through Disability Support Services (DSS). To be eligible for services, students must identify themselves to DSS and provide documentation of their disability. Once appropriate documentation is received, DSS works with students to determine reasonable accommodations. These accommodations may not always be the same as the student received in high school or at another college or university. DSS counselors are available to assist students with disabilities on an appointment-based system. Appointments may be made by contacting any Student Services office.

Visiting students

Students enrolled at other institutions who wish to attend MCC for coursework that transfers back to their home institution must meet the prerequisites or equivalency for the MCC courses. Students may provide an unofficial document to satisfy that requirement. Please call the Contact Center at 531-622-2400 for more information.

STUDENTS WITH TRANSFER CREDITS

Transferring to MCC

Students who have attended another college and wish to transfer to MCC to complete a certificate or degree program should call the Contact Center to discuss options or schedule an appointment with an academic advisor to discuss transfer of credits. Students who are non-degree seeking at MCC may be required to provide unofficial transcripts in order to satisfy prerequisites.

Submitting your transcripts

Students who wish to transfer credits from another college to MCC must provide official transcripts and declare a program of study so the incoming transcripts can be evaluated against the requirements for that program or degree. To mail official transcripts for evaluation, contact the school and have the transcript sent to:

Metropolitan Community College
Attn: Records
P.O. Box 3777
Omaha, NE 68103-0777

Students may also hand deliver an official transcript from another institution to the Records office on the Fort Omaha Campus. The transcript **must** be in a sealed envelope from that institution.

If students are having their official transcript emailed to MCC through an electronic transcript provider (Parchment, Scrip-Safe, National Student Clearinghouse, etc.), then it must be emailed to transcripts@mccneb.edu.

Emailed or faxed transcripts are considered unofficial and are only used for advisement purposes.

Transcripts are required once students have met with an academic advisor and declared a major. For advisement questions, call 531-622-2400 to speak with a Contact Center representative or to schedule an appointment with an academic advisor.

Transcript evaluation

Transcripts are typically evaluated on a course-by-course basis, so this evaluation cannot be done via email or over the phone. Courses not offered by MCC are not transferred in nor are courses that are less in credit/quarter hours than the courses offered at MCC.

The following parameters are used to evaluate transcripts:

- Institution must be regionally accredited by one of the following agencies:
 - Middle States Association of Colleges and Schools, Commission on Higher Education (MSCHE)
 - New England Association of Schools and Colleges, Commission on Institutions of Higher Education (NEASC-CIHE)
 - The Higher Learning Commission (HLC)

- Northwest Commission on Colleges and Universities (NWCCU)
- Southern Association of Colleges and Schools, Commission on Colleges (SACS)
- Western Association of Schools and Colleges, Accrediting Commission for Community and Junior Colleges (WASC-ACCJC)
- Western Association of Schools and Colleges, Accrediting Commission for Senior Colleges and Universities (WASC-ACSCU)
- Course content must be similar to MCC's
- Grade of C or better must have been received
- Credit hours must be equal
- Courses are evaluated based on the program of study and general education requirements

If students change their academic program, a re-evaluation may be requested by completing a re-evaluation form.

Visit <https://www.mccneb.edu/Prospective-Students/Resources/Student-Services-SOS/Records/Transcript-Re-evaluation-Form.aspx> for the form.

Once a transcript is evaluated, a postcard is sent informing the student that the results have been posted. A letter is sent if no credits are transferred.

International transcript evaluation

For students who wish to have an international transcript reviewed by MCC for possible credit transfer, they must first have it evaluated by a credential evaluation consultant. College degrees obtained outside the U.S. are **only** accepted when interpreted by transcript service members of the National Association of Credential Evaluation Services. A list of suggested evaluators may be found at: <https://www.mccneb.edu/Prospective-Students/Transfer-Students/Articulation/Extra-Resources/Course-Equivalency-Transcript-on-File.aspx>.

Students are encouraged to contact any or all of the consultants for cost and information. Students who choose to have a transcript evaluated by one of the listed consultants are strongly encouraged to have a course by course review, list the course credit hours for each course, and list letter grades (A-F) earned. **Once a credential evaluation consultant has reviewed the transcript, an official evaluation should be sent to:**

Metropolitan Community College
Attn: Records
P.O. Box 3777
Omaha, NE 68103-3777

International transcripts that have been evaluated by a credential evaluation consultant are reviewed using MCC's transcript evaluation guidelines/policies.

International high school diplomas/transcripts may also be reviewed by some of the suggested consultants. Please contact them directly for detailed information.

International Students

Admission of international students

Prospective F-1 students need to follow these application requirements to apply to MCC:

- All applicants are required to:
 - complete an international application online;
 - provide proof of English proficiency* either by providing proof of successfully completing a comparable English composition course with a C or higher, taking the ESL Accuplacer, or taking the Test of English as a Foreign Language (TOEFL). The applicant is responsible for making early arrangements for the test via online registration at www.ets.org or writing to:

TOEFL Services
Educational Testing Service
P.O. Box 6151
Princeton, NJ 08541-6151, USA

Official test results must be sent to MCC via TOEFL institutional code number 9621.

- provide an official copy of a high school or college diploma or certification in the original language and with certified English translations;
- submit a completed financial affidavit and a current (within six months) official bank statement or letter for a checking or savings account translated into English and in U.S. dollar equivalency; letters or statements for money markets, investments, or from employers about salaries are not acceptable.
- sign a statement acknowledging that they will be enrolled in an international student health insurance policy identified by the College; and
- provide a copy of the passport.
- Applicants applying for a change to F-1 status need to consult with a designated school official in International Student Services for additional requirements.
- Applicants in the United States need to provide a copy of the I-94, admission stamp, and visa (except Canadians) or I-797 Notice of Action indicating the current status.
- Applicants transferring from a language institution, college, or university in the United States are required to provide official transcripts from the respective school(s). Copies of all previous I-20s, employment authorization cards, and the Transfer to MCC form are required.
- F-1 students take assessments in order to determine appropriate course placement, as needed.
- F-1 students must register for 12.0 credit hours or more each quarter to stay in status, unless they have prior authorization from International Student Services.
- F-1 students are considered to be non-residents for tuition purposes.

*Countries that are exempt from providing English proficiency proof:

Australia
Canada (except Quebec)
Common Wealth Caribbean
Ireland
New Zealand
United Kingdom

For more information, visit mccneb.edu/Prospective-Students/Resources/International/Admission-Information/Admission-Forms.aspx, email iss@mccneb.edu, or call 531-622-2281.

International student health insurance

MCC requires all F-1 international students to purchase a health insurance policy through MCC. Students pay the insurance premiums to MCC prior to class registration, and MCC submits the premiums to the insurance company. Call 531-622-2281 or email iss@mccneb.edu for more information.

Current High School Students

High School Admission Requirements

In order to enroll at the College, high school students must

- be classified as a high school junior or at least 16 years of age;
- have a minimum C average in high school subjects;
- follow the enrollment policies and procedures of the College (i.e., application, assessment testing and prerequisite coursework); and
- discuss enrollment with a parent/legal guardian and a high school official.

Students not meeting the above criteria who wish to enroll can submit an Early Entry Enrollment form. This form requires the signatures of the student's parent/legal guardian and the high school principal or designee and then uploaded to your online application.

For additional information, contact Secondary Partnerships at (531) 622-2213 or secondarypartnerships@mccneb.edu

AP—Advanced Placement Program® high school credit opportunity

The College Board's Advanced Placement (AP) Program provides high school students with the opportunity to take college-level courses and exams and earn college credit or advanced placement. MCC may award college credit in fulfillment of program requirements when students have acceptable AP exam scores. For consideration of college credit, students need to have official exam score reports mailed to:

Metropolitan Community College

Attn: Records

P.O. Box 3777

Omaha, NE 68103-0777

For more information about the AP Program, visit www.collegeboard.com/apstudents.

Secondary Partnerships

MCC has established numerous partnerships with area high schools for the benefit of students, including dual enrollment courses, career academies, the Gateway to College program, and high school-to-college transfer classes. Other partnership activities enhance career relevance and rigor to prepare students for a wide array of postsecondary options.

Career Academy

MCC's Career Academy program is designed to provide high school juniors and seniors with opportunities to explore various career fields and get a jumpstart on their postsecondary education. MCC Career Academies increase student awareness in various career fields prior to high school graduation so more informed career choices can be made. Through a MCC Career Academy, students gain practical skills for specific career areas, knowledge of safety procedures, job-seeking skills, interpersonal skills for the workplace, and exposure to a college environment. For more information, visit <https://www.mccneb.edu/Prospective-Students/Enrollment/Secondary-Partnerships/Career-Academy.aspx> or call 531-622-2213.

CollegeNOW!

CollegeNOW! is a program specifically designed for Nebraska high school students to jumpstart their college education with half-price tuition. Students may take any college course (for which prerequisites are met) at an MCC location or online and receive MCC credit. For more information, visit <https://www.mccneb.edu/Prospective-Students/Enrollment/Secondary-Partnerships/College-Now.aspx> or call 531-622-2213.

Dual Enrollment

Dual Enrollment is a college credit program for high school students. Dual Enrollment allows Nebraska high school students to earn both high school and college credit at the same time. MCC has a written contract with the school district to provide college-level courses to qualified high school students. Most Dual Enrollment courses are offered at the high school during the regular school day. Students register for Dual Enrollment courses with their high school instructor or counselor. Students pay a discounted tuition rate and may transfer their college credit to any college or university that accepts MCC credit. It is the responsibility of the student to verify whether the course transfers to the receiving institution. For more information, visit <https://www.mccneb.edu/Prospective-Students/Enrollment/Secondary-Partnerships/Dual-Enrollment.aspx> or call 531-622-2213.

Gateway to College

MCC's Gateway to College program is a nationally recognized model of a high school diploma completion program for high school dropouts or students who are behind in credits and on the verge of dropping out of school. Gateway to College provides students who have not been successful in the traditional high school environment with the opportunity for a fresh start on a college campus. Students ages 16–20 who are ready to re-engage in education are given the opportunity to return to school

to complete their high school diploma on a college campus while earning dual credit for coursework. The program is designed for student success, beginning with the small size of the first-quarter learning community and a student resource specialist assigned to each student. Students interested in this scholarship program participate in a competitive application and admissions process. To learn more about the Gateway to College program, who is eligible, and how to apply, visit <https://www.mccneb.edu/Prospective-Students/Enrollment/Gateway-to-College.aspx> or call 531-622-2746.

Enrollment Services

Enrollment specialists may be your first point of contact at MCC, by applying online at <https://www.mccneb.edu/Prospective-Students/Enrollment/Apply-Now.aspx>, or by calling the Contact Center at 531-622-2400. Enrollment specialists assist students with all steps to get started or return to the College after an extended absence. This assistance may include identifying career interests and related programs, testing appointments (if required), advising appointments, identifying available resources, and registering for classes. Enrollment Specialists work collaboratively with students, advisors, faculty members, and other college officials.

Academic Advisement

Academic advisors can assist students with career exploration, identifying a degree program, and developing an educational plan to support their academic, career, and personal life goals. Academic advisors help connect students to college resources and information about MCC's programs, services, and policies. Academic advisors work collaboratively with students, program faculty members, and other College officials.

Assessment Services (Testing)

Placement assessment testing is available at each MCC Testing Services location. Students participate in basic skills assessments in reading, writing, English, and mathematics. Reviewing for placement test content can save tuition money and time in classes. Free review materials are available at www.mccneb.edu/Prospective-Students/Resources/Testing/Placement-Testing-Resources.aspx. Learning and Tutoring Centers, Math Centers, and Writing Centers provide assistance and preparation for placement tests.

An assessment test may be needed prior to registering for classes with prerequisites or placement requirements. Visit <https://www.mccneb.edu/prospective-students/resources/testing/assessment-of-new-students.aspx> for more information.

REGISTRATION

Individuals can register:

- by calling the Contact Center at 531-622-2351
- in person with a MCC staff member in the Student Services office at any of the campus/center locations
- online using the student My Way portal (current or continuing students only)

New Students

Prospective students who wish to enroll at MCC should apply online, or for more information regarding registration call the Contact Center at 531-622-5231.

Prospective students can access the current class schedule on MCC's homepage to search for classes and check availability.

Students wishing to enroll in more than 25.0 credit hours need to meet with an academic advisor or advocacy or disability support services counselor to request permission. Generally, only students with a 2.5 or higher G.P.A. for the preceding quarters or demonstrated academic success are permitted to carry more than 25.0 credit hours.

Students are responsible for making any changes in their class schedule. All schedule changes are subject to College procedures, refund policies, and deadlines at all times.

Orientation

MCC student orientation introduces students to College services and programs that support their educational and personal goals. Orientation provides information on academic programs, advising and course scheduling, paying for college, campus safety, student support services, and tips for student success. All new credit students participate in orientation as one of their next steps in becoming a MCC student. Orientation consists of six interactive segments and embedded quizzes. At the successful completion of all quizzes, students receive a certificate of completion. For more information, go to mccneb.edu/Prospective-Students/Resources/MCC-Student-Orientation.aspx.

Continuing Students

Online registration via My Way/My Services

A username and password are required to access online registration. All students can obtain username and password help at the Password Station online at mccneb.edu/password if needed.

1. Visit mccneb.edu and click **My Way** to access the portal.
2. Enter username and password to log in.
3. Click **My Services for Students**.
4. Click **Registration** (for express registration, students need the course synonym or course number from the credit course schedule located on the homepage).

For assistance with online registration and other online services, students can visit a My Way Center located at one of MCC's campus/center locations.

My Services include:

- academic evaluation (degree audit)
- account summaries by quarter
- address change form
- financial aid information
- grades and class schedules
- option to drop classes
- payment options
- registration for credit and noncredit classes
- requests for official transcripts
- student planning

Phone registration

Call 531-622-5231 (toll-free 800-228-9553).

1. Have your student ID number ready.
2. Have course and section numbers or course synonym numbers available (found on the course schedule on the MCC home page).

Change of Registration

The College provides specific timelines each quarter to change schedules. The following guidelines apply to course registration changes:

- Many courses allow late registration, but the dates and process varies by program and courses. Please contact the Academic Dean's office based on the course.
- Changes and refunds are effective on the date the request is received. The amount for a refund is automatically calculated by the date of the withdrawal. Students may view potential refunds by locating the course on the online credit schedule located on the MCC homepage and clicking **Important Dates**.
- Students may withdraw from a course any time prior to the last day to drop a class section.
- Withdrawing from a course within the designated drop period results in a W, which is recorded on the student's permanent record.
- Failure to withdraw from a class may result in the assignment of an F grade to the student's permanent record.
- Schedule changes are the responsibility of the student. Non-attendance does not constitute an official withdrawal or relieve a student of the financial obligation of tuition.
- F-1 international students should contact International Student Services before dropping below 12 credit hours.

- **Students receiving financial aid are advised to confirm their program of study and eligible coursework before making registration changes. All changes must be complete before the census date of the quarter to be included in eligible credits for financial aid.**

Schedule changes are the responsibility of the student. The changes must follow College procedures, refund policies, and deadlines at all times. Academic advisors and/or the Contact Center are available to assist students with schedule changes.

Course Cancellations

The College may find it necessary to cancel a course due to insufficient enrollment or other extenuating circumstances. Whenever possible, the course is canceled prior to the first class meeting, and the students are notified. Students enrolled in a canceled course receive a full refund.

Books and Materials

Students are expected to obtain books, supplies, and materials needed for classes. In addition, some programs require the purchase of special items (tools, a camera, etc.). A complete listing of special costs is available at the campus bookstores or online at mcneb.edu/Prospective-Students/Resources/Bookstore.aspx. Students can also explore the textbook exchange at mcneb.edu/bookexch.

FINANCIAL MATTERS

Financial Aid Philosophy

The fundamental philosophy guiding MCC financial aid is that no student should be denied an education due to the lack of financial resources. Financial aid eligibility is determined and awards (grants, loans, work-study, and scholarships) are made without regard to race, color, religion, sex, national origin, age, or disability. MCC is committed to assisting eligible students in obtaining financial assistance to meet primary financial need (tuition, books, fees, and transportation). Secondary costs of education (room, board, and personal expenses) may be considered in financial aid packages based on availability of funds.

Financial Aid

Financial aid is assistance available to help students with the costs of attending college. This assistance comes from the federal and state government, MCC, and private sources. Financial aid includes grants, federal work-study, student loans, and scholarships. Federal and state grants are only available to students who have not earned a bachelor's or a professional degree.

Federal Pell Grant

This program provides a direct grant to students to help pay college costs. Amounts awarded to all federally eligible students depend on financial need (as determined by the Free Application for Federal Student Aid [FAFSA]) and enrollment status.

Campus-Based Programs

The programs listed below are campus-based financial aid programs funded by federal and state government and by MCC. Since the funding available for these programs is limited, eligible students are awarded on a first come, first-served basis.

Federal Supplemental Education Opportunity Grant (FSEOG)

Students with exceptional financial need are eligible for this grant. Priority is given to students who are eligible for a Federal Pell Grant and meet the July 1 priority deadline.

Nebraska Opportunity Grant (NOG)

Nebraska residents with exceptional financial need are eligible for this grant. Students must be within 110 percent of the maximum EFC that is eligible for a Federal Pell Grant. Students who are not Nebraska residents and would like information about state grant programs in their state may call the Financial Aid office at 531-622-2330.

Selected Grant/Scholarship Programs

Many scholarships are offered at MCC at various times during the year. Several are listed below.

Board of Governors Scholarship for graduating seniors

Seniors enrolled in public and private high schools in the four-county area can apply for a two-year, full-tuition scholarship. Application information is available at the high schools.

Board of Governors Scholarship for GED graduates

GED graduates from MCC and other adult education programs in MCC's four-county service area are eligible to apply for a two-year, full-tuition scholarship each year.

Board of Governors Tuition Grant

Recipients must have financial need based on their FAFSA data and be legal residents of Nebraska. This grant can only be used to pay tuition. Recipients are responsible for paying fees and any tuition not covered by the grant.

Many other scholarships are offered to MCC students based on financial need and require an official and valid electronic federal Student Aid Report (SAR) to be on file in the Financial Aid office. Students should complete the FAFSA each year if they plan to apply for any scholarships. The FAFSA application is available October 1. Students should contact the Financial Aid office or visit the MCC website on a regular basis to view the current scholarships.

Students are encouraged to inquire about and apply for scholarships offered by the Metropolitan Community College Foundation as well as scholarships offered by outside foundations. Visit www.mccneb.edu/scholarships for additional information on the application process and deadlines.

Federal Work-Study

The Federal Work-Study program provides part-time employment for eligible students. Work-study positions are located both on and off campus. A number of reading and math tutoring positions and off-campus, nonprofit community service jobs are available. Additional information about the terms and conditions of employment, student eligibility, and available jobs is available from the Financial Aid office. Work-study funding is limited; students who have already attained a bachelor's degree or a professional degree are not eligible for work-study funds.

Federal Direct Subsidized and Unsubsidized Stafford Loans

This federal program provides low-interest loans to students. Students must file the FAFSA to determine their eligibility for this program. Students who have already attained a bachelor's or professional degree are eligible to apply for this loan.

The maximum amount students can be awarded is determined by dependency status, number of completed credits, and financial need.

Students must be registered for a minimum of 6.0 credits per quarter each quarter they request a loan to be eligible for either type of loan. Repayment of the loan begins at the end of a six-month grace period after students graduate, stop attending, or are registered for fewer than 6.0 credit hours per quarter.

Federal Direct PLUS Loan

This loan program is designed to assist the parent(s) who wants to borrow money to help pay for the educational expenses for each child who is a dependent undergraduate student. Students must be enrolled in at least 6.0 credit hours.

Information about the terms of both of these loans and sample repayment schedules are available from the Financial Aid office.

Financial assistance information is available from any staff member in the Financial Aid office and the Financial Aid office website, mccneb.edu/fa.

Application Procedures

FAFSA on the Web: <https://fafsa.gov/>

2017-18 Academic Year: Fall quarter 2017 through Summer quarter 2018

Is the 2017-18 FAFSA currently available? YES

2018-19 Academic Year: Fall quarter 2018 through Summer quarter 2019

Is the 2018-19 FAFSA currently available? Available October 1, 2017

Application Process for Federal Student Aid:

- Complete and submit the 2016-17 and 2017-18 FAFSA at www.fafsa.ed.gov. Be sure to list MCC's school code: 004432 on your FAFSA.
- You will need to have your FSA ID username and password to complete your FAFSA on the Web. If you need to retrieve your FSA username or password go to: <https://fsaid.ed.gov/npas/index.htm> (Edit My FSA ID)
- After the Federal Processor sends MCC a copy of your processed FAFSA data, we will send you a letter that identifies the document(s) you must submit to the Financial Aid office. Please submit all required documents as quickly as possible.
- After your documents have been reviewed, we will determine whether you are ready to be awarded or whether we need additional information from you. (We will contact you if we do.)
- After you have been awarded, an award letter will be sent to you via U.S. mail and your award data will appear in My Way under My Services | Financial Aid | Self-Service Fin Aid.

Priority deadlines for completing and submitting the FAFSA

Fall quarter	July 1
Winter quarter	October 1
Spring quarter	January 1
Summer quarter	March 1

Free Application for Federal Student Aid

This application is used to apply for all types of federal, state, and institutional aid awarded by the College. Students are encouraged to complete the FAFSA online (fafsa.gov). Students who are unable to complete a FAFSA online may complete a paper FAFSA and submit it to the Financial Aid office for processing. Once the FAFSA is processed by the U.S. Department of Education, a federal Student Aid Report (SAR) is sent to the student. An electronic Institutional Student Information Record (ISIR), which duplicates the information on the student's SAR, is sent to the Financial Aid office. The ISIR must be processed and have a valid expected family contribution (EFC) before a student's eligibility for any financial aid funds can be determined and an award issued.

Verification process

Some federal aid applicants are selected by the Department of Education for a process called verification. Verification requires that documentation be provided to verify the information submitted on the FAFSA. Students are notified by U.S. mail of all documents needed to complete the verification process. Any documentation requested by MCC must be provided within 14 days of receipt of the request or the student file may be inactivated. No financial aid disbursements can be made until the verification process is complete. Students may call the Financial Aid office to re-activate the file at any time during the current academic year once all documents are received.

General Eligibility Requirements

Students must meet the following general requirements to be eligible for federal, state, and institutional financial aid programs:

- Demonstrate financial need;
- Be a U.S. citizen, U.S. national, or permanent resident or eligible non-citizen;
- Be enrolled as a regular student pursuing an associate degree, an eligible certificate of achievement, or an eligible career certificate;
- Be enrolled at least half-time to be eligible for Direct Loan Program funds;
- Have a high school diploma or a GED certificate;
- Have a valid Social Security number;
- Not be in default on a federal student loan or owe a repayment on a federal grant;
- Be registered with Selective Service (unless a female); and
- Meet the Financial Aid Satisfactory Progress standards.

Awarding Procedures

When all required information, forms, and documents have been received by the Financial Aid office, the student's financial aid file is considered complete and ready for verifying and awarding to the extent funds are available.

The Financial Aid office uses the following criteria to award funds to financial aid applicants:

- Financial need, scholarship eligibility, grade level, enrollment level, and program of study;
- Must have an EFC that the Financial Aid office has determined to be valid; and
- Must have a complete file for the new award year. Students who have completed financial aid files by the Fall quarter priority deadline of July 1 receive consideration for the Federal Supplemental Educational Opportunity Grant, Nebraska Opportunity Grant, and Federal Work-Study. The Federal Pell Grant can be applied for throughout the year; however, the Financial Aid office must electronically receive students' SAR information no later than June 30 of the current award year to determine their federal grants eligibility for the award year.

Grant Payment Authorization and Disbursement Procedures

Authorization procedures

The Financial Aid office adjusts students' quarterly award amounts based on the enrollment level as of the financial aid census date. Students should contact the Financial Aid office for more information about the census dates for the current award year.

The following types of courses do not count toward enrollment level for financial aid: courses not needed to meet the student's MCC degree or certificate requirements, audit courses, courses transferred in from another institution, dual enrollment courses, or courses that have been repeated more than once after the student received a grade of R, P, D, or better.

Credits for late-starting classes do not count toward a student's enrollment level for financial aid until: (1) the class has begun and (2) the instructor has reported that the student is participating in the class.

Award amounts are not adjusted after the appropriate census date for any increase or decrease in a student's enrollment level. There are two exceptions to this policy:

1. If a student completely withdraws from all classes, Return of Title IV regulations may require that a portion of a student's aid be returned to the Department of Education by the institution and by the student. (See Return of Federal Funds for more information.)
2. If a student drops a class that has not started and received a 100 percent refund, aid is reduced to reflect the new enrollment status.

Students should contact the Financial Aid office for more information, especially when adding or dropping classes.

Disbursement procedures

After all charges (e.g., tuition, books, and supplies) have been deducted from the total amount of the quarterly award, the Student Accounts office issues any remaining credit balance to the student and disburses it according to the student's indicated preference. Initial refunds are issued within two weeks from the census date. After the initial refund date, refunds occur weekly each Friday.

Return of federal funds

When students complete zero credits for a quarter, they may owe a repayment of a portion of their federal financial aid funds to the U.S. Department of Education, have an outstanding student account balance because MCC was also required to return funds, or both. Federal funds that may have to be returned are Federal Stafford and/or PLUS Loans, Federal Pell Grant, and FSEOG. The Nebraska Opportunity Grant, Board of Governors Tuition Grant, and Federal Work-Study are not affected by this requirement.

Students are considered to have completed zero credits when they formally withdraw from all of their classes (W grades) or informally withdraw from all of their classes by ceasing attendance. Students who receive a grade of F in a class are only considered to have completed the class if they attended past the 60 percent point of the quarter. Students who owe a repayment of federal financial aid are notified in writing.

For more information and examples of the return of federal funds calculations, contact the Financial Aid office.

Financial Aid Satisfactory Progress Policy and Standards

Federal financial aid regulations require MCC to establish a Satisfactory Progress policy for students receiving aid. MCC must notify students of that policy and monitor the progress of all students receiving financial aid to ensure compliance with the policy.

It is the responsibility of all students receiving aid to be familiar with the policy and to ensure that the standards are met by monitoring their own progress. Failure to meet the Financial Aid Satisfactory Progress standards may place students' financial aid in jeopardy. For this reason, students should regularly check their MCC student email and My Way for updates. To be considered in compliance, students must meet all three standards outlined in the Financial Aid Satisfactory Progress policy. Questions about these standards should be directed to the Financial Aid office.

Standard 1: Percentage of attempted credit hours completed

The percentage of attempted credit hours completed is measured by dividing the cumulative number of completed credits by the cumulative number of attempted credits. The minimum requirement is 67 percent. For financial aid purposes, a course is considered completed if a grade of A, B, C, D, P, or R is earned. Grades of F, W, and I are considered unsuccessful grades and reduce the completion rate.

Standard 2: Cumulative Grade Point Average (Cumulative GPA)

To receive/continue to receive financial aid, students must maintain a minimum cumulative GPA. The cumulative GPA requirement differs based on the number of credit hours attempted.

Associate Degree Programs

Credit hours attempted	Minimum cumulative GPA required
00.0 – 29.5	1.5
30.0 – 79.5	1.75
80.0+	2.0

Certificate of Achievement and Career Certificate Programs

Credit hours attempted	Minimum cumulative GPA required
00.0 - program completion	2.0

Standard 3: Maximum Credit Limit

The maximum time frame for the completion of a degree or certificate is limited by federal regulations to 150 percent of the published number of credit hours required to complete the degree or certificate program. This includes transfer credits and all attempted credit hours, including completed credits, audits, incompletes, withdrawals, and repeated or failed classes.

Treatment of the following types of courses for satisfactory progress

Audit courses

Audit courses are ineligible for financial aid funding and do not count toward the number of attempted credits or the number of earned credits; however, they do count toward the maximum credit limit.

Repeated courses

Students can only receive financial aid once for a repeated course if they have already received a grade of R, P, D, or better in the course. Credits from repeated courses count as attempted and earned credits as well as count toward the maximum credit limit. In addition, grades for the first time the course is taken and all times the course is repeated count toward the Satisfactory Progress cumulative GPA.

Transfer courses

Credits transferred to MCC from another institution count as attempted and earned credits as well as count toward the maximum credit limit but do not affect the Satisfactory Progress cumulative GPA.

English as a Second Language (ESL) courses

Credits for ESL courses count as attempted and earned credits. Federal, state, and institutional financial aid can be received for a maximum of 100.0 attempted ESL credit hours. Students who lose financial aid eligibility because they exceed 100.0 attempted credit hours of ESL may regain aid eligibility when they start developmental classes or college-level classes.

Developmental courses

Students admitted into financial aid eligible programs are eligible to receive federal aid for up to 45.0 developmental credits. Developmental credits count as attempted and earned credits as well as count toward the maximum credit limit. They also affect the Satisfactory Progress cumulative GPA.

Dual Enrollment courses

High school students enrolled in MCC courses that will apply toward their high school graduation requirements and earn them credits at MCC are not eligible to receive federal aid. When dual enrollment students graduate from high school, enroll in financial aid eligible programs at MCC, and apply for financial aid, credits for the MCC courses taken under a dual enrollment program count as attempted and completed credits as well as toward the maximum credit limit. These credits also affect the Satisfactory Progress cumulative GPA.

Financial Aid Satisfactory Progress Statuses

There are nine Satisfactory Progress statuses. Status is determined the first time a student applies for financial aid (even if financial aid was not received for prior quarters) and at the end of every quarter.

Good Standing (GS)

Good standing status is given to students who meet all three Satisfactory Progress standards (percentage of attempted hours completed, cumulative GPA, and maximum credit limit) or who apply for financial aid for their first quarter of attendance at MCC. To remain in good standing, students must meet all three Satisfactory Progress standards each quarter.

Warning (WRN)

Students in good standing who do not meet all Satisfactory Progress standards are placed on warning status for one quarter. Students on warning status are eligible to receive financial aid. If at the end of the warning quarter students have met all Satisfactory Progress standards, their status is changed back to good standing. If at the end of the warning quarter students have not met all Satisfactory Progress standards, their status is changed to denied.

Denied (DEN)

Denied status is given to students who do not meet all Satisfactory Progress standards at the end of their warning quarter. Denied status can be appealed. See the Appeal Procedures section below.

Monitoring/Probation (MON)

Students on denied status who submit and secure approval of an appeal are placed on monitoring/probation status for one quarter. Students on monitoring/probation status are eligible to receive federal aid and must meet the following requirements during the monitoring/probation quarter: complete 100 percent of attempted credits, achieve a minimum quarterly GPA of 2.0 or higher, and attempt no more than 150 percent of the credits required for their program of study. While on monitoring/probation, students must follow the academic program approved in their appeal.

Extended Monitoring (MNX)

Students who have been on monitoring/probation, have completed 100 percent of attempted credits, achieve a minimum quarterly GPA of 2.0 or higher, and attempt no more than 150 percent of the credits required for their program of study remain in extended monitoring until they regain good standing.

Termination (TER)

Students who do not complete 100 percent of attempted credits or achieve a minimum quarterly GPA of 2.0 and are in a monitoring/probation or extended monitoring status may be terminated. Termination is a permanent status and cannot be appealed.

Max Time Approved (MAX)

Students in denied status because they reached the maximum time frame and students in denied status who will reach the maximum time frame before they complete their program are placed in max time approved status for one quarter if they submit and secure approval of an appeal. Students on max time approved status are eligible to receive federal aid and must meet the following requirements during the max time approved quarter: complete 100 percent of their attempted credits for the quarter and achieve a minimum GPA of 2.00 or higher for the quarter. While on max time approved status, students must follow the academic program approved in their appeal and must only enroll in classes required for their academic program.

Max Time Extended (MXE)

Students who have been on max time approved status for one quarter, completed 100 percent of their attempted credits for their max time approved quarter, and achieved a quarterly GPA of 2.00 or higher for their monitoring quarter will be placed in max time extended status. The requirements students must meet while on max time extended status are the same as those for max time approved status.

Max Time Denied (MXD)

Max time denied status is given to students whose previous status was max time approved or max time extended and who did not meet the requirements for max time approved or max time extended. Max time denied status can be appealed. See the Appeal Procedures section below.

Appeal Procedures

Students placed in denied status have the right to appeal. All appeals are reviewed by the Satisfactory Progress Committee. When reviewing appeals, the committee looks for mitigating circumstances (unusual or extraordinary circumstances beyond the student's control that the student could not have planned for).

How to submit an appeal

To submit an appeal, follow these steps:

1. Print a copy of the Financial Aid Satisfactory Progress Appeal form from the Financial Aid Office website (forms section) or the MyWay portal (from the MyWay home page, select Financial, Financial Aid/Veterans Services, Forms).
2. Complete steps 1 through 4 on the appeal form, including an academic plan printed from your MyWay academic Student Planner. You may need to request assistance from an academic advisor or counselor if you are not able to complete an academic plan using Student Planner.
3. Submit the completed appeal (appeal form, academic plan, written statement, supporting documentation) to any Financial Aid office.

Review of appeals

The Financial Aid Satisfactory Progress Committee reviews appeals. Students are notified of the committee's decision on their appeal by official MCC email and in MyWay.

When an appeal is approved, aid is reinstated for the quarter the student requested in the appeal. If the student does not attend during their reinstatement quarter, the reinstatement applies to the next quarter of enrollment, up to one year from the date the appeal was approved. If the student re-enrolls after a year from the date of approval they must complete an Appeal Reinstatement Form along with an updated Academic Plan to reinstate their financial aid.

Military/Veterans Services

The Military/Veterans Services office provides advisory services relating to educational benefits and periods of earned entitlement to VA-eligible students planning to enroll or already enrolled at MCC. Forms and applications needed by veterans eligible for educational benefits are available from the Military/Veterans Services office.

Veterans' educational benefits

Due to the number of veteran educational programs, students should contact Military/Veterans Services for detailed information. In general, the following information applies:

- In order to receive benefits, entitled students must be in a specific program of study and be eligible to receive benefits only for the courses required in that program. Students are required to attend all classes for which they are registered and maintain satisfactory academic progress. Eligible veterans normally receive a monthly check that may vary in amount since it is determined by class load.
- If possible, new veteran students should apply for benefits 30-60 days prior to the start of the quarter they plan to attend; however, application can be made at any time during the quarter. Students who have attended other institutions must request that official transcripts of credit earned at the institution(s) be sent directly to the Records office for evaluation of prior credit into their current program of study. Certain veterans and veterans' dependents may be eligible for additional benefits.

Veteran Work-Study program

Some veteran students qualify for the VA Work-Study program, which provides funds for part-time positions at various locations on campus serving veterans. Any questions should be directed to Military/Veterans Services.

Some restrictions apply to all VA educational programs. For more information, call Military/Veterans Services at 531-622-4619.

Support services

Services are provided for current military service members, veterans, and their families as they pursue their academic, career, and personal goals by:

- providing military-specific academic advising and support services;
- easing the transition from military to college life;
- establishing connections to form a cooperative community of military/veteran students;
- enhancing MCC's awareness and appreciation of service members; and
- equipping military/veteran students with knowledge of College and community resources.

For more information, contact MCCVets@mccneb.edu or call 531-622-4619.

Tuition and Fees

Classifications

Students are classified as residents or non-residents for the purpose of assessing tuition charges.

Resident

Students qualify to register for resident tuition rates at MCC if they are not an international student with F status and meet one of the following criteria:

- Have a Nebraska mailing address (P.O. Box not acceptable)
- Are a minor whose parents or legal guardians have a Nebraska mailing address (P.O. Box not acceptable)
- Are married to a spouse who has a Nebraska mailing address (P.O. Box not acceptable)
- Have attended or graduated from a Nebraska secondary school during the school year immediately prior to registration at MCC
- Are an active duty military person or veteran as verified by the Military Veteran Services office
- Are the spouse or dependent of an active duty military person or veteran and other individuals in receipt of VA educational benefits as verified by the Military Veteran Services office

Non-resident

Individuals who do not qualify for the resident tuition rates are considered non-residents and their tuition is assessed according to the non-resident tuition schedule.

International students with F statuses are charged the non-resident tuition rate.

High school CollegeNOW! tuition

Nebraska resident high school students enrolling in courses at MCC, including but not limited to MCC Career Academies, receive the CollegeNOW! high school rate. This rate remains in effect through the summer following their high school graduation. The rate is changed starting the fall quarter after graduation to resident or non-resident based on their current address.

Sixty-two years of age or older

Students 62 years of age or older are eligible for reduced tuition rates for credit courses and reduced registration fees for noncredit courses unless otherwise stated. All other applicable costs for Continuing Education courses are assessed at the full rate.

Tuition for Credit Classes

Credit course fees effective 16/FA are:

Residents

Standard tuition	\$59.00/credit hr.*
CollegeNOW! high school students	\$29.50/credit hr.
People 62 years of age or older	\$29.50/credit hr.

Non-residents

Standard tuition	\$88.50/credit hr.
People 62 years of age or older	\$44.25/credit hr.

*The College tuition rate is subject to change without prior notice by and at the discretion of the MCC Board of Governors.

Students are advised to check at www.mccneb.edu/Prospective-Students/Tuition-Financial-Assistance/Tuition.aspx for the tuition rates currently in effect.

Fees

Facilities fee	\$5/credit hr.
International student health insurance (charged to all international students)	\$555.00/qtr. (current rate being charged through 17/SS)
Specialized course fees (e.g., student liability insurance, special fee for tests required in class, lab supplies, etc.)	Fees vary by course
Pass through fees on select courses paid to third party for services provided (e.g., drug screening, background checks, third party facility usage fee, etc.)	Varies by services provided
Student liability insurance program (Students enrolling in certain health occupations and human services programs requiring clinical practice, laboratory work, or experiences that place students in the position of providing patient care must be covered by a student liability insurance program. The specific policy is determined by the College with the cost paid by students as part of the fee assessed upon initial enrollment in the clinical, laboratory, or patient care class.)	Varies by policy cost

Delinquent Accounts

Students must meet all financial obligations each quarter by the payment due date by paying all money due to MCC. This includes tuition, fees, fines, charges for unreturned library books, and any other financial obligations by the payment due date. Students with delinquent accounts are not permitted to enroll in succeeding quarters, are not entitled to transcripts, are not permitted to graduate, and, if currently enrolled, may be disenrolled.

Tuition Payments

After registration, students are billed for their tuition a few weeks before the quarter starts. Tuition can be paid by credit card, check, cash, or deferred payment.

Credit card

Discover, MasterCard, Visa, and American Express credit card payments are accepted:

- in person at Student Services;
- via phone at 531-622-5231, 531-622-2405, or toll-free (800) 228-9553; or
- on MCC's website via My Services (student username and PIN are required for online payment).

Check

Check or money order payments are accepted at any campus Student Services office and at the Fremont, Sarpy, and Applied Technology centers. Make checks payable to Metropolitan Community College and include a student ID number in the memo. Send to:

Metropolitan Community College
Attn: Student Accounts
P.O. Box 3777
Omaha, NE 68103-0777

The canceled check is proof of payment.

Bank account information can also be used on MyWay; a student user name and PIN are required for online payment.

Cash

Cash is accepted in person at any campus Student Services office, the three centers listed above, or at the Student Financial Services office (Fort Omaha Campus, Building 30). Do not send cash by mail. The receipt is proof of payment.

Deferred payment (Nelnet Payment Plan)

MCC offers deferred payments through the Nelnet payment plan provided by a third-party agency that allows students to make payments on their tuition for the quarter. For more information, visit <https://www.mccneb.edu/Prospective-Students/Costs-Aids/Payment-Options/Nelnet-Tuition-Management-and-E-Cashier.aspx>.

Schedule Changes

Changes in a student's schedule may have implications for the student's financial aid. Check with the Financial Aid office prior to any schedule changes.

Refund Policies

Credit courses

An official schedule change that reduces or terminates a student's credit load may entitle the student to a refund. The eligibility and amount of a refund is automatically calculated by the date of the withdrawal.

Refunds vary based on the start date of the course and the date that the class is dropped. Please check the important dates link in the credit class schedule (mcccatalog.mccneb.edu/Pages/Home.aspx) to see the last day that you can drop your class (mccneb.edu/Prospective-Students/Tuition-Financial-Assistance/Tuition/Last-Date-To-Drop-with-No-Charge-Instructions.aspx) without a charge.

MCC's refund policy is a full refund until 2/11th of the course sections have met. Students also do not receive a withdraw (W) on their transcript through this time period.

After 2/11th of the sections have met, no refund is given and a withdraw (W) from the course is reflected on their transcript.

Students may view MCC's contract with Bank Mobile, a Division of Customer Bank, at vibeaccount.com/swc/doc/landing/#6i1tb6ory8uefwa00go.

Students who feel individual circumstances warrant exceptions from this policy may file a records action appeal. Instructions for this appeal are online at mccneb.edu/Prospective-Students/Resources/Student-Services-SOS/Records/RAAP-Records-Action-Appeal-Process.aspx.

Students are responsible for dropping the course(s) if unable to attend. Non-attendance does not relieve students from the obligation to pay.

STUDENT SERVICES

It is the role of Student Services to support the academic mission by providing a comprehensive range of services designed to facilitate student engagement with the College and success in the classroom.

These services include, but are not limited to, advising, counseling, services to students with disabilities, testing services, tutoring, career services, and military and veteran student services at all three campuses and four center locations. Libraries and Learning and Tutoring Centers are located at the South Omaha Campus, Fort Omaha Campus, and the Sarpy Center. The Elkhorn Valley Campus has a library located in the Academic Support Commons.

Student Conduct

The code of student conduct is a set of rules that applies to every student enrolled at MCC. Every student is responsible for abiding by the code of student conduct.

College is a time for learning, inside and outside the classroom. MCC respects the rights of faculty to teach and students to learn. Maintenance of these rights requires classroom conditions that do not impede the learning process. Classroom behavior that seriously interferes with either the instructor's ability to conduct the class or the ability of other students to profit from the instructional program will not be tolerated. Each member of the campus community—instructors, staff, and students—contributes to the climate of MCC's locations by:

- respecting fellow students, staff, and faculty;
- practicing honesty;
- being tolerant of differences; and
- demonstrating civility.

The code of student conduct addresses two areas of behavior: academic and non-academic. Contact the appropriate academic dean regarding questions about academic misconduct, contact the dean of student advocacy and accountability regarding questions about non-academic/behavior misconduct. Violators of the student conduct code are subject to one or more sanctions depending on the seriousness of the violation.

Academic Support

Academic advising

Academic advisors assist students by developing an educational plan, promoting successful student practices, and providing general direction to support student academic and career goals. Advisors connect students to important college resources and provide information about MCC's academic programs, services, policies, and procedures. Advisors also guide students through career exploration by utilizing interest, strength, and other assessment tools.

Advocacy counseling

The advocacy counselors utilize counseling skills to support the development of academic and life skills of students, including those returning to the College following academic suspension or dismissal. Advocacy counselors provide intervention and/or referrals to community resources for students experiencing personal problems and/or crisis situations. The advocacy counselors provide confidential assistance, advocacy, support, and consultation on behalf of individuals of gender and/or relationship violence on the campus including victims of sexual assault, domestic violence, harassment, and/or stalking. Advocacy includes assistance in coordinating services with local agencies on behalf of the subject in all areas, including student services, the local campus police department, and other services as needed. Advocacy counselors are available at the Elkhorn Valley, Fort Omaha, and South Omaha campuses and the Sarpy Center.

Learning and Tutoring Centers

The College's Learning and Tutoring Centers provide resources, technologies, and services to support the learning needs of students in various areas of the College's curriculum. Students have access to state-of-the-art equipment, computers, and specialized software. Students can check the schedule at <https://www.mccneb.edu/Current-Students/Student-Tools/Tutoring.aspx> for subject area assistance. The Learning and Tutoring Centers are located at the Fort Omaha and South Omaha campuses and the Fremont Area and Sarpy centers; the Elkhorn Valley Campus provides these services at the Academic Support Commons. Services are provided free to currently enrolled students.

Libraries

The MCC libraries provide research materials and instruction in support of the College's curriculum. Staff members are available to assist students with their research assignments, email, MyWay, Blackboard, MS Office software, and PaperCut. Libraries are located at the Elkhorn Valley, Fort Omaha, and South Omaha campuses. At the Elkhorn Valley Campus, library services are provided in the Academic Support Commons. Current students, faculty, and staff are also welcome to use the City of La Vista Public Library at the Sarpy Center.

Each campus library houses a collection of print and audiovisual materials, including books, journals, magazines, newspapers, and DVDs. The library's website includes links to more than 60 research databases containing eBooks, streaming videos, journals, magazines, newspapers, and encyclopedias. Off-campus access to the databases is available for current students, faculty, and staff.

Other resources available to students include:

- library orientation/instruction
- computers equipped with Internet access as well as Microsoft Office products (Word, Access, Excel, PowerPoint, and Publisher)
- interlibrary loan to obtain materials not available through MCC's libraries
- reciprocal borrowing agreements with the Omaha Public Libraries, the City of La Vista Public Library, and other college libraries in Nebraska

In addition to serving MCC's students, faculty, and staff, the three campus libraries also provide library services to the residents of the College's four-county service area (Dodge, Douglas, Sarpy, and Washington counties).

For more information about the library resources and services, including hours, locations, and policies, visit the library's website at <https://www.mccneb.edu/Current-Students/Student-Tools/Library.aspx> or call a library:

- Elkhorn Valley Campus, 531-622-1300
- Fort Omaha Campus, 531-622-2306
- South Omaha Campus, 531-622-4506

Math Centers

MCC's Math Centers provide free drop-in assistance from qualified personnel for all math and/or math-related courses. Space is also available for study groups. Additionally, students can sign up for free one-on-one tutoring in all MCC math courses at each of the four main campuses. Many other resources are available at the Math Centers. Additional information can be found at www.mccneb.edu/mathcenter.

Tutoring

Free drop-in assistance in many academic subjects, including chemistry, accounting, social sciences, and foreign language courses, is available at scheduled day, evening, and weekend hours in MCC's Learning and Tutoring Centers. MCC students enrolled in credit classes are encouraged to seek tutoring as often as desired in order to achieve their best possible academic performance. No appointments are necessary. Schedules of tutoring availability by subject are posted in the Learning and Tutoring Centers and at <https://www.mccneb.edu/Current-Students/Student-Tools/Tutoring.aspx>. Call Tutor Services at 531-622-2432 or 531-622-4740 with any questions.

Writing Centers

Writing Centers, staffed by experienced English teachers and writing consultants, provide professional assistance, writing workshops, Teacher Talk sessions, and assignment design feedback to help students and faculty with written communication across academic disciplines and beyond. Simply stated, it is a place where writers invite other writers to dialogue about writing. Writing Centers are available at all College locations. For more information, visit resource.mccneb.edu/writingcenter.

Bookstores

The College contracts with Follett Higher Education Group to manage and operate the bookstores. The bookstores located at the Elkhorn Valley, Fort Omaha, and South Omaha campuses and the Sarpy Center are open throughout the quarter. Hours are prominently posted at each store and are extended during peak times each quarter. Temporary bookstore services are provided at the Fremont Area Center.

For more information, call any MCC bookstore:

- Elkhorn Valley Campus, 531-622-1208
- Fort Omaha Campus, Building 10, 531-622-2308
- Sarpy Center, 531-622-3850
- South Omaha Campus, Connector, 531-622-4508

Call for available dates and times:

- Fremont Area Center, 531-622-3000

Campus Dining

Campus dining is available, while classes are in session, at the Fort Omaha Campus (Building 10), the Elkhorn Valley Campus, and the Sarpy Center. The South Omaha Campus offers daily vendors for peak-time dining options. Hours of operation and variety of beverages, snacks, sandwiches, and hot items may vary by location.

The Sage Student Bistro, located at the Fort Omaha Campus in the Institute for the Culinary Arts (Building 22), offers a teaching and learning experience for culinary arts students. Eat lunch or dinner Monday through Thursday when classes are in session. For more information, visit resource.mccneb.edu/bistro.

Career Services

The mission of Career Services is to foster collaborative relationships with both internal and external partners, to facilitate the development of responsible career decision-making skills, and to provide comprehensive career development. MCC Career Navigators work with prospective students, current students, and alumni.

Students and MCC alumni are encouraged to utilize the services and resources of Career Services. Career Services offers the following appointments for students:

- Career assessment and exploration
- Resume and cover letter assistance
- Job and internship search
- Mock interview prep
- NEworks registration

Career Services also offers career events to help students network with employers. For more information or to schedule an appointment, go to mccneb.edu/careercenter or contact the office at 531-622-4647. Additional assistance is also available through our partner, the Nebraska Department of Labor, at 402-473-7019.

Change of Address

Changes of address and telephone numbers can be updated online through My Services. Billing, refunds, and other information from MCC are mailed to the latest address on file.

Learning Communities

Learning communities comprise a cohort - a group of students who share interests and take classes together. The goal of these communities is to provide student and course connections that make classes and learning more interesting and students more successful. Benefits include:

- learning in a cooperative environment;
- integrated curriculum;
- individual advising/counseling;
- direct contact with quality instructors;
- making new friends;
- small class sizes; and
- a better chance for academic success, which increases the likelihood of staying in college.

Current learning community opportunities include:

Paired learning

Paired learning courses emphasize the relationship between two subject areas by providing students with the opportunity to learn about common topics from different points of reference. Instructors organize curriculum around projects and problem-based instruction.

Passport program

The Passport program is a learning community for students interested in starting their degrees at MCC and then transferring to four-year institutions. The learning communities consist of groups of up to 25 students who complete their first academic year of college together. Students attend full-time during the day, taking three courses each quarter, completing a total of 40.5 quarter (27.0 semester) credits that transfer to most four-year institutions.

An academic advisor is assigned to the Passport group to help ensure student success. For more information, visit www.mccneb.edu/passport.

Teacher Preparation Connection

MCC offers a range of courses in early childhood education (ECED) and education (EDUC) that transfer to bachelor's degree programs at colleges and universities throughout the state.

Students planning to earn certification in early childhood education, elementary education, secondary education, or special education can complete up to 94.0 quarter hours (62.0 semester hours) at MCC. Most or all of those credits transfer to four-year programs.

The list of courses required by teacher certification programs varies, so it is recommended that a transfer institution and

certification program be chosen prior to registering for EDUC courses.

TRiO

The TRiO Programs (TRiO) are Federal outreach and student services programs designed to identify and provide services for individuals from disadvantaged backgrounds. TRiO includes eight programs targeted to serve and assist low-income individuals, first-generation college students, and individuals with disabilities to progress through the academic pipeline from middle school to post baccalaureate programs.

The TRiO/Student Support Services (SSS) program furthers the MCC mission of educational excellence and equal access by providing first-generation college students with limited income and/or disabilities and homeless students a multiplicity of academic and personal support services: study skills development to achieve academic success, tutoring and supplemental instruction to master course content, and intensive academic and personal advisement to build confidence and promote student success. SSS also provides mentors and summer bridge and learning community programs to first-year students, financial literacy education, and scholarship/grant opportunities. These interconnected services increase persistence and encouragement for a unified transition.

TRiO/SSS also includes the Single Parent/Displaced Homemaker program serving single parents, displaced workers or pregnant students as they strive to meet their educational goals. Students must apply for program services; space is limited.

The MCC Upward Bound Math and Science program is designed to strengthen the math and science skills of participating students from Omaha Northwest High School. The goal of the program is to help students recognize and develop their potential to excel in math and science and to encourage them to pursue postsecondary degrees in math and science, and ultimately careers in the math and science profession.

Single Parent/Displaced Homemaker Program

The Single Parent/Displaced Homemaker program provides a wide range of workshops and personal assistance to single parents, single pregnant women, and displaced homemakers who are accepted into the Student Support Services/TRiO program. Referral to other College offices and relevant outside community agencies is also available. The program also advises the POPS student group, Positive Opportunities for Parenting Solo. Participation in Student Support Services is not required to participate in POPS.

Police/Public Safety Department

The primary objective of the Police/Public Safety Department is to provide a safe environment that enhances the learning environment and the College's educational mission. The department is responsible for providing security, responding to emergencies and traffic accidents, enforcement of state and local laws, enforcement of campus rules and regulations, and various other services. Some of these services include:

- patrolling and providing police and security services and assistance on MCC property;

- assisting students, staff, and the general public with information and directions;
- assisting students and staff with automotive problems, such as jumpstarting and opening vehicles when keys are locked inside; and
- providing escorts for staff, students, and visitors as requested.

To reach the Police/Public Safety Department, call 531-622-2222.

Annual Security and Fire Safety Report

The MCC Police/Public Safety Department prepares the Annual Security and Fire Safety Report to comply with the Jeanne Clery Act. This report includes statistics for the previous three years concerning reported crimes that occurred on campus, in certain off-campus buildings or property owned or controlled by MCC, and on public property within or immediately adjacent to and accessible from MCC campus locations. The report also includes policies concerning campus security, such as reporting sexual assault and other matters. The full text of the report can be found online at [mccneb.edu/getattachment/Prospective-Students/Resources/Police/2016-AnnualSecurityReport-\(1\).pdf.aspx](http://mccneb.edu/getattachment/Prospective-Students/Resources/Police/2016-AnnualSecurityReport-(1).pdf.aspx)

Campus sexual violence prevention education

The offices of Public Safety and Student Advocacy and Accountability encourage all staff and students to review the information regarding sexual violence prevention education at the following website: mccneb.edu/getattachment/Prospective-Students/Resources/Police/Campus_Sexual_Violence_Prevention_Education0816.pdf.aspx. It contains tips for rape prevention, statistics, and rape counseling options with organizations outside of MCC.

Parking and traffic

All motor vehicles used by students and staff should be registered with the College. Each campus has parking lots and traffic signs that are prominently displayed. Parking is not reserved and is available on a first-come, first-served basis. There is no charge for parking permits at the College, but all rules and regulations must be observed. Parking permits are issued through Student Services.

Specialized Technology Areas

To enhance the student learning experience, MCC provides state-of-the-art equipment and up-to-date software at numerous locations throughout the College. The College has a dedicated Academic Data Center where students experience the operation and use of the newest technologies in IT. MCC information technology students are being introduced to and utilize virtualization technology, cloud computing, and data center management. MCC information technology is also giving students experience in using mobile devices and developing mobile applications. Students have access to information technology resources via the Internet and on all campuses.

The visual arts lab at the Elkhorn Valley Campus houses state-of-the-art hardware and software in support of the College's visual arts programs. The lab has the latest versions of design software such as the full suite of Adobe's Creative Cloud, and Corel painter to assist students of photography, graphic design, and visual arts. Animation students can access high-powered processors with specialty software including Maya, Mudbox, Dragon Frame, and Cinema 4D. Hands-on drawing skills are enhanced through the use of Wacom tablets and Cintiq pressure-sensitive monitors. All visual art students benefit from high-quality color and large format printers.

Student Identification Cards

Photo student identification cards are available for free to all students and can be obtained at the Learning and Tutoring Centers at the Elkhorn Valley campus, Fort Omaha campus, South Omaha campus, Sarpy Center, and Fremont Area Center, or at Student Services at the Applied Technology Center.

MCC LEARNING INITIATIVES

Distance Education

Online courses

Online courses give students the opportunity to balance commitments of schedules and studies allowing the classroom to come to them wherever they are. Courses are accessible via the Internet using a standard Web browser. Each week the student logs on to Blackboard Learn to access the online course(s) in which they are enrolled. MCC's online courses are built upon a tradition of more than 20 years of delivering alternative learning. Online credit courses are equivalent to on-campus courses and maintain the same academic standard in content, assignments, and credit. Every course is managed by a qualified MCC instructor who provides information, guides students, prompts discussion, helps with assignments, answers questions, and grades work.

Online courses are designed by MCC faculty following the nationally recognized quality assurance and continuous improvement approach Quality Matters (QM).

Students who are not F-1 students and whose primary language is not English need to take the Accuplacer assessment to determine course placement. Call 531-622-2400 to get started. The TOEFL is not required. There are federal regulations specific to F-1 students and online classes. Contact International Student Services at 531-622-2281 or iss@mccneb.edu for guidelines.

Hybrid courses

A hybrid course is a coordinated approach to learning, using both online technology and classroom interaction with faculty and peers. MCC hybrid courses meet face-to-face 50 percent of the traditional quarter's campus meetings; the other 50 percent of campus meeting time is replaced with online study and learning activities. Depending on the credit hours, for example, instead of meeting on campus twice per week, students are scheduled to come to class once a week. The remainder of the week is spent completing readings and online assignments.

Hybrid classes provide students unique benefits, including:

- More flexibility to choose classes and arrange study time according to students' individual schedules
- Engaging classroom time, including focused discussions and applications of course material with faculty and peers
- Understanding of the subject matter through analytical online assignments and classroom lectures and activities targeted to students' needs

Accelerated courses

Accelerated courses cover the same quality and quantity content as other courses but are completed in shorter time lengths; generally five-week terms. Accelerated courses are offered as online, hybrid, and face-to-face classes.

Accelerated courses move through the course content very rapidly. Students must be prepared to concentrate on course requirements and devote time to study. Many such courses are designed for working professionals.

Support services

Students may use the College computers in the Learning and Tutoring Centers, computer labs, Enrollment Centers, or libraries. One-on-one assistance is available in the Learning and Tutoring Centers for students who wish to learn how to take online classes. Additionally, services from the Writing and Math centers are available to e-learning students. Librarians are available by phone and in person to help with resources, including more than 60 online research databases.

Campus Share (course conferencing)

Course conferencing offerings enable students to attend classes with students at other MCC locations. Students interact with the instructor and students at other locations via video and audio connections.

COMMUNITY INITIATIVES

Adult Education and General Education Development (GED)

Adult Education is a program sponsored jointly by the Nebraska State Department of Education and MCC. This program is for adults 18 years of age or older; however, people who are at least 16 years of age and are not enrolled in a regular high school program may enroll with special permission from the Nebraska State Department of Education. This program offers students the opportunity to develop basic skills in reading, writing, and math.

This program also consists of GED preparation classes that prepare adults for the General Education Development examination, which is a nationally standardized test of high school equivalency. Classes are free; however, there is a \$25.00 annual student registration fee. There is also an application fee for the high school diploma and a testing fee. The high school diploma is issued by the Nebraska Department of Education upon successful completion of the examination.

The GED examination consists of the following four timed tests:

- Reasoning through language arts (150 minutes)
- Social studies (90 minutes)
- Science (90 minutes)
- Mathematical reasoning (115 minutes)

MCC is also authorized by GED Testing Service to provide official GED testing.

Additional information regarding Adult Education and GED classes can be obtained by calling the Adult Education office at 531-622-4060.

Apprenticeships

MCC offers a four-year apprenticeship training program in electrical and plumbing trades. The program is offered at the Industrial Training Center located at the South Omaha Campus. The electrical curriculum is approved by the State of Nebraska Electrical Board, and the plumbing curriculum is approved by the city of Omaha Plumbing Board. All instruction is during the evening.

Students who have successfully completed a College-approved apprenticeship program through one of the local unions or an approved in-house company apprenticeship program may receive up to 56 credits toward an associate degree. For more information about this program, contact the apprenticeship coordinator at 531-622-4034.

Business and Training Services (BTS)

BTS, in partnership with College academic areas, provides career skills training for businesses and nonprofit organizations. Collaborative partnerships are at the heart of the BTS division, which delivers real-world career training to not only the employed but also to the unemployed and underemployed in MCC's community. BTS also works with area businesses to build and facilitate affordable, customized workshops and training programs on-site at the business location, online, or at MCC locations. Specific training areas include business management, customer service, applied technology, interpersonal skills, IT, Spanish/ESL, and leadership development.

Continuing Education

Continuing Education is focused on providing the community with a variety of noncredit learning opportunities, such as using Excel and Word, learning a language, or writing a résumé. Continuing Education may also provide the community with personal enrichment activities like learning to dance, trying watercolor painting, repairing a house, or improving mental and physical health.

English as a Second Language Program

MCC's English as a Second Language program offers both credit and noncredit learning options for students who need to develop their English language proficiency. Both credit and noncredit classes are offered to provide a sequenced program of instruction.

Students who enter the ESL program are required to complete assessment testing to determine appropriate placement into the sequence of courses. To register for assessment testing for credit ESL classes, students should call Student Services.

Additional information concerning noncredit ESL instruction can be obtained by calling the Adult Education office at 531-622-4060. Information about credit ESL courses can be obtained from any Student Services or the office of the dean of English, English as a Second Language, and Reading at 531-622-2366.

Internship/Co-Op Work Experience

MCC's Internship/Cooperative Education program places students in working and learning environments for on-the-job training in their particular field of study before graduation. Students are placed with business, industry, or social services agencies.

An internship or co-op may be applied to many programs of study. Credit is granted based on the number of internship/co-op hours successfully completed.

Interested students should contact the appropriate academic dean for eligibility requirements and application procedures. F-1 students should contact International Student services at 531-622-2281 or email iss@mccneb.edu to discuss federal regulations for internships.

Service-Learning and Cooperative Education

MCC understands how important it is to provide real-world experiences to reinforce what students learn in the classroom.

- **Service-learning** – Projects that reinforce academic learning and promote civic engagement. The service-learning program seeks to teach students positive values and personal and communal responsibility; encourages professors to be innovative and creative; and creates positive change in the community. Service-learning brings together the classroom, campus, and community.
- **Cooperative education** – Internships and practicum experiences for MCC students.

ACADEMIC POLICIES AND PROCEDURES

Academic Awards

MCC offers a wide range of programs of study leading to the associate in applied science degree, associate in arts degree, associate in science degree, associate in science in nursing, certificate of achievement, or career certificate.

Many degree programs offer various options or tracks that are areas of interest within the program of study. Although students may successfully complete a single or multiple options/tracks within the program, only the degree for the overall program of study is awarded. Students are not eligible to receive multiple degrees for completing more than one of the options/tracks within the overall program of study.

Associate in applied science degree (AAS)

The associate in applied science degree is awarded to a student completing the requirements of one of the career programs with a minimum of 96.0 quarter hours and a maximum of 110.0 quarter hours unless noted for accreditation purposes. An associate in applied science degree prepares the graduate for entry-level positions and is accepted by several four-year institutions under A-to-B transfer agreements.

Associate in arts degree (AA)

The associate in arts degree is awarded to students completing the requirements of the Liberal Arts/Academic Transfer programs. This degree parallels the work done in the first two years at a four-year institution. All transfer associate in arts degrees at MCC require a minimum of 61.5 quarter hours (40.1 semester hours) of general education coursework within the degree program requirements. Additional major-related courses and electives contribute to the total 96+ quarter credit hours required for a transfer degree.

Associate in science degree (AS)

The associate in science degree is an academic transfer degree awarded to students completing the courses required for the degree. This degree is generally transferable as the first two years at a baccalaureate program or in meeting the minimum requirements for entrance into a designated professional program of study. All transfer associate in science degrees at MCC require a minimum of 61.5 quarter hours (40.1 semester hours) of general education coursework within the degree program requirements. Additional major-related courses and electives contribute to the total 96+ quarter credit hours required for a transfer degree.

Associate in science in Nursing degree (ASN)

The associate in science in Nursing degree is awarded to students completing the program requirements of the associate degree nursing program with a minimum of 108.0 credit hours and a maximum of 110.0 credit hours unless noted for accreditation purposes. Graduates awarded this degree are eligible to take the NCLEX Exam for licensure as a registered nurse. Many of the required courses transfer to four-year institutions.

Certificate of achievement

The certificate of achievement is awarded to students upon successful completion of the requirements of one of the career programs with a minimum of 48.0 quarter hours and a maximum of 55.0 quarter hours.

Career certificate

A career certificate represents a structured sequence of courses that may be completed in a relatively short period. In some cases, the entire module may be completed in a single quarter of study; in other cases, two or three quarters may be needed because of course prerequisites or other factors.

Credit by Testing and Experience

MCC may grant academic credit for the following:

Credit for course proficiency exams

Students wishing to demonstrate course proficiency may challenge selected credit courses by taking a proficiency examination. Students must be in good standing, be currently enrolled at MCC, not be enrolled in the course being challenged, and cannot have completed the course previously with a grade. A fee for each proficiency examination is payable at any MCC location prior to testing. Students should contact Student Services for information and application procedures. Credit granted may apply toward the student's current listed major only. Credit granted might not transfer to other institutions.

Credit for high school opportunities

Credit for AP program

MCC may award college credit in fulfillment of program requirements when students have acceptable Advanced Placement exam scores. For consideration of college credit, students need to have official exam score reports mailed to:

Metropolitan Community College
Attn: Records
P.O. Box 3777
Omaha, NE 68103-0777

Credit for knowledge acquired through work experience

Credit may be granted for learning acquired through work experience that parallels a student's program at MCC. Credit is not granted for courses in which a course proficiency test is available. Students should contact Student Services for information. A fee is charged.

Credit for military service

MCC seeks to grant the most credit possible for military training and experience. Military students who submit a DD-214 are granted up to 3.5 credits in Physical Education (PHED) for basic training. Additional credit hours may be awarded for military training and experience as recommended by the American Council on Education.

Some factors may limit the number of credits accepted, including departmental accreditation and program-specific requirements. Credits not transferred as a specific class at MCC may be applied to either the major or general education requirements as undefined electives. Credits granted do not apply toward fulfillment of MCC's residency requirement for graduation (24.0 hours). Military students pursuing specialized programs that have very few or no electives may find that they receive limited credits from their military experience.

Documents eligible for transcript evaluation can include DD-214, DD-295, DD-2586, CCAF Transcript (Community College of the Air Force), JST (Joint Services Transcript), CGI (Coast Guard Institute Transcript), and other official documents indicating military experience. In addition, MCC accepts DSST (DANTES) and CLEP scores.

Use of military credits to transfer from MCC to another institution depends on a number of factors, including whether the institution has a transfer credit agreement with MCC. The institution receiving transfer courses makes the decision regarding award of transfer credit. Military students should evaluate their transfer options carefully in consultation with the receiving institution. For additional information on military transfer credits, see a military adviser.

Credit for national standardized test results Defense Activity for Non-Traditional Education Support (DANTES)

MCC may award specific course credit for subject examinations in fulfillment of current program requirements. For consideration of college credit, students need to have an official national exam score report mailed to:

Metropolitan Community College
Attn: Records
P.O. Box 3777
Omaha, NE 68103-0777

The following limitations exist for credits awarded by testing and experience:

- Credit granted does not apply toward fulfillment of MCC's residency requirement for graduation.
- Credit for documented work experience is only available for classes listed in the current College catalog.
- Work experience credit is not available for any course for which a proficiency exam exists.
- Credit earned through documented work experience or course proficiency examinations are generally not transferable to another institution on a course-by-course basis.

Students with questions regarding awarding credit as an alternative to attending classes should contact an advisor at 531-622-2400.

The College-Level Examination Program (CLEP)

Although MCC does not administer CLEP testing, students with CLEP credits from other institutions may submit those credits for consideration of college credit in fulfillment of MCC program requirements. While the credits count toward graduation, the score is not used in the calculation of a grade point average. Credit granted does not apply toward fulfillment of MCC's residency requirement for graduation. Students wishing to submit CLEP test scores for consideration need to have an official exam score report mailed to:

Metropolitan Community College
Attn: Records
P.O. Box 3777
Omaha, NE 68103-0777

Credit for Students with Earned Undergraduate or Graduate Degrees

MCC credit is automatically awarded for some general education courses to students who have an official transcript on file in the Records office, noting conferred bachelor's, master's, juris doctor, or doctoral degrees from an accredited American institution. A student must have declared a major as well as actively seek a certificate or/and degree. General education credit is awarded for the following:

- ENGL 1010 English Composition I and ENGL 1020 English Composition II
- HMRL 1010 Human Relations Skills
- INFO 1001 Information Systems and Literacy. This credit is only awarded to students who graduate from the 2016-17 catalog or a later year catalog. Students declaring majors in catalogs prior to 2016-17 are required to take INFO 1001. Information Technology program majors are required to take INFO 1001, regardless of catalog year.

Note: Official transcripts are evaluated for the potential awarding of math and social science/humanities general education requirements; credit is not automatically awarded. Students should be aware that there may be additional and/or specific general education requirements for individual programs.

Dean's List

MCC celebrates students who have completed coursework with excellence. Outstanding academic achievement is recognized through the dean's list each quarter. To qualify for the dean's list, students must

- complete a minimum of 12.0 credit hours in graded 1000-level or above classes;
- complete at least 6.0 credit hours in graded 1000-level or above classes for the quarter in which they are qualifying; and
- achieve at least a 3.50 GPA for the quarter in which they are qualifying.

Students receive email notification via their student email account from the vice president for academic affairs approximately three weeks after the qualifying quarter has ended. This email includes a memo and certificate that are suitable for printing and framing. Since student email accounts may be purged at the end of the quarter, students should save or back-up their dean's list email if they wish to keep it. Dean's list certificates are not archived or available for reissuance. Students' names are publicized on the MCC website and sent to select newspapers.

MCC Scholars - Student Recognition Program

MCC Scholars provides a pathway for students to receive recognition for work in areas for which they are passionate. Recognition is available for work in global perspectives, community engagement, and sustainability.

The MCC Scholars program has two achievement levels. The first level provides a recognition certificate. The second level results in a notation of the achievement on the student's transcript. Students seeking either level of recognition work closely with a faculty mentor who is also passionate about the area of interest selected.

Grading System

- **A – Excellent:** The student has demonstrated outstanding proficiency in mastering course objectives. (4 points per credit in computation of grade point average)
- **B – Above average:** The student has demonstrated above average proficiency in mastering course objectives. (3 points per credit in computation of grade point average)
- **C – Average:** The student has demonstrated average proficiency in mastering course objectives. (2 points per credit in computation of grade point average)
- **D – Below average:** The student has demonstrated below average but passing proficiency in mastering course objectives. (1 point per credit in computation of grade point average)
- **F – Failing:** The student has not demonstrated a minimum passing proficiency in mastering course objectives. (0 points per credit in computation of grade point average)

- **FX – Failure related to non-attendance:** The student stops attending a class or participating in an online class, does not return, and fails. (0 points per credit in computation of grade point average). The FX grade was discontinued after the 13/SP quarter.
- **I – Incomplete:** Due to extenuating circumstances, students may be given an extension of time to complete course objectives. Assignment of I grades is a faculty prerogative and is issued when students, who have completed the majority (at least 60 percent) of the course requirements, are unable to complete the remainder due to unusual or extenuating circumstances. An I grade must be made up no later than three weeks prior to the end of the next quarter or it becomes an F. Prior to issuing the Incomplete grade, the instructor and student meet to discuss a timeline for completing the remaining assignments and/or tests in order for the student to earn a quality letter grade. The instructor sends an email to the student, and copies the appropriate academic dean, confirming the due date for the remaining work. (Does not count in computation of grade point average)
- **P – Pass:** P is an indication that the student has completed the coursework satisfactorily. It is used for developmental courses and other courses at the discretion of the College. (Does not count in the computation of grade point average)
- **R – Re-enroll:** The student has made satisfactory progress and should re-enroll until course objectives are completed. R is used for developmental courses only. (Does not count in computation of grade point average)
- **V – Audit:** An audit (no credit) does not count in computation of a grade point average. Audit requests may only be submitted during the first week of class and are processed during the second week. An audit is not an option for online classes.
- **W – Withdrawal:** W is an indication of an action requested by the student. The student must officially withdraw from a course prior to the last day to drop classes. The student may drop via My Services or call Registration to officially withdraw. Ws may not be changed to a grade. (Does not count in the computation of grade point average)
- **Z – Unreported grade:** Z indicates that a grade has not been reported by the faculty member. (Does not count in computation of grade point average)

Grade point average

Students' GPAs are determined by dividing the total number of grade points earned by the total number of credits attempted in those courses that count toward students' GPA.

To calculate a GPA:

$$\text{grade value} \times \text{credit hours completed} = \text{grade points}$$

A	$4 \times 4.5 = 18$
B	$3 \times 4.5 = 13.5$
C	$2 \times 4.5 = 9$
D	$1 \times 4.5 = 4.5$
F	$0 \times 4.5 = 0$

Example

Course	Grade	Hours completed	Grade points
ENGL 1010	A	4.5	18
BSAD 1000	C	4.5	9
INFO 1001	F	4.5	0
ACCT 1050	D	3.0	3
Totals		16.5	30

Take the total number of grade points (30) and divide by total hours completed (16.5): GPA= 1.82

Note: Actions of R, P, W, V, and Z do not apply toward the GPA but do appear in attempted hours.

Auditing a course

Students who wish to attend a course without taking examinations or receiving credit for a course may request to audit the course. Students intending to audit should not register for the courses as they cannot already be enrolled in a class they wish to audit. Instead, they must request an audit from the instructor during the first week of class only. Students who audit a class pay the regular tuition rate and fees. Audited courses do not count toward graduation requirements nor do they satisfy prerequisite requirements for other courses. However, audited courses do appear on the transcript marked with a V.

Courses that are eligible for audit are determined by the appropriate academic dean; some courses may not be available for audit. Online courses may not be audited. An audit student may not change from audit to credit status once the course has started.

Audited courses are not considered when establishing the full- or part-time status of a student receiving financial aid or veteran's benefits.

Repeating a course

Students may repeat a course in an effort to earn a better grade. Both grades remain on the permanent record; the latest grade is used to compute the GPA. Students using federal financial aid to pay for courses may not use financial aid funds to repeat a course in which they earned a C or better.

Final grades for repeated courses for those graduating must first be verified by the Records office in order for those students to be considered for graduation requirements.

Appeals to change course grades

Students who wish to appeal a final course grade need to follow the appeal procedure listed below. The appeal process for final course grades must be initiated no later than the end of the quarter (the last class day) following the quarter in which the course was completed.

The procedure for a final course grade appeal at MCC requires that the student and instructor first have a conversation with the expectation of resolving the grading issue between them. The question is mainly whether or not the instructor's syllabus has been followed.

If, after that conversation, there is still disagreement about whether or not the instructor has adhered to the syllabus in

dealing with the student's final grade issue, the student may choose to follow a formal appeal process.

The formal appeal process begins when a student puts his or her concern officially in writing by sending a letter or email to the instructor (first level of appeal). Upon receipt of the instructor's response, the student may appeal, if necessary, in writing to the next level, the appropriate academic dean (second level of appeal). Upon receipt of the academic dean's response, the student may appeal, if necessary, to the final level, the vice president for academic affairs, for a final decision.

The purpose of the initial first-level appeal letter (or email) is to seek resolution between student and instructor, pointing specifically to the syllabus and how the student can show that the procedures set up in the syllabus were not upheld.

The instructor's written reply to this letter usually suffices to resolve the issue.

A grade appeal makes it to the level of the academic dean only in the rare cases when a written appeal to the instructor is unsuccessful.

The purpose of the written appeal to the academic dean is to show how the student was not dealt with in accordance with procedures set up in the instructor's syllabus and how the instructor erred in his or her response to the student's written appeal. When a written appeal is submitted to an academic dean, the student must attach the syllabus for the course, the student's written appeal to the instructor, and the instructor's written reply.

A grade appeal makes it to the level of the vice president for academic affairs in the unlikely event that an appeal was not resolved at the first level (instructor) or the second level (academic dean). The student must submit a written appeal that shows how the student was not dealt with in accordance to the procedures set up in the instructor's syllabus and, specifically, where the instructor and the academic dean erred in their respective responses. When a written appeal is submitted to the vice president for academic affairs, the student must attach the syllabus for the course, the student's written appeals to both the instructor and the academic dean, and the respective responses from the instructor and the academic dean.

Decisions made by the vice president for academic affairs concerning appeals to change a final course grade are final and not subject to further appeal.

Academic amnesty

Students who wish to petition for academic amnesty (elimination of a course(s) from a previous quarter), must meet the below provisions. The amnesty process begins when a student meets with an academic advisor to complete the petition. The petition requests the elimination of up to two quarters of students' classes from the computation of their GPA.

- Academic amnesty can be granted *only one time* and is not reversible.
- Students must have successfully completed a minimum of 24.0 credit hours at 1000- or 2000-level MCC classes with a minimum GPA of 2.50 *after the most recent quarter being petitioned for amnesty.*

- Academic amnesty is applied to D and F grades only, which are eliminated from GPA calculation and hours attempted. Courses in which students received an A, B, or C grade continue to be included in students' overall GPAs and are exempt from academic amnesty.
- Students' permanent records (transcripts) reflect the original grade(s) received. Original grades are marked with a pound sign (#) on students' transcripts but are not included in the GPA calculation.

NOTE: Academic amnesty has no bearing on financial aid eligibility, as all quarters, including those for which academic amnesty is granted, must be considered.

Graduation Guidelines

Program requirements

The program requirements that students must meet to graduate with a certain degree or certificate are stipulated in the College catalog at mccneb.smartcatalogIQ.com. Catalog effective dates begin with the start of fall quarter and run through the end of the next summer quarter. Specifically:

- The effective catalog year for students is determined by the quarter in which they first attend MCC, not the date of their enrollment or registration.
- Students are held to the requirements in the catalog year in which they first attend unless they opt to meet the requirements in a later catalog in a year in which they attend.
- All requirements must be completed within four years of the initial or chosen catalog year. Those not completing within four years must select a later catalog in a year in which they attended and meet the requirements listed in that catalog.

Final grades for those graduating must be verified in the system to be considered for graduation requirements. Students who are retaking courses that they are using to complete their program of study requirements must receive a final grade in those courses before they may be considered as having fulfilled graduation requirements. Students cannot be processed through the system until this occurs.

To graduate with honors, students must earn a cumulative GPA of 3.50 or above in their program of study.

Eligibility

Students who wish to graduate with the following degrees or certificates must meet the following eligibility requirements:

Degrees: Associate in Applied Science, Associate in Arts, Associate in Science, or Associate in Science in Nursing

To apply and be eligible for graduation with an associate degree, students must have:

- earned a GPA of at least 2.00 in all studies that are applicable toward graduation from a program of study and be in good academic standing;
- successfully completed all program requirements encompassing a minimum of 96.0 credit hours as outlined in

the College catalog; program requirements include successful completion of a minimum of 24.0 credit hours in residence at MCC or enrollment in an approved statewide initiative program with MCC designated as the home institution;

- resolved all College financial obligations and returned all library and College materials; and
- completed an online graduation application form in the My Services student portal and submitted it by the deadline date.

Certificates of Achievement

To be eligible for graduation with a certificate of achievement, students must have:

- earned a GPA of at least 2.0 in all studies attempted and applicable toward graduation from a program of study and be in good academic standing;
- successfully completed all course requirements of a program of study encompassing a minimum of 48.0 credit hours as outlined in the College catalog with a minimum of 15.0 credit hours in residence at MCC;
- resolved all College financial obligations and returned all library and College materials; and
- completed an online graduation application form in the My Services student portal and submitted it to the Records office.

Career Certificates

Designed for the person seeking job-relevant career development, career certificate modules represent a structured sequence of courses that may be completed in a relatively short period. Career certificates range from a minimum of 24.0 quarter hours to a maximum of 36.0 quarter hours.

At least two-thirds of the credits leading to the career certificate must be completed at MCC, and a grade of C or better in all courses required for the certificate is required as well as to be in good academic standing.

Graduation application

All students must submit a graduation application to receive a degree or certificate. A separate application must be submitted for each degree or certificate that a student anticipates receiving.

The application for graduation can be found on the My Services student portal under Academic Profile and must be submitted online. Deadlines to file a graduation application are as follows:

Fall quarter – Nov. 1

Winter quarter – Feb. 1

Spring quarter – April 1

Summer quarter – July 1

At MCC, degrees and certificates are awarded at the end of each quarter and denote the completion of a program of study. Degrees and certificates are mailed approximately four to six weeks after the end of each quarter to qualifying students.

The MCC Commencement Ceremony is held annually to recognize students who have graduated or will graduate during the current academic year (fall, winter, spring, and summer quarters).

Career certificate recipients are not eligible to participate in the annual Commencement Ceremony.

Standards of Academic Progress

Academic standards and alert system

To encourage satisfactory progress throughout quarters of enrollment, the College's academic progress policy establishes specific standards that must be met by all students enrolled in credit courses at MCC. If students are not making academic progress, the College may limit enrollment and course selection, if considered necessary. If students are on probation after an academic suspension or dismissal, the College may establish other special conditions under which the students may again enroll, including regular meetings with advocacy counselors and academic advisors, enrollment in developmental courses, participation in career development activities, and completion of assessment tests.

Note: Students receiving financial aid must also comply with the Financial Aid Satisfactory Progress Statuses (p. 21).

Minimum requirements for good academic standing	
Attempted graded courses (credit hours)	Minimum cumulative GPA
1.0–29.5	1.50
30.0–79.5	1.75
80.0+	2.00

Academic good standing: meeting minimum GPA for credit hours completed. *Intervention:* None

Academic probation: not meeting minimum GPA for credit hours completed. *Intervention:* Registration holds are placed on students' records. Students on probation must complete an online probation workshop prior to future registration. Students on probation for more than one quarter are required to meet with an academic advisor or advocacy/DSS counselor for registration. While on probation, students may have limits placed on the number of credit hours of enrollment and/or course selection.

Academic suspension: students on probation who do not earn a GPA of at least 2.00 in their next quarter of enrollment. *Intervention:* Students are placed on academic suspension. Students on academic suspension are denied enrollment for a period of one quarter and must apply for readmission and observation status.

Academic observation: status when students return after suspension or dismissal. *Intervention:* Registration holds are placed on students' records. Students desiring to enroll after suspension or dismissal are required to meet with an advocacy or DSS counselor and request re-admission. If the request is granted, the advocacy or DSS counselor places the student in academic observation status. While on academic observation status the student is expected to work with the advocacy or DSS counselor for subsequent enrollment until they have returned to good standing. The counselor is authorized to impose reasonable restrictions on students' subsequent enrollment.

If students earn less than a 2.00 GPA for credits completed while in academic observation status, they are placed on academic dismissal. Students meeting the cumulative GPA requirement for good standing are not suspended or dismissed under this policy.

Academic dismissal: Dismissal may be permanent. The College reserves the right to deny enrollment to students on academic dismissal. *Intervention:* Registration holds are placed on students' records. Students on academic dismissal are not allowed to register or attend credit classes for one year. After an absence of one year, students on dismissal may petition for re-admission through an advocacy or DSS counselor.

Transfer Agreements

MCC works closely with many four-year institutions to develop agreements that assure smooth transfer of courses and degrees. There are four types of these articulation agreements:

Associate-to-Bachelor's (A-to-B) Agreements

Associate-to-Bachelor's Agreements provide for completion of an associate degree in the process of obtaining a bachelor's degree. Most, if not all, of the credits in the associate degree transfer to the four-year institution, often with the transfer student being awarded junior class standing. In order to take advantage of these agreements, students must complete the entire A-to-B curriculum and graduate from MCC.

Department/College-Based General Education Transfer Guides

General Education Transfer Guides list all of MCC's courses that satisfy four-year schools' general education requirements. Some institutions have an institution-wide general education requirement. Other institutions' general education requirements vary depending upon the student's department or major. The Department/College-Based General Education Transfer Guides list the specific general education courses required for a student's intended major. Completing all of the general education courses that transfer to a specific department or college does not mean students graduate from MCC with an associate degree. Students can complete nearly one-half of a bachelor's degree at MCC and successfully transfer those classes toward a four-year degree.

Program-Based Transfer Guides

Program-Based Transfer Guides list the courses that satisfy admission requirements to specialized programs such as health or engineering. These guides contain both general education and major course requirements.

Course-by-Course Transfer Guides

Course-by-Course Transfer Guides list MCC courses that transfer to four-year institutions by identifying equivalent courses at the four-year institution. The guides are very useful if students desire to take a specific course at MCC for transfer to a four-year institution. To use the Course-by-Course Transfer Guides effectively, students need to know their specific four-year degree course requirements in order to determine if an equivalent transfer course is available at MCC.

Visit <https://www.mccneb.edu/Prospective-Students/Transfer-Students/Articulation.aspx> for specific transfer agreement information.

Reverse Transfer

Students who complete 60 quarter credit hours or more at MCC and transfer those credits to a four-year college or university are eligible for the Reverse Transfer Program. They can transfer credits from their four-year program back to MCC to meet the requirements for their declared associate degree.

For more information, see the Reverse Transfer link at <https://www.mccneb.edu/Prospective-Students/Transfer-Students/Articulation.aspx>.

Transcripts

Transcript changes

Any students who believe there is an inaccuracy on their transcript must contact the Records office. The transcript is the final, accurate record of academic accomplishment.

Transcript retention

The official academic records (transcripts) for all MCC students are permanently retained by the College. Student financial aid records are retained for three years plus the current year.

Transcript requests

Transcript requests may be requested through My Way or online at <https://www.mccneb.edu/Prospective-Students/Resources/Student-Services-SOS/Records/Transcript-Request.aspx>. Students have the option of requesting an electronic transcript or a paper transcript. Students receive email updates regarding the status of their order and have the ability to track their request history online; however, the type of information varies depending on whether a paper or e-transcript is requested.

There is a fee charged for transcripts. The current fee schedule and payment procedure can be found at <https://www.mccneb.edu/Prospective-Students/Resources/Student-Services-SOS/Records/Transcript-Request.aspx>.

Electronic transcripts

Electronic transcripts (e-transcripts) are official transcripts that are submitted to a third party through a secured process. Each transcript is validated through a digital and certified signature by MCC. All e-transcripts are identical to a paper transcript, the only difference is the delivery method. The recipient's email address is required to utilize this service. **Students should make sure that the correct email address is obtained and verified with the recipient prior to submitting a request.**

E-transcripts are processed within one to two business days (Monday-Friday, excluding days when the College is closed), provided there are no holds on the student's account. Students may submit an e-transcript request 24/7, but transcripts are not processed until the next business day. Additional processing time may be required after the end of the quarter.

Additional documents may be attached to the request to be sent along with the e-transcript.

Students who need a copy of their Omaha Tech transcripts cannot utilize this service, as only paper transcripts are available.

Paper transcripts

Paper transcripts are official transcripts that are printed on security paper. The recipient's postal address is required to utilize this service.

Paper transcripts are processed within five to seven business days; allow additional processing time during high volume periods (end/start of term, graduation, etc.).

Additional documents may be attached to the request to be sent along with the paper transcript.

Note: Students who are no longer enrolled at MCC still have access to their network login and password; however, they **MUST** maintain the password requirements (changing it periodically). For username or password assistance, students should contact the Help Desk at 531-622-2900. Students who were enrolled prior to 2001 do not have access to their MCC network login and password.

For additional information, contact the Records office at 531-622-2353.

In compliance with the U.S. Department of Education's policy aimed at reducing the student loan default rate, current or former students who are in default on their student loans are not entitled to official transcripts of grades or course completions.

End of quarter grades

Even if grades have been posted by an instructor, transcripts cannot be released until grade processing has been completed, which can take up to three days. As stated, additional processing time may be added to the five to seven business day time frame.

GENERAL EDUCATION

General Education Rationale and Minimum Requirements

MCC recognizes the importance of preparing students for success in both their personal and professional lives. MCC students develop, across the curriculum, both the knowledge base of a program of study as well as the career skills needed to become a productive individual, an effective and contributing team member, and a person who appreciates the importance of lifelong learning and self-improvement. Vital to the preparation for lifelong learning skills is the development of competencies in:

- **Communication** – Effective communicators express thoughts, ideas, and feelings in both written and oral modes in order to be successful in their education and professional careers. This requires students to develop critical reading, writing, speaking, and listening skills early in their college experience and to have these skills reinforced throughout their program curricula. Effective communicators:
 - engage in the four stages of the communication process: collecting, shaping, drafting, and revising;
 - select, organize, and present details to support a main idea;
 - participate in groups using a variety of collaborative techniques;
 - use knowledge of target audience expectations and values to shape a text;
 - use various techniques in writing and speaking, including authority, point-of-view, style, and voice; and
 - employ good mechanics and word usage choice.
- **Critical thinking** – Critical thinking stresses a rational process, demonstrates logical inquiry and problem solving, and leads to an evaluative decision or action. It plays an important part in personal, social, and professional development. It helps learners uncover bias and prejudice in ideas. Critical thinking encourages learners to develop a willingness to consider different points of view and to explore possibilities. It underlies the basic elements of communication, writing, speaking, and listening. Critical thinkers:
 - interpret and evaluate statements, theories, problems, and observations from different points of view or perspectives;
 - question the validity of assumptions, evidence, and data;
 - assess the value or importance of positions, policies, and formulated solutions; and
 - employ the logic of argument.
- **Information literacy** – Information literacy is a set of abilities to recognize when information is needed; to retrieve, manage, and organize the needed information; and to locate, evaluate, and use technology in the gathering of this information. It enables learners to master content and extend their investigations, to become more self-directed, and to assume greater control over their own learning. Information literate learners:
 - determine the extent of information needed;
 - critically evaluate information and its sources;
 - incorporate selected information into a personal knowledge base;
 - use information ethically and legally; and
 - utilize software to manage, present, and store information.
- **Numeracy** – From balancing a checkbook to managing a business, numbers play an integral part in life experiences. Success in both a career field and personal experiences involves the effective use and understanding of numbers. Numeracy is the ability to think about, express, and evaluate information in quantitative terms. Numerically literate individuals:
 - interpret, analyze, and solve basic numerical problems;
 - estimate the reasonableness of an answer; and
 - interpret, evaluate, and present graphic/tabular data.
- **Scientific inquiry** – Science plays a vital role in today's society from environmental issues to health issues to economic issues. To assess the validity of scientific information, students should be able to effectively evaluate and use the scientific process. Scientific inquirers:
 - apply the scientific inquiry process to a situation;
 - communicate the importance of science in daily life;
 - evaluate societal issues from a scientific perspective; and
 - make informed judgments about science-related topics and/or policies.
- **Social and cultural awareness** – Social and cultural awareness provide the basis to understand how each person shapes, and is shaped by, culture and society as well as to recognize and understand the obligation to engage in ethical, safe, and legal behaviors. Socially and culturally aware individuals:
 - appreciate the influence of history, geography, the arts, humanities, and the environment on individual cultural development;
 - distinguish subjective opinions and ideology from objective findings and data;
 - recognize social and individual biases;
 - develop personal and social responsibility and participate as an engaged citizen; and
 - recognize individual differences, value diversity, and display global awareness.

It is in this spirit that the College promotes the importance of general education. General education core requirements must be completed by every student who completes a degree or

certificate of achievement program at MCC. In most programs, general education requirements are already determined; in programs where specific courses are not outlined, students should use the list of approved general education courses to complete minimum requirements for general education.

General Education Minimum Requirements

General education course areas	Competencies covered in course area	Minimum number of credit hours required
Communications	communication, critical thinking, social and cultural awareness	9.0 credit hrs.
Humanities/social sciences	scientific inquiry, social and cultural awareness, critical thinking	4.5 credit hrs.
Quantitative/numeracy skills	numeracy, critical thinking	4.5 credit hrs.
Human relations skills	social and cultural awareness, scientific inquiry, critical thinking, communication	4.5 credit hrs.
Information systems and literacy	information literacy	4.5 credit hrs.
Science	scientific inquiry	Variable depending on program of study

General Education Requirements

Associate in applied science degrees:

Communications	9.0 credit hrs.
Humanities/social sciences	4.5 credit hrs.
Quantitative/numeracy skills	4.5 credit hrs.
Other: INFO 1001	4.5 credit hrs.
HMRL 1010 or RDLS 1200*	<u>4.5 credit hrs.</u>
	27.0 credit hrs.
*RDLS 1200 option only in certain programs	

Associate in arts degrees:

Communications	13.5 credit hrs.
Quantitative/numeracy skills	4.5 credit hrs.
Other: INFO 1001	4.5 credit hrs.
HMRL 1010 or RDLS 1200*	<u>4.5 credit hrs.</u>
	27.0 credit hrs.
*RDLS 1200 option only in certain programs	

Associate in science degrees:

Communications	13.5 credit hrs.
Quantitative/numeracy skills	4.5 credit hrs.
Other: INFO 1001	4.5 credit hrs.
HMRL 1010 or RDLS 1200*	<u>4.5 credit hrs.</u>
	27.0 credit hrs.
*RDLS 1200 option only in certain programs	

Certificates of achievement:

Communications	4.5 credit hrs.
Humanities/social sciences	4.5 credit hrs.
Quantitative/numeracy skills	<u>4.5 credit hrs.</u>
	13.5 credit hrs.

The requirements specified above apply to all degrees and certificates of achievement, however, there may be additional requirements for individual programs. For example, all transfer associate in arts and associate in science degrees at MCC require a minimum of 61.5 quarter hours (40.1 semester hours) of general education coursework within the degree requirements. Additional major-related courses and electives contribute to the total 96+ quarter credit hours required for a transfer degree.

General Education Course Options

Select a General Education area below for appropriate course options. **NOTE:** Students who plan to transfer credits should select from the Transfer course options (p. 220) rather than the General Education course options listed here.

Communications

English

Level 1

ENGL 1010	English Composition I	4.5
ENGL 1210	Applied Communications	4.5
ENGL 1220	Technical Writing	4.5
ENGL 1225	Applied Communications I	4.5
ENGL 1230	Business Writing	4.5

Level II

ENGL 1020	English Composition II	4.5
ENGL 1240	Oral and Written Reports	4.5
ENGL 1245	Applied Communications II	4.5

Humanities/Social Sciences

Humanities

Architectural Drafting

ARCH 1000	Appreciation of Architecture	4.5
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Art

ARTS 1000	Introduction to the Visual Arts	4.5
ARTS 1010	Elementary Drawing	4.5
ARTS 1020	2-D Design	4.5
ARTS 1030	3-D Design	4.5
ARTS 1110	Art History-Ancient to Gothic	4.5
ARTS 1120	Art History-Renaissance to Modern	4.5

Chinese

CHIN 1110	Beginning Chinese I	7.5
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Design, Interactivity, and Media Arts

DIMA 1411	History of Animation	4.5
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English

ENGL 1310	Creative Writing	4.5
ENGL 1311	Poetry Writing Studio	4.5
ENGL 1312	Fiction Writing Studio	4.5
ENGL 1313	Creative Nonfiction Writing Studio	4.5
ENGL 2215	Creative Writing Capstone	4.5
ENGL 2450	Introduction to Literature	4.5
ENGL 2460	Introduction to Short Stories	4.5
ENGL 2470	Introduction to Women's Literature	4.5
ENGL 2480	Introduction to Drama Literature I	4.5
ENGL 2481	Introduction to Drama Literature II	4.5
ENGL 2490	Introduction to Latin American Literature	4.5
ENGL 2510	American Literature I	4.5
ENGL 2520	American Literature II	4.5
ENGL 2900	Special Topics in Literature	4.5

ENGL 2902	Special Topics in Creative Writing Studio	4.5
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French

FREN 1110	Elementary French I	7.5
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German

GERM 1010	Elementary German I	7.5
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Humanities

HUMS 1000	Humanities through the Arts	4.5
HUMS 1100	Classical Humanities	4.5
HUMS 1110	Origins of the Humanities	4.5
HUMS 1120	The Humanities in the Medieval - Renaissance World	4.5
HUMS 1130	The Humanities in the Modern World	4.5
HUMS 1150	The Humanities in the Non-Western World	4.5
HUMS 2310	Film History and Appreciation	4.5

Japanese

JAPN 1010	Beginning Japanese I	7.5
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Music

MUSC 1010	Introduction to Music I	4.5
MUSC 1020	Introduction to Music II	4.5
MUSC 1050	Music Appreciation	4.5
MUSC 1110	Music Fundamentals I	4.5
MUSC 1120	Music Fundamentals II	4.5

Philosophy

PHIL 1010	Introduction to Philosophy	4.5
PHIL 1030	Professional Ethics	4.5
PHIL 1100	Critical Reasoning	4.5
PHIL 2030	Introduction to Ethics	4.5
PHIL 2200	Introduction to Comparative Religion	4.5
PHIL 2400	Philosophy and Literature	4.5
PHIL 2600	Contemporary Issues in Philosophy	4.5

Photography

PHOT 1005	Basic Photography I - Digital	6.0
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Sign Language

SLIS 1010	American Sign Language I	6.0
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Spanish

SPAN 1110	Elementary Spanish I	7.5
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Speech

SPCH 1110	Public Speaking	4.5
SPCH 1120	Argumentation and Debate	4.5
SPCH 1220	Communication in Small Groups	4.5
SPCH 1300	Interpersonal Communication	4.5
SPCH 2900	Special Topics in Communication	variable

SPCH 1110 can be used as a communications course for transfer.

Theatre

THEA 1000	Introduction to Theatre	4.5
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THEA 2010	Script Analysis	4.5	SOCI 1050	Sociology of Healthcare ☞	4.5
THEA 2020	Fundamentals of Acting I	4.5	SOCI 1100	Native American Studies ☞	4.5
THEA 2021	Fundamentals of Acting II	4.5	SOCI 1250	Introduction to Anthropology ☞	4.5
THEA 2040	Movement for the Actor	4.5	SOCI 2050	Current Social Problems ☞	4.5
THEA 2050	Voice for the Actor	4.5	SOCI 2060	Multicultural Issues ☞	4.5
Social Sciences			SOCI 2110	Introduction to Gerontology ☞	4.5
Economics			SOCI 2150	Survey of Human Sexuality ☞	4.5
ECON 1000	Macroeconomics ☞	4.5	SOCI 2160	Marital and Family Relationships ☞	4.5
ECON 1100	Microeconomics ☞	4.5	SOCI 2310	Criminology ☞	4.5
Geography			SOCI 2311	Juvenile Justice ☞	4.5
GEOG 1010	Fundamentals of Geography ☞	4.5	SOCI 2450	Social Psychology ☞	4.5
GEOG 1020	World Regional Geography ☞	4.5	SOCI 2550	Popular Readings in Social Science ☞	4.5
GEOG 1050	Introduction to Human Geography ☞	4.5	SOCI 2650	Research Methods ☞	4.5
History			Natural Sciences		
HIST 1010	United States History to 1877 ☞	4.5	Biology		
HIST 1020	United States History from 1865 to Present ☞ ☹	4.5	BIOS 1010	General Biology ☞ ☹	6.0
HIST 1050	Introduction to Black History ☞	4.5	BIOS 1010L	General Biology Lab	0.0
HIST 1060	Black Women in the United States ☞	4.5	BIOS 1111	Biology I	5.0
HIST 1070	Traditional and Modern China ☞	4.5	BIOS 1111L	Biology I Lab	0.0
HIST 1080	Traditional and Modern Japan ☞	4.5	BIOS 1121	Biology II	5.0
HIST 1110	World Civilization from Prehistory to 1500 ☞	4.5	BIOS 1121L	Biology II Lab	0.0
HIST 1120	World Civilization from 1500 to Present ☞ ☹	4.5	BIOS 1130	Biology III	5.0
HIST 2050	Modern Europe Since 1789 ☞	4.5	BIOS 1130L	Biology III Lab	0.0
HIST 2200	Latin American History ☞	4.5	BIOS 1310	Survey of Human Anatomy and Physiology	5.0
HIST 2220	U.S. and Global Military History ☞	4.5	BIOS 1310L	Survey of Human Anatomy and Physiology Lab	0.0
Political Science			BIOS 1400	Introduction to Botany	4.5
POLS 2050	American National Government ☞	4.5	BIOS 1400L	Introduction to Botany Lab	0.0
POLS 2060	The Constitution ☞	4.5	BIOS 1500	Introduction to Bioprocessing	4.5
POLS 2070	Contemporary Social and Political Issues ☞	4.5	BIOS 1500L	Introduction to Bioprocessing Lab	0.0
Psychology			BIOS 2150	Microbiology	6.0
PSYC 1000	Psychology for Everyday Living ☞	4.5	BIOS 2150L	Microbiology Lab	0.0
PSYC 1010	Introduction to Psychology ☞ ☹	4.5	BIOS 2310	Human Anatomy and Physiology I	6.0
PSYC 1110	Parenting and Family Problem Solving ☞	4.5	BIOS 2310L	Human Anatomy and Physiology I Lab	0.0
PSYC 1120	Human Growth and Development ☞	4.5	BIOS 2320	Human Anatomy and Physiology II	6.0
PSYC 1130	Cognitive Development ☞	4.5	BIOS 2320L	Human Anatomy and Physiology II Lab	0.0
PSYC 2140	Behavior Modification and Principles of Learning ☞	4.5	Chemistry		
PSYC 2150	Survey of Human Sexuality ☞	4.5	CHEM 1010	College Chemistry ☞	6.0
PSYC 2350	Fundamentals of Abnormal Psychology ☞	4.5	CHEM 1010L	College Chemistry Lab	0.0
PSYC 2450	Social Psychology ☞	4.5	CHEM 1120	Chemistry for the Health Sciences I	3.0
PSYC 2550	Popular Readings in Social Science ☞	4.5	CHEM 1120L	Chemistry for the Health Careers Lab	0.0
PSYC 2650	Research Methods ☞	4.5	CHEM 1130	Chemistry for Health Sciences II	3.0
Social Work			CHEM 1130L	Chemistry for the Health Careers II Lab	0.0
SOWK 1010	Introduction to Social Work ☞	4.5	CHEM 1210	General Chemistry: Part I	2.0
Sociology			CHEM 1210L	General Chemistry: Part I Lab	0.0
SOCI 1010	Introduction to Sociology ☞ ☹	4.5	CHEM 1211	General Chemistry: Part II	4.0
			CHEM 1211L	General Chemistry: Part II Lab	0.0
			CHEM 1212	General Chemistry I: Accelerated	6.0

CHEM 1212L	General Chemistry I: Accelerated Lab	0.0	PHYS 211B	General Physics IIB	2.5
CHEM 1220	General Chemistry II	6.0	PHYS 211BL	General Physics IIB Lab	0.0
CHEM 1220L	General Chemistry II Lab	0.0	PHYS 211C	General Physics IIC	2.5
CHEM 1510	Chemistry for Bioindustry I	3.0	PHYS 211CL	General Physics IIC Lab	0.0
CHEM 1510L	Chemistry for Bioindustry I Lab	0.0	Science		
CHEM 1520	Chemistry for Bioindustry II	3.0	SCIE 1010	Physical Science ☞	6.0
CHEM 1520L	Chemistry for Bioindustry II Lab	0.0	SCIE 1010L	Physical Science Lab	0.0
CHEM 2310	Fundamentals of Organic Chemistry	6.0	SCIE 1300	Astronomy ☞	4.5
CHEM 2310L	Fundamentals of Organic Chemistry Lab	0.0	SCIE 1310	Astronomy Laboratory ☞	1.5
CHEM 232A	Organic Chemistry IA	2.5	SCIE 1400	Introduction to Meteorology	6.0
CHEM 232AL	Organic Chemistry IA Lab	0.0	SCIE 1400L	Introduction to Meteorology Lab	0.0
CHEM 232B	Organic Chemistry IB	2.5			
CHEM 232BL	Organic Chemistry IB Lab	0.0	Other		
CHEM 232C	Organic Chemistry IC	2.5	Information Systems and Literacy		
CHEM 32CL	Organic Chemistry IC Lab	0.0	INFO 1001	Information Systems and Literacy ☞ ☞	4.5
CHEM 233A	Organic Chemistry IIA	2.5			
CHEM 233AL	Organic Chemistry IIA Lab	0.0	Human Relations Skills		
CHEM 233B	Organic Chemistry IIB	2.5	HMRL 1010	Human Relations Skills ☞ ☞	4.5
CHEM 233BL	Organic Chemistry IIB Lab	0.0	RDLS 1200	College Success Strategies ☞	4.5
CHEM 233C	Organic Chemistry IIC	2.5			
CHEM 233CL	Organic Chemistry IIC Lab	0.0	NOTE: RDLS 1200 College Success Strategies is an option only in certain programs. Check your program of study.		
Geography			Quantitative/Numeracy Skills		
GEOG 1150	Introduction to Physical Geography - Weather and Climate ☞	6.0	Finance		
GEOG 1160	Introduction to Physical Geography - Landforms ☞	6.0	FINA 1000	Financial Literacy ☞	4.5
GEOG 1210	Introduction to Physical Geology ☞	6.0	NOTE: FINA 1000 Financial Literacy is an option only in certain programs. Check your program of study.		
Physics			Mathematics		
PHYS 1010	Applied Physics	4.5	MATH 1220	Business Mathematics ☞	4.5
PHYS 1010L	Applied Physics Lab	0.0	MATH 1240	Applied Mathematics	4.5
PHYS 110A	Principles of Physics IA ☞	2.5	MATH 1242	Applied Math for the Hospitality Industry	4.5
PHYS 110AL	Principles of Physics IA Lab ☞	0.0	MATH 1260	Geometry	4.5
PHYS 110B	Principles of Physics IB ☞	2.5	MATH 1310	Intermediate Algebra ☞	4.5
PHYS 110BL	Principles of Physics IB Lab ☞	0.0	MATH 1410	Statistics ☞	4.5
PHYS 110C	Principles of Physics IC ☞	2.5	MATH 1420	College Algebra ☞	5.0
PHYS 110CL	Principles of Physics IC Lab ☞	0.0	MATH 1430	Trigonometry ☞	4.5
PHYS 111A	Principles of Physics IIA	2.5	MATH 1930	Applied Calculus ☞	4.5
PHYS 111AL	Principles of Physics IIA Lab	0.0	MATH 2410	Analytic Geometry and Calculus I ☞	7.5
PHYS 111B	Principles of Physics IIB	2.5	MATH 2411	Calculus II ☞	7.5
PHYS 111BL	Principles of Physics IIB Lab	0.0	MATH 2412	Calculus III ☞	6.0
PHYS 111C	Principles of Physics IIC	2.5	MATH 2510	Differential Equations	4.5
PHYS 111CL	Principles of Physics IIC Lab	0.0	NOTE: MATH courses 1310 and higher can be used as a math course for transfer.		
PHYS 210A	General Physics IA	2.5			
PHYS 210AL	General Physics IA Lab	0.0			
PHYS 210B	General Physics IB	2.5			
PHYS 210BL	General Physics IB Lab	0.0			
PHYS 210C	General Physics IC	2.5			
PHYS 210CL	General Physics IC Lab	0.0			
PHYS 211A	General Physics IIA	2.5			
PHYS 211AL	General Physics IIA Lab	0.0			

A PLACE TO START

Are you new to MCC?
 Would you like to explore career options?
 Are you ready to dive right in and take some classes?
 This list is a good place to start.

Every course on this list can be taken with no prerequisites or pre-tests.

Each course either gives you an introduction to a career path or counts toward general education requirements for most degrees. While not required during your first quarter, visiting with an academic advisor can assist you in finding classes that best meet your needs.

Consider this a quick start - a way to enroll in classes without waiting.

Career-Oriented Courses

Accounting

ACCT 1050 Bookkeeping
 ACCT 1100 Accounting I

Architectural Design Technology

ARCH 1000 Appreciation of Architecture
 ARCH 1100 Beginning AutoCAD

Arts

ARTS 1000 Introduction to the Visual Arts
 ARTS 1010 Elementary Drawing
 ARTS 1020 2-D Design
 ARTS 1050 Creative Careers

Auto Collision Technology

AUTB 1040 Auto Collision Repair Welding
 AUTB 1100 Structural Repair I
 AUTB 1200 Nonstructural Repair I

Automotive Technology

AUTT 1010 Introduction to Auto Service and Minor Repair
 AUTT 1210 Automotive Electricity and Electronics I

Business Management

BSAD 1000 Introduction to Business
 BSAD 1100 Business Law I
 BSAD 1250 Introduction to Not-for-Profit Management
 BSAD 1600 Principles of Supervision
 BSAD 2100 Principles of Management
 ENTR 1050 Introduction to Entrepreneurship

Civil Engineering Technology

SCET 1000 Civil Engineering Fundamentals
 SCET 1050 Building Construction
 SCET 1070 Contracts and Specifications

Construction and Building Science

CNST 1000 Introduction to Building Construction
 CNST 1050 Introduction to Carpentry

Criminal Justice

CRIM 1010 Introduction to Criminal Justice
 CRIM 1020 Introduction to Corrections

Culinary, Hospitality, Research, and Management

CHRM 1000 Career Orientation/Culinary Arts
 CHRM 1020 Sanitation

Design, Interactivity, and Media Arts

DIMA 1110 Digital Design: Raster
 DIMA 1120 Digital Design: Vector

Diesel Technology

DESL 1000 Diesel Preventive Maintenance

Early Childhood Education

ECED 1110 Infant and Toddler Development
 ECED 1120 Preschool Child Development
 ECED 1150 Introduction to Early Childhood Education

Electrical Technology

ELTR 1200 Basic Electricity

Pre-Engineering

ENGR 1010 Introduction to Engineering Design

Finance

FINA 1000 Financial Literacy
 FINA 1100 Principles of Property and Casualty Insurance

Health Information Management Systems

HIMS 1111 Healthcare Careers
 HIMS 1120 Medical Terminology I

Health Information Technology

HITP 1005 Introduction to Electronic Health Records
 HITP 1010 Introduction to Health Information Technology

Horticulture, Land Systems, and Management

HLSM 1000 Horticulture, Land Systems, and Management Orientation

Heating, Air Conditioning, and Refrigeration

HVAC 1000 Refrigeration Electrical Theory and Application
 HVAC 1010 Refrigeration Service Principles and Basic Automatic Controls

Human Relations

HMRL 1010 Human Relations Skills
 HMRL 1050 Leadership: Training and Skill Development

Human Services

HMSV 1010 Introduction to Human Services

Industrial and Commercial Trades

INCT 0900 Introduction to the Trades
 INCT 1000 Industrial Safety and Health
 INCT 1010 Introduction to the Trades II
 INCT 1050 Mechanical Print Reading
 INCT 1301 Home and Building Maintenance Carpentry
 INCT 1500 Introduction to Distribution
 INCT 2050 Problem Solving

Information Technology

INFO 1001 Information Systems and Literacy

Insurance

INSU 1000 Principles of Health and Life Insurance
 INSU 1100 Principles of Property and Casualty Insurance

Interior Design

INTD 1100 Illustration Techniques for Interiors
INTD 1310 Fundamentals of Textiles

Legal Studies

LAWS 1100 The Paralegal Profession
LAWS 1101 Introduction to Law

Mechanical Drafting Technology

DRAF 1100 AutoCAD Fundamentals
DRAF 1300 Inventor Fundamentals

Photography

PHOT 1005 Basic Photography I – Digital

Precision Machine Technology

PRMA 1401 Machine Tool I

Process Operations Technology

PROT 1000 Introduction to Process and Power Operations
PROT 1010 Safety Topics for Process and Power Operations
PROT 1100 Process Instrumentation and Control
PROT 1110 Reading and Understanding Process Diagrams
PROT 1250 Basic Electricity for Power and Process
PROT 1302 Stationary Engineering I

Real Estate

REES 1000 Real Estate Principles

Social Work

SOWK 1010 Introduction to Social Work

Theatre

THEA 1000 Introduction to the Theatre
THEA 2020 Fundamentals of Acting I

Video/Audio Communications Arts

PHOT 1500 Moving Image Lab
VACA 1010 Audio and Video Production Engineering
VACA 1020 Audio I

Welding

WELD 1000 Print Reading for Welders
WELD 1100 Industrial Cutting Processes
WELD 1200 Gas Metal Arc Welding (MIG) - Steel I

General Education Courses

Humanities

HUMS 1000 Humanities through the Arts
HUMS 1100 Classical Humanities
HUMS 1110 Origins of the Humanities
MUSC 1010 Introduction to Music I
MUSC 1020 Introduction to Music II
MUSC 1050 Music Appreciation
PHIL 1010 Introduction to Philosophy
PHIL 1030 Professional Ethics
PHIL 1100 Critical Reasoning

Languages

ARAB 1010 Introduction to Arabic
CHIN 1110 Beginning Chinese I
FREN 1010 Beginning French I
GERM 1010 Elementary German I
JAPN 1010 Beginning Japanese I
SPAN 1110 Elementary Spanish I

Reading and Learning Skills

RDLS 1150 College Vocabulary
RDLS 1200 College Success Strategies

Science

BIOS 1010 Introduction to Biology
BIOS 1250 Environmental Biology
BIOS 1310 Survey of Human Anatomy and Physiology

Social Science

GEOG 1010 Fundamentals of Geography
GEOG 1020 World Regional Geography
GEOG 1050 Introduction to Human Geography
GEOG 1210 Introduction to Physical Geology
HIST 1010 US History to 1877
HIST 1020 US History from 1865 to Present
HIST 1050 Introduction to Black History
HIST 1120 World Civilization from 1500 to Present
POLS 2050 American National Government
PSYC 1000 Psychology for Everyday Living
PSYC 1010 Introduction to Psychology
PSYC 1120 Human Growth and Development

Speech

SPCH 1110 Public Speaking
SPCH 1300 Interpersonal Communication

Workplace Skills

WORK 1230 Career Planning
WORK 1250 Learning Anxiety
WORK 1400 Employability Skills
WORK 1410 Secrets to Business Success
WORK 1420 Interpersonal Communication Skills for the Workplace

PROGRAMS OF STUDY

Accounting (ACAAS)
 Advanced Industrial Sales Representative (IAISD)
 Air Conditioning (AACSD)
 Arboriculture (HLACC)
 Architectural Design Technology - AEC Professions (ADAEO)
 Architectural Design Technology - Architectural Design (ADADO)
 Architectural Design Technology - Architectural Documentation (ADDSO)
 Architectural Documentation Software (ADSCC)
 Architectural Imaging Software (AAIS1)
 Art (ARTAA)
 Auto Collision Estimating (ACESD)
 Auto Collision Technology (ABAS1)
 Auto Collision Technology (ABTC1)
 Automotive Maintenance and Light Repair Technician (AUMCA)
 Automotive Technician Assistant (AUTCC)
 Automotive Technology (AUAAS)
 Automotive Under-Vehicle Specialist (AUVCC)
 Baking and Pastry (CBPCE)
 Beginning Industrial Sales Representative (IBISD)
 Bookkeeping (BKPCE)
 Building Maintenance (IBMSD)
 Business Management - Financial Planning (BMPC1)
 Business Management - Financial Studies (BMFCE)
 Business Management - Generalist (BGAAS)
 Business Management - Management Specialist (BMSCE)
 Business Management – Not-for-Profit Management (BMNCE)
 Business Start-Up (BSUCC)
 Business Transfer (BSTAA)
 CDL–A Truck Driving (CDLSD)
 Cisco Certified Network Associate (ITCCC)
 Commercial Construction (CCOSD)
 Computer-Aided Design (CECCD)
 Computer-Aided Design (DCDSD)
 Computer-Aided Drafting (DCASD)
 Computer-Aided Manufacturing Design (DCMSD)
 Computer Technology Transfer - Computer Science (CTSAS)
 Computer Technology Transfer – Management Information Systems (CTMAS)
 Construction and Building Science – Construction Management (CBCMO)
 Construction and Building Science - Construction Technology (CBCTO)
 Construction and Building Science – Framing and Finishing Specialist (CBFCE)
 Construction Management (CCMSD)
 Criminal Justice - Corrections (CJCNO)
 Criminal Justice - Law Enforcement (CJLEO)
 Critical Facilities Operations (CFOAS)
 Culinary Arts and Management - Baking and Pastry (CABA2)
 Culinary Arts and Management (CAMCE)
 Culinary Arts and Management - Culinary Arts (CACA1)
 Culinary Arts Foundations (CAFSD)
 Customer Service Management (BCSSD)
 Customer Service Representative (PSCSD)
 Dental Assisting (DEACE)
 Design, Interactivity, and Media Arts - 2-D Animation (DI2DO)
 Design, Interactivity, and Media Arts - 3-D Animation and Games (DI3DO)
 Design, Interactivity, and Media Arts - DIMA Entrepreneur (DIENO)
 Design, Interactivity, and Media Arts - Graphic Design (DIGDO)
 Design, Interactivity, and Media Arts - Illustration (DILO)
 Design, Interactivity, and Media Arts - Media Generalist (DIMGO)
 Design, Interactivity, and Media Arts - Motion Graphics (DIMOO)
 Design, Interactivity, and Media Arts - Web Design (DIWDO)
 Diesel/Automotive Parts Sales (DTSCC)
 Diesel Technology – Diesel Service (DTDSO)
 Diesel Technology – Heavy Equipment (DTHEO)
 Diesel Technology – Power Generation (DTPGO)
 Diesel Truck (DDES1)
 Early Childhood Education Director (ECDCC)
 Early Childhood Educator – Assistant (ECTC1)
 Early Childhood Educator (ECAS1)
 Early Childhood Generalist (ECGSD)
 Electrical Apprenticeship (AREAO)
 Electrical Mechanical Systems (IEMSD)
 Electrical Plant Maintenance (IEPSD)
 Electrical Technology – Building Electrical (ETBCE)
 Electrical Technology (ETAAS)
 Entrepreneurship Generalist (BEGCE)
 Fashion Design (FDAAS)
 Financial Studies (BMFCC)
 Fire Science Technology (FSAAS)
 Floriculture (HLFCC)
 Full Stack Web Development (VFSCC)
 Gas Metal Arc Welding (WGMSD)
 Gas Tungsten Arc Welding (WGTSO)
 General Construction/Remodeling (CCRSD)
 General Management (BMGCC)
 General Plant Maintenance (IGPSD)
 General Studies (GSAAS)
 Global Perspectives (GLPCC)
 Health Data and Information Management (HDIAS)
 Health Information Management Systems - Medical Office Assistant (HIACE)
 Health Information Management Systems - Medical Coding and Billing (HIMC1)
 Health Information Management Systems - Medical Office Management (HIMO1)
 Health Information Technology (HITSD)
 Health Information Technology Professional (HITAS)
 Heating, Air Conditioning, and Refrigeration Technology (HAAAS)
 Heating, Air Conditioning, and Refrigeration Technology (HARCE)
 Heat Pump (AHPSD)
 Heat Systems (AHSSD)
 Horticulture, Land Systems, and Management - Floriculture (HLMFO)
 Horticulture, Land Systems, and Management - Grounds Management (HLMGO)
 Horticulture, Land Systems, and Management - Horticulture (HLHCE)
 Horticulture, Land Systems, and Management - Horticulture Management (HLMHO)

Horticulture, Land Systems, and Management - Landscape Design (HLMLO)
 Horticulture, Land Systems, and Management - Small Market Farming (HLMSO)
 Hospitality and Restaurant Leadership - Food and Event Management (CHFA1)
 Hospitality and Restaurant Leadership - Hospitality Entrepreneurship (CHBA1)
 Human Services - Chemical Dependency (CDCC1)
 Human Services - Chemical Dependency Counseling (CDA1)
 Human Services – General (HSGCE)
 Human Services - General Human Services (HSA2)
 Human Services
 Human Services Transfer (HSTAA)
 Immigration Laws, Policies, and Procedures (IPPC)
 Industrial Electrical/Mechanical Maintenance (IMEM2)
 Industrial and Commercial Trades – Industrial Electrical (IIECE)
 Industrial Distribution I (ID1C1)
 Industrial Distribution II (ID2C1)
 Industrial Distribution (IMID2)
 Industrial Electrical (IMECC)
 Information Technology – Cisco Network Technician (ITCNO)
 Information Technology – Cyber Security (ITCSO)
 Information Technology – Database Management (ITDA1)
 Information Technology – Data Center Operations (ITDC1)
 Information Technology – Data Center Technician (ITCCO)
 Information Technology – Desktop Support Specialist (ITDS1)
 Information Technology – Front End Web Development (ITWD1)
 Information Technology – Programming for Database/Web (ITDWO)
 Information Technology – Server Administration (ITSAO)
 Information Technology – Server Technician (ITSRO)
 Interdisciplinary Studies - Prototype Design (PDTAS)
 Interior Design (IDAS1)
 Landscape Design (HLLCC)
 Language Interpretation (LGICE)
 Legal Secretary (LSSCC)
 Legal Studies – Legal Administrative Assistant (LSAAO)
 Legal Studies – Paralegal Accelerated Certificate (LSACC)
 Legal Studies – Paralegal (LSPA0)
 Legal Studies – Pre-Law (LSPLO)
 Liberal Arts/Academic Transfer – Language Studies (LTLAA) - associate in arts
 Liberal Arts/Academic Transfer (LATAA) - associate in arts
 Liberal Arts/Academic Transfer (LATAS) - associate in science
 Logistics (IMLCC)
 ManageFirst (CHMCC)
 Manufacturing Process Operations (PRMCC)
 Masonry and Concrete Construction (CMCSD)
 Mechanical Design Technology (DRAS1)
 Mechanical Design Technology (DRTC1)
 Medical Assisting (MDACE)
 Not-for-Profit Management (BNPSSD)
 Nursery and Landscape Management (HLNCC)
 Nursing – Associate Degree (ASNAS)
 Nursing – Practical (LPNCE)
 Office Technology – Administrative Assistant (OTAAO)
 Office Technology - Microcomputer Office Applications (OTMCE)
 Office Technology – Office Professional (OTOPO)
 Paramedicine (PMPMC)
 Photography (PTAS3)
 Pipe Welding (WPWSD)
 Plant Production and Propagation (HLPCC)
 Plumbing Apprenticeship - Pre-Apprenticeship Plumbing (ARPCE)
 Plumbing Fundamentals (PLFCC)
 Plumbing Apprenticeship (ARPAO)
 Precision Machine Basics (PMBCC)
 Precision Machine Technology - CNC and Tool and Die Technology (PMTAS)
 Precision Machine Technology – CNC Technology (PMCAS)
 Process Operations Technology – Bio-Processing (PRBPO)
 Process Operations Technology - Manufacturing Process Operations (PRMPO)
 Process Operations Technology – Nuclear Power Plant Non-Licensed Operator (PRPNO)
 Process Operations Technology – Power Plant (PRPPO)
 Production Maintenance (IPMSD)
 Professional Communication (PRCCC)
 Professional Health Studies – Dental Assisting (PHSDO)
 Professional Health Studies – General Health Studies (PHSGO)
 Professional Health Studies – Medical Assisting (PHSMO)
 Professional Health Studies – Paramedicine (PHPMO)
 Professional Skills (PSKSD)
 Programmable Logic Controllers (IPLSD)
 Publication Writing and Design (PWDCE)
 Public Health (PBHCE)
 Refrigeration (ARFSD)
 Residential Carpentry (CRCSD)
 Respiratory Care Technology (RTAAS)
 Shielded Metal Arc Welding (WSMSSD)
 Small Market Farming (HLSCC)
 Spanish for Business (SBPS1)
 Spanish for Healthcare (SMPS1)
 Stationary Engineer (PRESD)
 Surveying (CESSD)
 Theatre - Playwriting (THPCC)
 Theatre (THEAA)
 Theatre - Theatre Technology (THETC)
 Utility Line Technician (UTAAS)
 Versatilist Information Technology - Business Intelligence Systems (VBICE)
 Versatilist Information Technology - Computer Programming (VCPCE)
 Versatilist Information Technology - UNIX/Linux Operating Systems (VUXCE)
 Versatilist Information Technology (VITAS)
 Video/Audio Communication Arts - Digital Cinema (VDCC1)
 Video/Audio Communication Arts - Screenwriting (VACS1)
 Video/Audio Communication Arts - Sound Recording (VSRC1)
 Video/Audio Communication Arts (VAAAS)
 Welding Technology – Manufacturing (WELMO)
 Welding Technology – Pipe (WELPO)
 Welding Technology – Structural (WELSO)
 Welding Technology (WEAAS)

PROGRAM GROUPINGS

Art, Design and Communication (p. 50)

Business, Office and Legal (p. 71)

Community and Human Services (p. 93)

Construction (p. 106)

Culinary, Hospitality, and Horticulture (p. 121)

Health Sciences & Health Technology (p. 138)

Industrial and Transportation (p. 156)

Information Technology (p. 186)

Liberal Arts and Sciences/General Studies (p. 208)

ART, DESIGN AND COMMUNICATION

Art

- Art, associate in arts degree (p. 50)

Communications

- Global Perspectives, career certificate (p. 51)
- Language Interpretation, certificate of achievement (p. 52)
- Professional Communication, career certificate (p. 52)

Design, Interactivity, and Media Arts

- Design, Interactivity, and Media Arts Degree Options (p. 53)
 - Design, Interactivity, and Media Arts - 2-D Animation (p. 53)
 - Design, Interactivity, and Media Arts - 3-D Animation and Games (p. 54)
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 - Design, Interactivity, and Media Arts - Media Generalist (p. 58)
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 - Design, Interactivity, and Media Arts - DIMA Entrepreneur (p. 62)
- Publication Writing and Design, certificate of achievement (p. 63)

Fashion Design

- Fashion Design, associate in applied science degree (p. 63)

Interior Design

- Interior Design, associate in applied science degree (p. 65)

Photography

- Photography, associate in applied science degree (p. 66)

Theatre

- Theatre, associate in arts degree (p. 67)
- Theatre - Theatre Technology, certificate of achievement (p. 67)
- Theatre - Playwriting, career certificate (p. 68)

Video/Audio Communication Arts

- Video/Audio Communication Arts, associate in applied science degree (p. 68)
- Video/Audio Communication Arts - Digital Cinema, certificate of achievement (p. 69)
- Video/Audio Communication Arts - Screenwriting, certificate of achievement (p. 69)

- Video/Audio Communication Arts - Sound Recording, certificate of achievement (p. 70)

Art

Art is a visual arts discipline in which traditional media is used in the creation of two and three dimensional artwork such as drawing, painting, sculpture, printmaking, ceramics, and jewelry.

Degree: Associate in Arts

Art (ARTAA)

Award: Associate in arts degree

Program location: Elkhorn Valley Campus

The Art program combines the acquisition of traditional art skills learned through conceptual and visual experience as well as electronic technologies. This degree prepares students to enter a four-year fine arts program.

Graduation Requirements

General education	31.5
Major requirements	69.0
Total credit hours required	100.5

General education requirements (31.5 credit hrs.)

The general education requirements for this degree program exceed the minimum standard number of hours. For more information, contact Student Services.

Communications

ENGL 1010	English Composition I	4.5
ENGL 1020	English Composition II	4.5
SPCH 1110	Public Speaking	4.5

Humanities/social sciences

Humanities/social sciences 4.5

See Humanities/social sciences course options (p. 42)

Quantitative/numeracy skills

MATH 1310	Intermediate Algebra	4.5
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Additional

HMRL 1010	Human Relations Skills	4.5
INFO 1001	Information Systems and Literacy	4.5

Major requirements for Art (69.0 credit hrs.)

ARTS 1010	Elementary Drawing	4.5
ARTS 1020	2-D Design	4.5
ARTS 1030	3-D Design	4.5
ARTS 1110	Art History-Ancient to Gothic	4.5
ARTS 1120	Art History-Renaissance to Modern	4.5
ARTS 2010	Life Drawing	4.5

ARTS 2020	Elementary Painting	4.5
ARTS 2030	Elementary Sculpture	4.5
ARTS 2040	Elementary Printmaking	4.5
DIMA 1110	Digital Design: Raster OR	4.5
DIMA 1120	Digital Design: Vector	4.5
PHOT 1005	Basic Photography I - Digital	6.0

Select 18.0 credit hours from the following:

When selecting electives, students should check for required prerequisites to design a complete academic plan.

ARTS 1000	Introduction to the Visual Arts	4.5	
ARTS 1050	Creative Careers	4.5	
ARTS 2025	Watercolor	4.5	
ARTS 2050	Elementary Ceramics	4.5	
ARTS 2060	Elementary Jewelry	4.5	
ARTS 2110	Intermediate Drawing	4.5	
ARTS 2120	Intermediate Painting	4.5	
ARTS 2130	Intermediate Sculpture	4.5	
ARTS 2140	Intermediate Printmaking	4.5	
ARTS 2150	Intermediate Ceramics	4.5	
ARTS 2160	Intermediate Jewelry	4.5	
ARTS 2220	Art Gallery Management	4.5	
ARTS 2230	Native American Art	4.5	
ARTS 2560	Portfolio Development and Professional Practice	4.5	
ARTS 2900	Special Topics in Art	variable	
ARTS 2981	Internship	variable	
BSAD 1250	Introduction to Not-for-Profit Management	4.5	
DIMA	Course of choice except DIMA 2500		
PHOT	Course of choice		

Students may select multiple DIMA or PHOT courses if so desired.

For the most current transfer listings, visit www.mccneb.edu/articulation.

Art Curriculum Plan

Below is a suggested guide for students planning to transfer to four-year institutions after two years of full-time study.

First Year**First quarter (Fall)**

ARTS 1010	Elementary Drawing OR	4.5
ARTS 1020	2-D Design	4.5
ARTS 1110	Art History-Ancient to Gothic	4.5
	OR	
ARTS 1120	Art History-Renaissance to Modern	4.5
ENGL 1010	English Composition I	4.5

INFO 1001	Information Systems and Literacy	4.5
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Second quarter (Winter)

ARTS 1010	Elementary Drawing OR	4.5
ARTS 1020	2-D Design	4.5
ARTS 1110	Art History-Ancient to Gothic	4.5
	OR	
ARTS 1120	Art History-Renaissance to Modern	4.5
ENGL 1020	English Composition II	4.5
MATH 1310	Intermediate Algebra	4.5

Third quarter (Spring)

ARTS 1030	3-D Design	4.5
ARTS 2010	Life Drawing	4.5
HMRL 1010	Human Relations Skills Humanities	4.5

Second Year**Fifth quarter (Fall)**

ARTS 2020	Elementary Painting	4.5
ARTS 2030	Elementary Sculpture	4.5
ARTS	ARTS Elective	4.5
SPCH 1110	Public Speaking	4.5

Sixth quarter (Winter)

ARTS 2040	Elementary Printmaking	4.5
ARTS	ARTS Elective	4.5
DIMA 1120	Digital Design: Vector OR	4.5
DIMA 1110	Digital Design: Raster	4.5

Seventh quarter (Spring)

PHOT 1005	Basic Photography I - Digital	6.0
ARTS	ARTS Elective	4.5
ARTS	ARTS Elective	4.5

Communications**Certificate of Achievement:**

Language Interpretation

Career Certificates:

Global Perspectives

Professional Communication

Global Perspectives (GLPCC)

Award: Career certificate

Pathway to associate degree: General Studies (GSAAS)

Students earning this career certificate increase their knowledge of global and cultural issues, fulfilling the need to understand and facilitate intercultural interactions for careers in today's increasingly global environment.

Gainful employment data for this program (such as costs and jobs related to the program) can be found at www.mccneb.edu/Current-Students/Resources/Student-

Services-SOS/Student-Right-to-Know.aspx.

Requirements for Global Perspectives career certificate (27.0 credit hrs.)

ARTS 1110	Art History-Ancient to Gothic	4.5
GEOG 1050	Introduction to Human Geography	4.5
HIST 1120	World Civilization from 1500 to Present	4.5
HUMS 1150	The Humanities in the Non-Western World	4.5
PHIL 2200	Introduction to Comparative Religion	4.5
SOCI 1250	Introduction to Anthropology	4.5

Language Interpretation (LGICE)

Award: Certificate of achievement

Pathway to associate degree: General Studies (GSAAS)

Program location: Online

This certificate offers students the opportunity to improve their language interpreting skills while earning a certificate in interpreting entirely online. Specially designed courses help up-and-coming interpreters learn the skills required to excel in this rewarding field.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Humanities-and-Visual-Arts/Humanities/Language-Interpretation.aspx.

Graduation Requirements

General education	13.5
Major requirements	36.0
Total credit hours required	49.5

General education requirements (13.5 credit hrs.)

Communications

ENGL 1010	English Composition I	4.5
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Social sciences

Social sciences	4.5
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See Social Sciences course options (p. 42)

Quantitative/numeracy skills

MATH 1220	Business Mathematics	4.5
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Major requirements for Language Interpretation (36.0 credit hrs.)

Initial course sequence

Students must take all courses

LANG 1110	Introduction to Language Interpretation	4.5
LANG 1120	Interpreting Ethics	4.5
LANG 1130	Emphasis Seminar	4.5

Specialty course sequences

Students must complete one area of specialization and the special topics course

Community specialization

LANG 2110	Fundamentals of Community Interpretation	4.5
LANG 2120	Community Interpretation - Terminology and Sight Translation	4.5
LANG 2130	Consecutive Interpretation - Community	4.5
LANG 2140	Simultaneous Interpretation - Community	4.5

Legal specialization

LANG 2210	Fundamentals of Legal Interpretation	4.5
LANG 2220	Legal Terminology and Sight Translation	4.5
LANG 2230	Consecutive Interpretation - Legal	4.5
LANG 2240	Simultaneous Interpretation - Legal	4.5

Medical specialization

LANG 2310	Fundamentals of Medical Interpretation	4.5
LANG 2320	Medical Terminology and Sight Translation	4.5
LANG 2330	Consecutive Interpretation - Medical	4.5
LANG 2340	Simultaneous Interpretation - Medical	4.5
LANG 2900	Special Topics in Languages	variable

Language Interpretation Curriculum Guide

Below is a suggested guide for students planning to complete the Language Interpretation certificate after one year of full-time study.

First Year

First quarter (Fall)

ENGL 1010	English Composition I	4.5
LANG 1110	Introduction to Language Interpretation	4.5
MATH 1220	Business Mathematics	4.5

Second quarter (Winter)

LANG 1120	Interpreting Ethics	4.5
LANG 1130	Emphasis Seminar	4.5
Social sciences		4.5

Third quarter (Spring)

Specialty course	4.5
Specialty course	4.5

Fourth quarter (Summer)

LANG 2900	Special Topics in Languages	variable
Specialty course	4.5	
Specialty course	4.5	

Professional Communication (PRCCC)

Award: Career certificate

Pathway to associate degree: General Studies (GSAAS)

This career certificate prepares students to communicate more effectively in a variety of professional settings.

Requirements for Professional Communication career certificate (27.0 credit hrs.)

ENGL 1220	Technical Writing	4.5
	OR	
ENGL 1230	Business Writing	4.5
ENGL 1240	Oral and Written Reports	4.5
SPCH 1110	Public Speaking	4.5
PHIL 1030	Professional Ethics	4.5

Electives - Select one of the following three areas of emphasis:

Creative Communication

ENGL 1310	Creative Writing	4.5
ENGL 1320	Introduction to Publication	4.5

Not-for-Profit Communication

BSAD 1250	Introduction to Not-for-Profit Management	4.5
ENGL 2210	Grant Writing	4.5

Group Communication

SPCH 1220	Communication in Small Groups	4.5
SPCH 1300	Interpersonal Communication	4.5

Design, Interactivity, and Media Arts

The Design, Interactivity, and Media Arts program provides a creative environment where students develop their visual problem-solving skills through the study of media, theory, and practices. The curriculum emphasizes a visual and conceptual approach to image construction and manipulation on the computer through a foundation of courses that include art, computer graphics, and typography. This core provides a basis for choosing an area of concentration for further study.

The program awards a customizable associate in applied science degree. Students may tailor their degree to emphasize 3-D animation and games, 2-D animation, interactive media and web design, motion graphics, or graphic design. Students may also follow a generalist path by choosing a variety of courses and media.

Degree: Associate in Applied Science

- Design, Interactivity, and Media Arts - 2-D Animation
- Design, Interactivity, and Media Arts - 3-D Animation and Games
- Design, Interactivity, and Media Arts - Graphic Design
- Design, Interactivity, and Media Arts - Illustration
- Design, Interactivity, and Media Arts - Media Generalist
- Design, Interactivity, and Media Arts - Motion Graphics
- Design, Interactivity, and Media Arts - Web Design
- Design, Interactivity, and Media Arts - DIMA Entrepreneur

Certificate of Achievement:

- Publication Writing and Design (leads to general studies degree)

Design, Interactivity, and Media Arts Degree Options

Award: Associate in applied science degree

Program location: Elkhorn Valley Campus for all; Graphic Design and Web Design also at Fort Omaha Campus

Options available under this degree are:

- Design, Interactivity, and Media Arts - 2-D Animation (DI2DO) (p. 53)
- Design, Interactivity, and Media Arts - 3-D Animation and Games (DI3DO) (p. 54)
- Design, Interactivity, and Media Arts - Graphic Design (DIGDO) (p. 56)
- Design, Interactivity, and Media Arts - Illustration (DIILO) (p. 57)
- Design, Interactivity, and Media Arts - Media Generalist (DIMGO) (p. 58)
- Design, Interactivity, and Media Arts - Motion Graphics (DIMOO) (p. 59)
- Design, Interactivity, and Media Arts - Web Design (DIWDO) (p. 60)
- Design, Interactivity, and Media Arts - DIMA Entrepreneur (DIENO) (p. 62)

Design, Interactivity, and Media Arts - 2-D Animation (DI2DO)

This concentration focuses on basic 2-D principles of animation and time-based art. Career opportunities include film animation, multimedia and web interface design, and more.

Graduation Requirements

General education	27.0
Major requirements	27.0
Concentration requirements	54.0
Total credit hours required	108.0

General education requirements (27.0 credit hrs.)

Communications

ENGL 1010	English Composition I	4.5
ENGL 1020	English Composition II	4.5

Humanities/social sciences

ARTS 1110	Art History-Ancient to Gothic	4.5
	OR	
ARTS 1120	Art History-Renaissance to Modern	4.5

Quantitative/numeracy skills

Mathematics or Financial Literacy	4.5
See Quantitative/numeracy skills course options (p. 44)	

Additional

INFO 1001	Information Systems and Literacy	4.5
HMRL 1010	Human Relations Skills	4.5

	OR		
RDL5 1200	College Success Strategies	☞	4.5

Requirements

Tier I - Major Requirements (27.0 credit hrs.)

Students must take all courses

ARTS 1010	Elementary Drawing	4.5
ARTS 1020	2-D Design	4.5
DIMA 1110	Digital Design: Raster	4.5
DIMA 1120	Digital Design: Vector	4.5
DIMA 1310	Typography I	4.5
DIMA 1450	Design for Motion Graphics I	4.5

Tier II - Required Concentration (45.0 credit hrs.)

DIMA 1220	Character, Narrative, and Storyboard Development	4.5
DIMA 1230	Drawing for Electronic Media	4.5
DIMA 1410	2-D Animation and Compositing I	4.5
DIMA 1411	History of Animation	4.5
DIMA 1510	Interactive 2-D Design I	4.5
DIMA 1620	Introduction to 3-D Modeling and Animation	4.5
DIMA 2210	Electronic Illustration	4.5
DIMA 2410	2-D Animation and Compositing II	4.5
DIMA 2840	Projects Development	4.5
ARTS 2010	Life Drawing	4.5

Tier III - Electives (9.0 credit hrs.)

Select 9.0 credit hours from the following:

DIMA 1240	Character Design 1	☺	4.5
DIMA 1400	Game Design Fundamentals	4.5	
DIMA 1455	Introduction to Stop-Motion Animation	4.5	
DIMA 1500	Web Design	4.5	
DIMA 2450	Design for Motion Graphics II	4.5	
DIMA 2510	Interactive 2-D Design II	4.5	
DIMA 2900	Special Topics in DIMA	variable	
DIMA 2981	Internship	4.5	
ARTS 2020	Elementary Painting	4.5	
ARTS 2025	Watercolor	4.5	
PHOT 1005	Basic Photography I - Digital	6.0	
PHOT 1500	Moving Image Lab	6.0	
VACA 1020	Audio I	4.5	
VACA 1110	Introduction to Scriptwriting	4.5	
VACA 1130	Video I - Studio	4.5	
VACA 2120	Screenwriting Principles	4.5	

Design Interactivity and Media Arts - 2-D

Animation Curriculum Plan

Below is a suggested guide for students planning careers in 2-D animation after two years of full-time study.

First Year

Quarter One

ARTS 1010	Elementary Drawing	4.5
DIMA 1110	Digital Design: Raster	4.5
DIMA 1120	Digital Design: Vector	4.5
	Gen. Ed.	4.5

Quarter Two

ARTS 1020	2-D Design	4.5
DIMA 1310	Typography I	4.5
DIMA 1450	Design for Motion Graphics I	4.5
DIMA 1220	Character, Narrative, and Storyboard Development	4.5

Quarter Three

DIMA 1230	Drawing for Electronic Media	4.5
DIMA 1620	Introduction to 3-D Modeling and Animation	4.5
DIMA 1411	History of Animation	4.5
	Gen. Ed.	4.5

Second Year

Quarter One

DIMA 1510	Interactive 2-D Design I	4.5
DIMA 1410	2-D Animation and Compositing I	4.5
ARTS 2010	Life Drawing	4.5
	Gen. Ed.	4.5

Quarter Two

DIMA 2210	Electronic Illustration	4.5
	Gen. Ed.	4.5
	Tier 3 Elective	4.5

Quarter Three

	Gen. Ed.	4.5
	Gen. Ed.	4.5
	Tier 3 Elective	4.5
DIMA 2840	Projects Development	4.5

Design, Interactivity, and Media Arts - 3-D Animation and Games (DI3DO)

Students create models, characters, and imaginative spaces that are the foundation of 3-D film animation and the gaming industry. These skills also apply to marketing, web design, and social media.

Graduation Requirements

General education	27.0
Major requirements	27.0
Concentration requirements	54.0
Total credit hours required	108.0

General education requirements (27.0 credit hrs.)

Communications

ENGL 1010	English Composition I	☞ ☺	4.5
ENGL 1020	English Composition II	☞ ☺	4.5

Humanities/social sciences

ARTS 1110	Art History-Ancient to Gothic	☞ ☺	4.5
	OR		

ARTS 1120	Art History-Renaissance to Modern ☞ ☹	4.5	PHOT 1500	Moving Image Lab	6.0
Quantitative/numeracy skills			VACA 1020	Audio I	4.5
	Mathematics or Financial Literacy	4.5	VACA 1110	Introduction to Scriptwriting	4.5
See Quantitative/numeracy skills course options (p. 44)					
Additional					
INFO 1001	Information Systems and Literacy ☞ ☹	4.5	VACA 1130	Video I - Studio	4.5
HMRL 1010	Human Relations Skills ☞ ☹ OR	4.5	VACA 2120	Screenwriting Principles	4.5
RCLS 1200	College Success Strategies ☞	4.5	VACA 2220	Digital Media Editing	4.5

Requirements

Tier I - Major Requirements (27.0 credit hrs.)

Students must take all courses

ARTS 1010	Elementary Drawing	4.5
ARTS 1020	2-D Design	4.5
DIMA 1110	Digital Design: Raster	4.5
DIMA 1120	Digital Design: Vector	4.5
DIMA 1310	Typography I	4.5
DIMA 1450	Design for Motion Graphics I	4.5

Tier II - Required Concentration (45.0 credit hrs.)

DIMA 1220	Character, Narrative, and Storyboard Development	4.5
DIMA 1230	Drawing for Electronic Media	4.5
DIMA 1400	Game Design Fundamentals	4.5
DIMA 1411	History of Animation	4.5
DIMA 1455	Introduction to Stop-Motion Animation	4.5
DIMA 1620	Introduction to 3-D Modeling and Animation	4.5
DIMA 2620	3-D Character Development OR	4.5
DIMA 2625	3-D Modeling for Animation and Games	4.5
DIMA 2640	3-D Lab	4.5
DIMA 2700	3-D Game Development	4.5
DIMA 2840	Projects Development	4.5

Tier III - Electives (9.0 credit hrs.)

Select 9.0 credit hours from the following:

DIMA 1240	Character Design 1 ☹	4.5
DIMA 1410	2-D Animation and Compositing I	4.5
DIMA 1500	Web Design	4.5
DIMA 1510	Interactive 2-D Design I	4.5
DIMA 2210	Electronic Illustration	4.5
DIMA 2410	2-D Animation and Compositing II	4.5
DIMA 2450	Design for Motion Graphics II	4.5
DIMA 2900	Special Topics in DIMA	variable
DIMA 2981	Internship	4.5
ARTS 1030	3-D Design	4.5
ARTS 2010	Life Drawing	4.5
PHOT 1005	Basic Photography I - Digital	6.0

Design Interactivity and Media Arts - 3-D Animation and Games Curriculum Plan

Below is a suggested guide for students planning careers in 3-D animation after two years of full-time study.

First Year

Quarter One

ARTS 1010	Elementary Drawing	4.5
DIMA 1110	Digital Design: Raster	4.5
DIMA 1120	Digital Design: Vector Gen. Ed.	4.5

Quarter Two

ARTS 1020	2-D Design	4.5
DIMA 1310	Typography I	4.5
DIMA 1400	Game Design Fundamentals	4.5
DIMA 1220	Character, Narrative, and Storyboard Development	4.5

Quarter Three

DIMA 1230	Drawing for Electronic Media	4.5
DIMA 1620	Introduction to 3-D Modeling and Animation	4.5
DIMA 1411	History of Animation Gen. Ed.	4.5

Second Year

Quarter One

DIMA 1450	Design for Motion Graphics I	4.5
DIMA 2700	3-D Game Development	4.5
DIMA 2625	3-D Modeling for Animation and Games Gen. Ed.	4.5

Quarter Two

DIMA 2640	3-D Lab	4.5
DIMA 1455	Introduction to Stop-Motion Animation Gen. Ed.	4.5
	Tier 3 Elective	4.5

Quarter Three

	Gen. Ed.	9.0
	Gen. Ed.	4.5
	Tier 3 Elective	4.5
DIMA 2840	Projects Development	4.5

Design, Interactivity, and Media Arts - Graphic Design (DIGDO)

Students combine creative problem-solving with visual, technical, and artistic skills to communicate messages to a specific audience. Design for print is the emphasis of this program.

Graduation Requirements

General education	27.0
Major requirements	27.0
Concentration requirements	54.0
Total credit hours required	108.0

General education requirements (27.0 credit hrs.)

Communications

ENGL 1010	English Composition I	4.5
ENGL 1020	English Composition II	4.5

Humanities/social sciences

ARTS 1110	Art History-Ancient to Gothic	4.5
	OR	
ARTS 1120	Art History-Renaissance to Modern	4.5

Quantitative/numeracy skills

Mathematics or Financial Literacy	4.5
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See Quantitative/numeracy skills course options (p. 44)

Additional

INFO 1001	Information Systems and Literacy	4.5
	OR	
HMRL 1010	Human Relations Skills	4.5
	OR	
RDLS 1200	College Success Strategies	4.5

Requirements

Tier I - Major Requirements (27.0 credit hrs.)

Students must take all courses

ARTS 1010	Elementary Drawing	4.5
ARTS 1020	2-D Design	4.5
DIMA 1110	Digital Design: Raster	4.5
DIMA 1120	Digital Design: Vector	4.5
DIMA 1310	Typography I	4.5
DIMA 1450	Design for Motion Graphics I	4.5

Tier II - Required Concentration (45.0 credit hrs.)

DIMA 1305	Concept Development	4.5
DIMA 1315	Graphic Design Basics	4.5
DIMA 1320	History of Graphic Design	4.5
DIMA 1325	Layout	4.5
DIMA 1500	Web Design	4.5
DIMA 2300	Logo Design and Branding	4.5
DIMA 2310	Information Design	4.5
DIMA 2350	Typography II	4.5
DIMA 2352	Publication Design	4.5
DIMA 2810	Portfolio Development	4.5

Tier III - Electives (9.0 credit hrs.)

DIMA 1200	Illustration I	4.5
DIMA 1530	Designing with WordPress	4.5
DIMA 2200	Illustration II	4.5
DIMA 2351	Package Design	4.5
DIMA 2900	Special Topics in DIMA	variable
DIMA 2981	Internship	4.5
ENTR 1050	Introduction to Entrepreneurship	4.5
INFO 1311	Web Page Creation	4.5
INFO 1955	How to Build Almost Anything	4.5

Design, Interactivity, and Media Arts - Graphic Design Curriculum Plan

Below is a suggested guide for students planning careers in graphic design after two years of full-time study.

First Year

Quarter One

DIMA 1110	Digital Design: Raster	4.5
DIMA 1120	Digital Design: Vector	4.5
DIMA 1315	Graphic Design Basics	4.5
ARTS 1020	2-D Design	4.5

Quarter Two

ARTS 1010	Elementary Drawing	4.5
DIMA 1310	Typography I	4.5
DIMA 1305	Concept Development	4.5
	Gen. Ed.	4.5

Quarter Three

DIMA 1325	Layout	4.5
DIMA 1320	History of Graphic Design	4.5
DIMA 1450	Design for Motion Graphics I	4.5
	Gen. Ed.	4.5

Second Year

Quarter One

DIMA 2300	Logo Design and Branding	4.5
DIMA 2350	Typography II	4.5
DIMA 1500	Web Design	4.5
	Gen. Ed.	4.5

Quarter Two

DIMA 2310	Information Design	4.5
DIMA 2352	Publication Design	4.5
	Gen. Ed.	4.5
	Tier 3 Elective	4.5

Quarter Three

	Gen. Ed.	4.5
	Gen. Ed.	4.5
	Tier 3 Elective	4.5
DIMA 2810	Portfolio Development	4.5

Select 9.0 credit hours from the following:

Design, Interactivity, and Media Arts - Illustration (DILO)

Students visually solve problems through the use of traditional and digital media as well as introductory animation skills to create visuals in support of a communication idea, mood, and/or concept.

Graduation Requirements

General education	27.0
Major requirements	27.0
Concentration requirements	54.0-55.5
Total credit hours required	108.0-109.5

General education requirements (27.0 credit hrs.)

Communications

ENGL 1010	English Composition I	4.5
ENGL 1020	English Composition II	4.5

Humanities/social sciences

ARTS 1110	Art History-Ancient to Gothic	4.5
	OR	
ARTS 1120	Art History-Renaissance to Modern	4.5

Students must select one of the above to satisfy the Humanities gen ed requirement. If desired, the other course may be taken to satisfy 4.5 credit hours of the Tier III electives requirement. However, students may not use the same course to satisfy both requirements.

Quantitative/numeracy skills

Mathematics or Financial Literacy	4.5
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See Quantitative/numeracy skills course options (p. 44)

Additional

INFO 1001	Information Systems and Literacy	4.5
HMRL 1010	Human Relations Skills	4.5
	OR	
RDLS 1200	College Success Strategies	4.5

Requirements

Tier I - Major Requirements (27.0 credit hrs.)

Students must take all courses

ARTS 1010	Elementary Drawing	4.5
ARTS 1020	2-D Design	4.5
DIMA 1110	Digital Design: Raster	4.5
DIMA 1120	Digital Design: Vector	4.5
DIMA 1310	Typography I	4.5
DIMA 1450	Design for Motion Graphics I	4.5

Tier II - Required Concentration (45.0 credit hrs.)

DIMA 1200	Illustration I	4.5
DIMA 1220	Character, Narrative, and Storyboard Development	4.5
DIMA 1230	Drawing for Electronic Media	4.5
DIMA 2200	Illustration II	4.5

DIMA 2210	Electronic Illustration	4.5
DIMA 2840	Projects Development	4.5
ARTS 2010	Life Drawing	4.5
ARTS 2020	Elementary Painting	4.5
ARTS 2040	Elementary Printmaking	4.5
ARTS 2110	Intermediate Drawing	4.5

Tier III - Electives (9.0-10.5 credit hrs.)

Select 9.0 - 10.5 credit hours from the following:

DIMA 1240	Character Design 1	4.5
DIMA 1305	Concept Development	4.5
DIMA 2450	Design for Motion Graphics II	4.5
DIMA 2900	Special Topics in DIMA	variable
DIMA 2981	Internship	4.5
ARTS 1110	Art History-Ancient to Gothic	4.5
	OR	
ARTS 1120	Art History-Renaissance to Modern	4.5
ARTS 1050	Creative Careers	4.5
ARTS 1030	3-D Design	4.5
ARTS 2025	Watercolor	4.5
ENTR 1050	Introduction to Entrepreneurship	4.5
PHOT 1005	Basic Photography I - Digital	6.0

Design Interactivity and Media Arts - Illustration Curriculum Plan

Below is a suggested guide for students planning careers in illustration after two years of full-time study.

First Year

Quarter One

ARTS 1010	Elementary Drawing	4.5
ARTS 1020	2-D Design	4.5
DIMA 1110	Digital Design: Raster	4.5
	Gen. Ed.	4.5

Quarter Two

DIMA 1120	Digital Design: Vector	4.5
ARTS 2010	Life Drawing	4.5
DIMA 1450	Design for Motion Graphics I	4.5
	Gen. Ed.	4.5

Quarter Three

ARTS 2110	Intermediate Drawing	4.5
DIMA 1310	Typography I	4.5
DIMA 2210	Electronic Illustration	4.5
	Gen. Ed.	4.5

Second Year

Quarter One

ARTS 2020	Elementary Painting	4.5
DIMA 1200	Illustration I	4.5
DIMA 1230	Drawing for Electronic Media	4.5
	Gen. Ed.	4.5

Quarter Two

ARTS 2040	Elementary Printmaking	4.5
DIMA 2200	Illustration II	4.5
DIMA 1220	Character, Narrative, and Storyboard Development	4.5
	Gen. Ed.	4.5

Quarter Three

DIMA 2840	Projects Development	4.5
	Gen. Ed.	4.5
	Tier 3 Elective	4.5
	Tier 3 Elective	4.5

Design, Interactivity, and Media Arts - Media Generalist (DIM GO)

The generalist option allows students to customize their degree to meet their unique career goals.

Graduation Requirements

General education	27.0
Major requirements	27.0
Concentration requirements	54.0-55.5
Total credit hours required	108.0-109.5

General education requirements (27.0 credit hrs.)**Communications**

ENGL 1010	English Composition I	4.5
ENGL 1020	English Composition II	4.5

Humanities/social sciences

ARTS 1110	Art History-Ancient to Gothic	4.5
	OR	
ARTS 1120	Art History-Renaissance to Modern	4.5

Students must select one of the above to satisfy the Humanities gen ed requirement. If desired, the other course may be taken to satisfy 4.5 credit hours of the Tier III electives requirement. However, students may not use the same course to satisfy both requirements.

Quantitative/numeracy skills

Mathematics or Financial Literacy	4.5
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See Quantitative/numeracy skills course options (p. 44)

Additional

INFO 1001	Information Systems and Literacy	4.5
HMRL 1010	Human Relations Skills	4.5
	OR	
RDLS 1200	College Success Strategies	4.5

Requirements**Tier I - Major Requirements (27.0 credit hrs.)**

Students must take all courses

ARTS 1010	Elementary Drawing	4.5
ARTS 1020	2-D Design	4.5
DIMA 1110	Digital Design: Raster	4.5
DIMA 1120	Digital Design: Vector	4.5
DIMA 1310	Typography I	4.5

DIMA 1450	Design for Motion Graphics I	4.5
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Tier II - Required Concentration (45.0 credit hrs.)

DIMA 1200	Illustration I	4.5
DIMA 1220	Character, Narrative, and Storyboard Development	4.5
DIMA 1230	Drawing for Electronic Media	4.5
DIMA 1305	Concept Development	4.5
DIMA 1320	History of Graphic Design	4.5
	OR	
DIMA 1411	History of Animation	4.5
DIMA 1400	Game Design Fundamentals	4.5
DIMA 1410	2-D Animation and Compositing I	4.5
	OR	
DIMA 1455	Introduction to Stop-Motion Animation	4.5
DIMA 1500	Web Design	4.5
DIMA 1620	Introduction to 3-D Modeling and Animation	4.5
DIMA 2840	Projects Development	4.5

Tier III - Electives (9.0 - 10.5 credit hrs.)**Select 9.0 - 10.5 credit hours from the following:**

DIMA 1240	Character Design 1	4.5
DIMA 1315	Graphic Design Basics	4.5
DIMA 1325	Layout	4.5
DIMA 1510	Interactive 2-D Design I	4.5
DIMA 1520	UI/UX	4.5
DIMA 1530	Designing with WordPress	4.5
DIMA 1540	Mobile App Design	4.5
DIMA 2200	Illustration II	4.5
DIMA 2210	Electronic Illustration	4.5
DIMA 2300	Logo Design and Branding	4.5
DIMA 2410	2-D Animation and Compositing II	4.5
DIMA 2450	Design for Motion Graphics II	4.5
DIMA 2510	Interactive 2-D Design II	4.5
DIMA 2620	3-D Character Development	4.5
DIMA 2625	3-D Modeling for Animation and Games	4.5
DIMA 2640	3-D Lab	4.5
DIMA 2700	3-D Game Development	4.5
DIMA 2900	Special Topics in DIMA	variable
DIMA 2981	Internship	4.5
ARTS 1030	3-D Design	4.5
ARTS 1110	Art History-Ancient to Gothic	4.5
	OR	
ARTS 1120	Art History-Renaissance to Modern	4.5
	OR	
ARTS 2010	Life Drawing	4.5
ARTS 2020	Elementary Painting	4.5
ARTS 2025	Watercolor	4.5
ARTS 2030	Elementary Sculpture	4.5
ARTS 2040	Elementary Printmaking	4.5

ENTR 1050	Introduction to Entrepreneurship ☞ ☹	4.5
ENTR 2040	Entrepreneurship Feasibility Study ☞	4.5
ENTR 2050	Marketing for the Entrepreneur ☞	4.5
ENTR 2060	Entrepreneurship Legal Issues ☞	4.5
ENTR 2070	Entrepreneurship Financial Topics ☞	4.5
INFO 1002	Introduction to Information Technology ☞ ☹	4.5
INFO 1311	Web Page Creation ☞ ☹	4.5
PHOT 1005	Basic Photography I - Digital	6.0
PHOT 1025	Digital Photography	6.0
PHOT 1500	Moving Image Lab	6.0
VACA 1020	Audio I	4.5
VACA 1110	Introduction to Scriptwriting	4.5
VACA 1130	Video I - Studio	4.5
VACA 2120	Screenwriting Principles	4.5
VACA 2220	Digital Media Editing	4.5

Design Interactivity and Media Arts - Media Generalist Curriculum Plan

Below is a suggested guide for students planning careers in media generalist after two years of full-time study.

First Year

Quarter One

ARTS 1010	Elementary Drawing	4.5
ARTS 1020	2-D Design	4.5
DIMA 1110	Digital Design: Raster Gen. Ed.	4.5

Quarter Two

DIMA 1120	Digital Design: Vector	4.5
DIMA 1305	Concept Development Gen. Ed.	4.5
DIMA 1220	Character, Narrative, and Storyboard Development	4.5

Quarter Three

DIMA 1450	Design for Motion Graphics I	4.5
DIMA 1310	Typography I	4.5
DIMA 1400	Game Design Fundamentals Gen. Ed.	4.5

Second Year

Quarter One

DIMA 1200	Illustration I Gen. Ed.	4.5
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Select one course from the following:

DIMA 1411	History of Animation	4.5
DIMA 1320	History of Graphic Design	4.5

Select one course from the following:

DIMA 1455	Introduction to Stop-Motion Animation	4.5
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DIMA 1410	2-D Animation and Compositing I	4.5
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Quarter Two

DIMA 1620	Introduction to 3-D Modeling and Animation	4.5
DIMA 1500	Web Design Gen. Ed. Tier 3 Elective	4.5

Quarter Three

DIMA 2840	Projects Development Gen. Ed. Tier 3 Elective Tier 3 Elective	4.5
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Design, Interactivity, and Media Arts - Motion Graphics (DIMOO)

This concentration focuses on time-based art leading to the production of a motion graphics portfolio.

Graduation Requirements

General education	27.0
Major requirements	27.0
Concentration requirements	51.0
Total credit hours required	105.0

General education requirements (27.0 credit hrs.)

Communications

ENGL 1010	English Composition I ☞ ☹	4.5
ENGL 1020	English Composition II ☞ ☹	4.5

Humanities/social sciences

ARTS 1110	Art History-Ancient to Gothic ☞ ☹ OR	4.5
ARTS 1120	Art History-Renaissance to Modern ☞ ☹	4.5

Quantitative/numeracy skills

Mathematics or Financial Literacy	4.5
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See Quantitative/numeracy skills course options (p. 44)

Additional

INFO 1001	Information Systems and Literacy ☞ ☹	4.5
HMRL 1010	Human Relations Skills ☞ ☹ OR	4.5
RDLS 1200	College Success Strategies ☞	4.5

Requirements

Tier I - Major Requirements (27.0 credit hrs.)

Students must take all courses

ARTS 1010	Elementary Drawing	4.5
ARTS 1020	2-D Design	4.5
DIMA 1110	Digital Design: Raster	4.5
DIMA 1120	Digital Design: Vector	4.5
DIMA 1310	Typography I	4.5
DIMA 1450	Design for Motion Graphics I	4.5

Tier II - Required Concentration (42.0 credit hrs.)

DIMA 1220	Character, Narrative, and Storyboard Development	4.5
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DIMA 1230	Drawing for Electronic Media	4.5	DIMA 1450	Design for Motion Graphics I	4.5
DIMA 1410	2-D Animation and Compositing I OR	4.5	DIMA 1220	Character, Narrative, and Storyboard Development	4.5
DIMA 1455	Introduction to Stop-Motion Animation	4.5	Quarter Three		
DIMA 1411	History of Animation	4.5	DIMA 2840	Projects Development	4.5
DIMA 1620	Introduction to 3-D Modeling and Animation	4.5		Tier 3 Elective	4.5
DIMA 2210	Electronic Illustration	4.5		Tier 3 Elective	4.5
DIMA 2450	Design for Motion Graphics II	4.5		Gen. Ed.	4.5
DIMA 2840	Projects Development	4.5	Second Year		
PHOT 1500	Moving Image Lab	6.0	Quarter One		
Tier III - Electives (9.0 credit hrs.)			DIMA 1455	Introduction to Stop-Motion Animation	4.5
Select 9.0 credit hours from the following:			DIMA 1410	2-D Animation and Compositing I	4.5
DIMA 1400	Game Design Fundamentals	4.5	PHOT 1025	Digital Photography	6.0
DIMA 1410	2-D Animation and Compositing I	4.5		Gen. Ed.	4.5
DIMA 1455	Introduction to Stop-Motion Animation	4.5	Quarter Two		
DIMA 1500	Web Design	4.5	DIMA 2450	Design for Motion Graphics II	4.5
DIMA 1510	Interactive 2-D Design I	4.5	DIMA 2210	Electronic Illustration	4.5
DIMA 2410	2-D Animation and Compositing II	4.5		Gen. Ed.	4.5
DIMA 2510	Interactive 2-D Design II	4.5		Tier 3 Elective	4.5
DIMA 2620	3-D Character Development	4.5	Quarter Three		
DIMA 2625	3-D Modeling for Animation and Games	4.5		Gen. Ed.	4.5
DIMA 2640	3-D Lab	4.5		Gen. Ed.	4.5
DIMA 2700	3-D Game Development	4.5		Tier 3 Elective	4.5
DIMA 2900	Special Topics in DIMA	variable	DIMA 2840	Projects Development	4.5
DIMA 2981	Internship	4.5	Design, Interactivity, and Media Arts - Web Design (DIWDO)		
ARTS 1030	3-D Design	4.5	Students combine creative problem-solving with visual, technical, and artistic skills to create aesthetically pleasing and functional websites.		
ARTS 2010	Life Drawing	4.5	Graduation Requirements		
ARTS 2040	Elementary Printmaking	4.5	General education	27.0	
VACA 1020	Audio I	4.5	Major requirements	27.0	
VACA 1110	Introduction to Scriptwriting	4.5	Concentration requirements	54.0-55.5	
VACA 1130	Video I - Studio	4.5	Total credit hours required	108.0-109.5	
VACA 2120	Screenwriting Principles	4.5	General education requirements (27.0 credit hrs.)		
VACA 2220	Digital Media Editing	4.5	Communications		

Design, Interactivity, and Media Arts - Motion Graphics Curriculum Plan

Below is a suggested guide for students planning careers in motion graphics after two years of full-time study.

First Year

Quarter One

ARTS 1010	Elementary Drawing	4.5
DIMA 1110	Digital Design: Raster	4.5
DIMA 1120	Digital Design: Vector	4.5
	Gen. Ed.	4.5

Quarter Two

ARTS 1020	2-D Design	4.5
DIMA 1310	Typography I	4.5

ENGL 1010 English Composition I ☞ ☹ 4.5		
ENGL 1020 English Composition II ☞ ☹ 4.5		
Humanities/social sciences		
ARTS 1110	Art History-Ancient to Gothic ☞ ☹	4.5
	OR	
ARTS 1120	Art History-Renaissance to Modern ☞ ☹	4.5

Students must select one of the above to satisfy the Humanities gen ed requirement. If desired, the other course may be taken to satisfy 4.5 credit hours of the Tier III electives requirement. However, students may not use the same course to satisfy both requirements.

Quantitative/numeracy skills

Mathematics or Financial Literacy 4.5
See Quantitative/numeracy skills course options (p. 44)

Additional

INFO 1001	Information Systems and Literacy ☞ ☹	4.5
HMRL 1010	Human Relations Skills ☞ ☹ OR	4.5
RDLS 1200	College Success Strategies ☞	4.5

Requirements**Tier I - Major Requirements (27.0 credit hrs.)**

Students must take all courses

ARTS 1010	Elementary Drawing	4.5
ARTS 1020	2-D Design	4.5
DIMA 1110	Digital Design: Raster	4.5
DIMA 1120	Digital Design: Vector	4.5
DIMA 1310	Typography I	4.5
DIMA 1450	Design for Motion Graphics I	4.5

Tier II - Required Concentration (36.0 credit hrs.)

DIMA 1500	Web Design	4.5
DIMA 1510	Interactive 2-D Design I	4.5
DIMA 1520	UI/UX	4.5
DIMA 1530	Designing with WordPress	4.5
DIMA 1540	Mobile App Design	4.5
DIMA 2820	Web Design Portfolio Development	4.5
INFO 1311	Web Page Creation ☞ ☹	4.5
INFO 2340	Internet Scripting ☞	4.5

Tier III - Electives (18.0 - 19.5 credit hrs.)**Select 18.0 - 19.5 credit hours from the following:**

DIMA 1230	Drawing for Electronic Media	4.5
DIMA 1305	Concept Development	4.5
DIMA 1315	Graphic Design Basics	4.5
DIMA 1320	History of Graphic Design	4.5
DIMA 1325	Layout	4.5
DIMA 1400	Game Design Fundamentals	4.5
DIMA 1411	History of Animation	4.5
DIMA 1620	Introduction to 3-D Modeling and Animation	4.5
DIMA 2300	Logo Design and Branding	4.5
DIMA 2310	Information Design	4.5
DIMA 2350	Typography II	4.5
DIMA 2352	Publication Design	4.5
DIMA 2500	Web Design Partnership Project	4.5
DIMA 2510	Interactive 2-D Design II	4.5
DIMA 2810	Portfolio Development	4.5
DIMA 2900	Special Topics in DIMA	variable
DIMA 2981	Internship	4.5
ARTS 1110	Art History-Ancient to Gothic ☞ ☹ OR	4.5
ARTS 1120	Art History-Renaissance to Modern ☞ ☹	4.5

ENTR 1050	Introduction to Entrepreneurship ☞ ☹	4.5
ENTR 2050	Marketing for the Entrepreneur ☞	4.5
HUMS 2310	Film History and Appreciation ☞	4.5
PHOT 1005	Basic Photography I - Digital	6.0
VACA 1020	Audio I	4.5
VACA 1110	Introduction to Scriptwriting	4.5
VACA 1130	Video I - Studio	4.5
VACA 2120	Screenwriting Principles	4.5
VACA 2220	Digital Media Editing	4.5

Design, Interactivity, and Media Arts - Web Design Curriculum Plan

Below is a suggested guide for students planning careers in web design after two years of full-time study

First Year**Quarter One**

ARTS 1010	Elementary Drawing	4.5
DIMA 1110	Digital Design: Raster	4.5
DIMA 1120	Digital Design: Vector	4.5
	Gen. Ed.	4.5

Quarter Two

ARTS 1020	2-D Design	4.5
DIMA 1310	Typography I	4.5
DIMA 1450	Design for Motion Graphics I	4.5
INFO 1311	Web Page Creation ☞ ☹	4.5

Quarter Three

DIMA 1500	Web Design	4.5
DIMA 1510	Interactive 2-D Design I	4.5
	Gen. Ed.	4.5
	Gen. Ed.	4.5

Second Year**Quarter One**

DIMA 1530	Designing with WordPress	4.5
	Tier 3 Elective	4.5
	Tier 3 Elective	4.5
	Gen. Ed.	4.5

Quarter Two

DIMA 1520	UI/UX	4.5
DIMA 1540	Mobile App Design	4.5
	Tier 3 Elective	4.5
	Gen. Ed.	4.5

Quarter Three

DIMA 2820	Web Design Portfolio Development	4.5
	Tier 3 Elective	4.5
	Gen. Ed.	4.5
INFO 2340	Internet Scripting ☞	4.5

Design, Interactivity, and Media Arts - DIMA Entrepreneur (DIENO)

Students prepare for entrepreneurial self-employment opportunities.

Graduation Requirements

General education	27.0
Major requirements	27.0
Concentration requirements	49.5
Total credit hours required	103.5

General education requirements (27.0 credit hrs.)

Communications

ENGL 1010	English Composition I	☞ ☹	4.5
ENGL 1020	English Composition II	☞ ☹	4.5

Humanities/social sciences

ARTS 1110	Art History-Ancient to Gothic	☞ ☹	4.5
	OR		
ARTS 1120	Art History-Renaissance to Modern	☞ ☹	4.5

Students must select one of the above to satisfy the Humanities gen ed requirement. If desired, the other course may be taken to satisfy 4.5 credit hours of the Tier III electives requirement. However, students may not use the same course to satisfy both requirements.

Quantitative/numeracy skills

Mathematics or Financial Literacy	4.5
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See Quantitative/numeracy skills course options (p. 44)

Additional

INFO 1001	Information Systems and Literacy	☞ ☹	4.5
HMRL 1010	Human Relations Skills	☞ ☹	4.5
	OR		
RDLS 1200	College Success Strategies	☞	4.5

Requirements

Tier I - Major Requirements (27.0 credit hrs.)

Students must take all courses

ARTS 1010	Elementary Drawing	4.5
ARTS 1020	2-D Design	4.5
DIMA 1110	Digital Design: Raster	4.5
DIMA 1120	Digital Design: Vector	4.5
DIMA 1310	Typography I	4.5
DIMA 1450	Design for Motion Graphics I	4.5

Tier II - Required Concentration (27.0 credit hrs.)

ENTR 1050	Introduction to Entrepreneurship	☞ ☹	4.5
ENTR 2040	Entrepreneurship Feasibility Study	☞	4.5
ENTR 2050	Marketing for the Entrepreneur	☞	4.5
ENTR 2060	Entrepreneurship Legal Issues	☞	4.5
ENTR 2070	Entrepreneurship Financial Topics	☞	4.5
ENTR 2090	Entrepreneurship Business Plan	☞	4.5

Tier III - Electives (22.5 credit hrs.)

Select 22.5 credit hours from the following:

DIMA 1220	Character, Narrative, and Storyboard Development	4.5	
DIMA 1230	Drawing for Electronic Media	4.5	
DIMA 1305	Concept Development	4.5	
DIMA 1315	Graphic Design Basics	4.5	
DIMA 1325	Layout	4.5	
DIMA 1400	Game Design Fundamentals	4.5	
DIMA 1410	2-D Animation and Compositing I	4.5	
DIMA 1411	History of Animation	4.5	
DIMA 1500	Web Design	4.5	
DIMA 1510	Interactive 2-D Design I	4.5	
DIMA 1620	Introduction to 3-D Modeling and Animation	4.5	
DIMA 2352	Publication Design	4.5	
DIMA 2410	2-D Animation and Compositing II	4.5	
DIMA 2450	Design for Motion Graphics II	4.5	
DIMA 2510	Interactive 2-D Design II	4.5	
DIMA 2700	3-D Game Development	4.5	
DIMA 2840	Projects Development	4.5	
ARTS 1110	Art History-Ancient to Gothic	☞ ☹	4.5
	OR		
ARTS 1120	Art History-Renaissance to Modern	☞ ☹	4.5
HUMS 2310	Film History and Appreciation	☞	4.5

DIMA 2840: Students may not register for DIMA 2840 without instructor approval.

Design, Interactivity, and Media Arts - DIMA Entrepreneur Curriculum Plan

Below is a suggested guide for students planning careers in DIMA entrepreneurship after two years of full-time study.

First Year

Quarter One

ARTS 1010	Elementary Drawing	4.5	
DIMA 1110	Digital Design: Raster	4.5	
ENTR 1050	Introduction to Entrepreneurship	☞ ☹	4.5
	Gen. Ed.	4.5	

Quarter Two

ARTS 1020	2-D Design	4.5	
DIMA 1120	Digital Design: Vector	4.5	
ENTR 2040	Entrepreneurship Feasibility Study	☞	4.5
	Gen. Ed.	4.5	

Quarter Three

DIMA 1310	Typography I	4.5	
DIMA 1450	Design for Motion Graphics I	4.5	
ENTR 2050	Marketing for the Entrepreneur	☞	4.5
	Gen. Ed.	4.5	

Second Year

Quarter One

ENTR 2060	Entrepreneurship Legal Issues	☞	4.5
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	Tier 3 Elective	4.5
	Tier 3 Elective	4.5
	Gen. Ed.	4.5
Quarter Two		
ENTR 2070	Entrepreneurship Financial Topics ☑	4.5
	Tier 3 Elective	4.5
	Tier 3 Elective	4.5
	Gen. Ed.	4.5
Quarter Three		
ENTR 2090	Entrepreneurship Business Plan ☑	4.5
	Tier 3 Elective	4.5
	Gen. Ed.	4.5

Publication Writing and Design (PWDCE)

Award: Certificate of achievement

Pathway to associate degree: General Studies (GSAAS)

Program location: Elkhorn Valley Campus, Fort Omaha Campus

This certificate of achievement offers students and returning professionals the opportunity to develop a solid foundation in print publication design. Students receive instruction in creative and technical writing, copy and content editing, and the foundational techniques of layout and print design. Students completing this certificate of achievement may seek employment in corporate communications, copywriting, marketing support, or magazine and book design.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Humanities-and-Visual-Arts/Visual-Arts/Design-Interactivity-and-Media-Arts.aspx.

Graduation Requirements

General education	13.5
Major requirements	40.5
Total credit hours required	54.0

General education requirements (13.5 credit hrs.)

Communications

ENGL 1220	Technical Writing ☑	4.5
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Humanities/social sciences

ENGL 2450	Introduction to Literature ☑	4.5
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Quantitative/numeracy skills

MATH 1220	Business Mathematics ☑	4.5
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Major requirements for Publication Writing and Design (40.5 credit hrs.)

ENGL 1240	Oral and Written Reports ☑	4.5
ENGL 1310	Creative Writing	4.5
ENGL 1320	Introduction to Publication	4.5
DIMA 1120	Digital Design: Vector	4.5

DIMA 1305	Concept Development	4.5
DIMA 1310	Typography I	4.5
DIMA 1315	Graphic Design Basics	4.5
DIMA 1325	Layout	4.5
DIMA 2352	Publication Design	4.5

Fashion Design

Fashion Design is a viable career option for entrepreneurial-minded students seeking to be part of a growing fashion scene in Omaha, the Midwest, and nationally. It combines aspects of design, business, technology, and other related fields to provide a well-rounded education to aspiring fashion designers. Industry partner for the Fashion Design program is Omaha Fashion Week and the Omaha Fashion Institute.

Degree: Associate in Applied Science

Fashion Design

Fashion Design (FDAAS)

Award: Associate in applied science degree

Program location: Elkhorn Valley Campus

The Fashion Design degree is designed to provide students with fashion design principles, entrepreneurial skills, and the practical knowledge required to enter the fashion industry. The program partners with Omaha Fashion Week to provide a series of fashion apprenticeships for students in this program.

Graduation Requirements

General education	27.0
Major requirements	70.5-75.0
Total credit hours required	97.5-102.0

General education requirements (27.0 credit hrs.)

Communications

ENGL 1010	English Composition I ☑	4.5
ENGL 1020	English Composition II ☑	4.5

Humanities/social sciences

ARTS 1000	Introduction to the Visual Arts	4.5
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Quantitative/numeracy skills

Select one course from the following:

MATH 1220	Business Mathematics ☑	4.5
MATH 1260	Geometry	4.5
	MATH course higher than MATH 1260	4.5
FINA 1000	Financial Literacy ☑	4.5

Additional

INFO 1001	Information Systems and Literacy ☑	4.5
HMRL 1010	Human Relations Skills ☑	4.5
	OR	
RDLS 1200	College Success Strategies ☑	4.5

Major requirements for Fashion Design (70.5-75.0 credit hrs.)

FASH 1000	Fashion Design Principles	4.5	INFO 1001	Information Systems and Literacy ☞ ☹	4.5
FASH 1400	History of Fashion	4.5	Third Quarter		
FASH 2100	Fashion Illustration	4.5	ARTS 1020	2-D Design	4.5
FASH 2200	Digital Design Principles for Fashion Designers	4.5	INTD 1260	Color Theory	4.5
FASH 2981	Fashion Apprenticeship I	4.0	ENGL 1020	English Composition II ☞ ☹	4.5
FASH 2982	Fashion Apprenticeship II	4.0	HMRL 1010	Human Relations Skills ☞ ☹	4.5
FASH 2983	Fashion Apprenticeship III	4.0		OR	
ARTS 1010	Elementary Drawing	4.5	RDLS 1200	College Success Strategies ☞	4.5
ARTS 1050	Creative Careers	4.5	Second Year		
ARTS 1020	2-D Design	4.5	Fifth Quarter		
DIMA 1120	Digital Design: Vector	4.5	ARTS 1050	Creative Careers	4.5
INTD 1260	Color Theory	4.5	DIMA 1120	Digital Design: Vector	4.5
INTD 1310	Fundamentals of Textiles	4.5	FASH 2100	Fashion Illustration	4.5
Select three courses from the following:			FASH 2981	Fashion Apprenticeship I	4.0
ARTS 2060	Elementary Jewelry	4.5	Sixth Quarter		
ARTS 2160	Intermediate Jewelry	4.5	FASH 2200	Digital Design Principles for Fashion Designers	4.5
DIMA 1230	Drawing for Electronic Media	4.5	FASH 2982	Fashion Apprenticeship II	4.0
ENTR 1050	Introduction to Entrepreneurship ☞ ☹	4.5		Elective	4.5-6.0
ENTR 2040	Entrepreneurship Feasibility Study ☞	4.5	Seventh Quarter		
ENTR 2050	Marketing for the Entrepreneur ☞	4.5	FASH 2983	Fashion Apprenticeship III	4.0
ENTR 2090	Entrepreneurship Business Plan ☞	4.5		Elective	4.5-6.0
FASH 2900	Special Topics in Fashion Design	variable		Elective	4.5-6.0
INFO 1957	Wearable Technology	4.5			
PHOT 1005	Basic Photography I - Digital	6.0			
PHOT 1010	Basic Photography II - Film	6.0			
PHOT 1020	Color Photography	6.0			

Fashion Design Curriculum Plan

Curriculum Plan

Below is a suggested guide for students planning careers in fashion design after two years of full-time study.

First Year

First Quarter

ARTS 1000	Introduction to the Visual Arts ☹	4.5
FASH 1000	Fashion Design Principles	4.5
INTD 1310	Fundamentals of Textiles	4.5
MATH 1220	Business Mathematics ☞	4.5
	OR	
MATH 1260	Geometry	4.5
	OR	
	MATH course higher than MATH 1260	4.5

Second Quarter

ARTS 1010	Elementary Drawing	4.5
FASH 1400	History of Fashion	4.5
ENGL 1010	English Composition I ☞ ☹	4.5

Interior Design

The Interior Design program provides the student with aesthetic design knowledge and skills and a practical knowledge of retail and business procedures in the area of interior product retailing. Job opportunities include positions as interior design assistants, consultants, and sales personnel for local interior product retailers.

Degree: Associate in Applied Science

Interior Design

Interior Design (IDAS1)

Award: Associate in applied science degree

Program location: Elkhorn Valley Campus

This degree provides students with aesthetic design knowledge and skills and a practical knowledge of retail and business procedures in the area of interior products and services. Job opportunities include positions as interior design assistants and consultants and sales personnel for local interior product retailers and vendors. All INTD prefix courses, with the exception of INTD 2981, transfer to the University of Nebraska at Kearney's Interior Design program. Ask an advisor for details.

Graduation Requirements

General education	27.0
Major requirements	73.0
Total credit hours required	100.0

General education requirements (27.0 credit hrs.)

Communications

English level I	4.5
English level II	4.5

See Communications course options (p. 42)

Humanities/social sciences

ARTS 1000 Introduction to the Visual Arts ☹	4.5
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Quantitative/numeracy skills

Select one course from the following:

MATH 1220 Business Mathematics ☹	4.5
MATH 1260 Geometry	4.5
Any higher level MATH course	4.5

Additional

INFO 1001 Information Systems and Literacy ☹ ☹	4.5
HMRL 1010 Human Relations Skills ☹ ☹	4.5
OR	
RDLS 1200 College Success Strategies ☹	4.5

Major requirements for Interior Design (73.0 credit hrs.)

INTD 1100 Illustration Techniques for Interiors	3.0
INTD 1210 Foundations for Interior Design	4.5
INTD 1220 Residential Design	4.5
INTD 1230 Kitchen and Bath Design	3.0
INTD 1260 Color Theory	4.5
INTD 1310 Fundamentals of Textiles	4.5
INTD 1320 Interior Finishes and Materials	4.5

INTD 1410 History of Architecture and Interiors	4.5
INTD 1420 History of Furniture	4.5
INTD 2100 Room Rendering	4.5
INTD 2200 Digital Design Principles for Interior Designers	4.5
INTD 2250 Commercial Design	4.0
INTD 2520 Professional Practice	3.0
INTD 2940 Interior Design Capstone	3.0
INTD 2981 Internship	3.0

To register for INTD 2981 Internship, students must contact an interior design instructor and have completed a minimum of 30.0 hours in the Interior Design program.

Select 13.5 credit hours from the following:

ACCT 1050 Bookkeeping ☹	3.0
OR	
ACCT 1100 Accounting I ☹ ☹	4.0
ARTS Course of choice	4.5
BSAD 1000 Introduction to Business ☹	4.5
OR	
ENTR 1050 Introduction to Entrepreneurship ☹ ☹	4.5
BSAD 1200 Principles of Selling ☹	4.5
ENTR 2050 Marketing for the Entrepreneur ☹	4.5
ENTR 2060 Entrepreneurship Legal Issues ☹	4.5
ENTR 2070 Entrepreneurship Financial Topics ☹	4.5
INTD 2900 Special Topics in Interior Design	variable

To register for INTD 2900, students must contact an interior design instructor and have completed a minimum of 30.0 hours in the interior design program.

Interior Design Curriculum Plan

Below is a suggested guide for students planning careers in interior design after two years of full-time study.

First Year

First Quarter

INTD 1100 Illustration Techniques for Interiors	3.0
INTD 1210 Foundations for Interior Design	4.5
INTD 1310 Fundamentals of Textiles	4.5
MATH course	4.5

Second Quarter

English level I	4.5
INFO 1001 Information Systems and Literacy ☹ ☹	4.5
INTD 1220 Residential Design	4.5
INTD 1320 Interior Finishes and Materials	4.5




Third Quarter

English level II	4.5
INTD 1230 Kitchen and Bath Design	3.0
INTD 1260 Color Theory	4.5
Related discipline	4.5

Second Year**Fifth Quarter**

INTD 1410	History of Architecture and Interiors	4.5
INTD 2100	Room Rendering	4.5
	Related discipline	9.0

Sixth Quarter

INTD 1420	History of Furniture	4.5
INTD 2200	Digital Design Principles for Interior Designers	4.5
INTD 2250	Commercial Design	4.0
HMRL 1010	Human Relations Skills  	4.5
	OR	
RDLS 1200	College Success Strategies 	4.5
	Related discipline	4.5

Seventh Quarter

	Humanities/social sciences elective	4.5
INTD 2520	Professional Practice	3.0
INTD 2940	Interior Design Capstone	3.0
INTD 2981	Internship	3.0

Photography

Students in the Photography program learn to solve photographic problems through the skillful use of camera, lighting, laboratory, and electronic techniques. Included in the program are experiences in commercial, general, and digital photography. This degree is designed to transfer to area universities including UNO, UNL, and Bellevue University.

Degree: Associate in Applied Science

Photography

Photography (PTAS3)

Award: Associate in applied science degree





Program location: Elkhorn Valley Campus

This degree teaches students to solve photographic problems through the skillful use of camera, lighting, laboratory, and electronic techniques. The program includes experiences in commercial, general, and digital photography. Graduates of this program are prepared for the following employment opportunities: commercial or portrait studio, hospital or research laboratory, newspaper, photo-finishing laboratory, digital imaging service, retail photo sales, or independent business ownership.

Graduation Requirements

General education	28.5
Major requirements	76.5-79.5
Total credit hours required	105.0-108.0

General education requirements (28.5 credit hrs.)**Communications**

ENGL 1010	English Composition I  	4.5
ENGL 1020	English Composition II  	4.5

Humanities/social sciences

PHOT 1005	Basic Photography I - Digital	6.0
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
Quantitative/numeracy skills

Mathematics or Financial Literacy 4.5

See Quantitative/numeracy skills course options (p. 44)

NOTE: Students planning to transfer should select from the transfer list options at Quantitative/Numeracy Skills (p. 220)

Additional



INFO 1001	Information Systems and Literacy  	4.5
HMRL 1010	Human Relations Skills  	4.5
	OR	
RDLS 1200	College Success Strategies 	4.5

Major requirements for Photography (76.5-79.5 credit hrs.)

Students should work with faculty to select courses from the lower list that meet their career goals.

ARTS 1020	2-D Design	4.5
PHOT 1010	Basic Photography II - Film	6.0
PHOT 1015	Photographic Concepts	6.0
PHOT 1020	Color Photography	6.0
PHOT 1025	Digital Photography	6.0
PHOT 1535	Large Format Photography	6.0
PHOT 1545	Photographic Lighting	6.0
PHOT 2015	Intermediate Photographic Concepts	6.0
PHOT 2025	Intermediate Digital Photography	6.0
PHOT 2560	Portfolio Development and Professional Practice	6.0

Select 18.0 - 21.0 credit hours from the following:

ENTR 1050	Introduction to Entrepreneurship  	4.5
PHOT 1500	Moving Image Lab	6.0
PHOT 1540	Photojournalism	6.0
PHOT 1550	Experimental Photography	6.0
PHOT 2525	Advanced Digital Photography	6.0
PHOT 2535	Advanced Large Format Photography	6.0
PHOT 2545	Advanced Photographic Lighting	6.0
PHOT 2550	Advanced Experimental Photography	6.0
PHOT 2900	Special Topics in Photography	variable
PHOT 2981	Internship	variable
ARTS	Course of choice	4.5
VACA	Course of choice	4.5

Theatre

Theatre - a blend of visual arts/design, music, literature, research, physical expression, technology, and business - is the quintessential liberal arts degree. Theatre studies strengthens interpersonal communication and public presentation skills; develops critical thinking and collaborative skills; and gives a solid background in interdisciplinary arts, social awareness, and appreciation of diverse cultures.

Degree: Associate in Arts

Theatre

Certificate of Achievement:

Theatre – Theatre Technology

Career Certificate:

Theatre - Playwriting

Theatre (THEAA)**Award:** Associate in arts degree**Program location:** Elkhorn Valley Campus, Fort Omaha Campus, South Omaha Campus

This degree trains students in the history, performance, production, and cultural importance of theatre. Theatre - a blend of visual arts/design, music, literature, research, physical expression, technology, and business - is the quintessential liberal arts degree. Theatre studies strengthen interpersonal communication and public presentation skills; develop critical thinking and collaborative skills; and give a solid background in interdisciplinary arts, social awareness, and appreciation of diverse cultures. Students who successfully complete this degree can go on to a baccalaureate institution to major in theatre, speech/communications, film/digital media, or related humanities or education fields.

Graduation Requirements

General education	31.5
Major requirements	67.0
Total credit hours required	98.5

General education requirements (31.5 credit hrs.)**Communications**

ENGL 1010	English Composition I	4.5
ENGL 1020	English Composition II	4.5
SPCH 1110	Public Speaking	4.5

Humanities/social sciences

Humanities/social sciences	4.5
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See Humanities/social sciences options (p. 42)

Quantitative/numeracy skills

Mathematics or Financial Literacy	4.5
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See Quantitative/numeracy skills course options (p. 220)

Additional

HMRL 1010	Human Relations Skills	4.5
INFO 1001	Information Systems and Literacy	4.5

Major requirements for Theatre (67.0 credit hrs.)

THEA 1110	Theatre Technology I	4.0
THEA 2010	Script Analysis	4.5
THEA 2020	Fundamentals of Acting I	4.5
THEA 2030	Playwriting I	4.5

Select 31.5 credit hours from the following:

THEA 1120	Theatre Technology II	4.0
THEA 1130	Theatre Technology III	4.0
THEA 2021	Fundamentals of Acting II	4.5

THEA 2031	Playwriting II	4.5
THEA 2040	Movement for the Actor	4.5
THEA 2050	Voice for the Actor	4.5
THEA 2150	Stage Rigging	4.5
THEA 2160	Principles of Stage Lighting	4.5
THEA 2170	Stage Management	4.5
THEA 2200	Arts Administration	4.5
THEA 2900	Special Topics in Theatre	variable
	OR	
THEA 2920	Theatre Practicum	variable
THEA 2981	Cooperative Study I	4.0
THEA 2982	Cooperative Study II	4.0
THEA 2983	Cooperative Study III	4.0

Select 9.0 credit hours from the following:

THEA 1000	Introduction to Theatre	4.5
HUMS	Course of choice	4.5
MUSC	Course of choice	4.5
PHIL	Course of choice	4.5
SPCH	Course of choice	4.5

THEA 1000 is highly recommended.

Theatre - Theatre Technology (THETC)**Award:** Certificate of achievement**Pathway to associate degree:** Theatre (THEAA)**Program location:** Elkhorn Valley Campus, Fort Omaha Campus, South Omaha Campus

This certificate allows students to gain necessary skills to work behind-the-scenes in theatre doing costuming, scenery, lighting, or sound. Students accepted into the Theatre Technology Apprenticeship program are expected to spend at least 15 hours per week in training.

The Theatre Technology Apprenticeship program is a two-year program run in conjunction with the Omaha Community Playhouse. In order to satisfy the 1500-hour requirement to receive the Theatre Technology Apprenticeship Program Certificate from the U.S. Department of Labor, students are required to complete an additional 24.0 credit hours of cooperative study courses (THEA 2981–THEA 2986) beyond the MCC certificate of achievement.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academic-Programs/Programs-of-Study/Humanities-and-Visual-Arts/Visual-Arts/Theatre.aspx.

Graduation Requirements

General education	13.5
Major requirements	34.5
Total credit hours required	48.0

General education requirements (13.5 credit hrs.)**Communications**

ENGL 1010	English Composition I	4.5
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Quantitative/numeracy skills

Mathematics or Financial Literacy	4.5
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See Quantitative/numeracy skills course options (p. 44)

Humanities

Humanities 4.5

See Humanities (p. 42) course options

Major requirements for Theatre – Theatre Technology (34.5 credit hrs.)

THEA 1000	Introduction to Theatre ☑	4.5
THEA 1110	Theatre Technology I	4.0
THEA 1120	Theatre Technology II	4.0
THEA 1130	Theatre Technology III	4.0
THEA 2010	Script Analysis	4.5
THEA 2150	Stage Rigging	4.5
THEA 2160	Principles of Stage Lighting	4.5
THEA 2170	Stage Management	4.5
	OR	
THEA 2900	Special Topics in Theatre	variable

Theatre - Playwriting (THPCC)

Award: Career Certificate

Pathway to associate degree: Theatre (THEAA)

Program location: Elkhorn Valley Campus, Fort Omaha Campus, South Omaha Campus

This certificate provides students with basic skills in playwriting. Playwrights may seek commissions or play submission opportunities (workshop or full production), or they may produce their work independently.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academic-Programs/Programs-of-Study/Humanities-and-Visual-Arts/Visual-Arts/Theatre.aspx.

Requirements for Theatre - Playwriting Career Certificate (27 credit hrs.)

THEA 1000	Introduction to Theatre ☑	4.5
THEA 2010	Script Analysis	4.5
THEA 2020	Fundamentals of Acting I	4.5
THEA 2030	Playwriting I	4.5
THEA 2031	Playwriting II	4.5
ENGL 1310	Creative Writing	4.5

Video/Audio Communication Arts

The Video/Audio Communication Arts program teaches students the production process for television, film, commercial, and other media production. Students learn to use professional moving image cameras in the field and the studio. Students learn how to record quality professional audio in the field and studio. Students learn how to write scripts for feature films, commercials, and corporate industrial media. Students also learn how to edit and manipulate visual and sound media using industry standard professional tools and software.

Degree: Associate in Applied Science

Video/Audio Communication Arts

Certificate of Achievement:

Video/Audio Communication Arts – Digital Cinema

Video/Audio Communication Arts – Screenwriting

Video/Audio Communication Arts - Sound Recording

Video/Audio Communication Arts (VAAAS)

Award: Associate in applied science degree

Program location: Elkhorn Valley Campus

This degree provides students with a background in various aspects of video and audio production and post-production. Graduates of this program should be adaptable to the following employment situations: videographer for television, independent producer, or in-house production facility; technical representative for manufacturers; or reselling. This degree is designed to transfer to area universities including UNO and Bellevue University.

Graduation Requirements

General education	28.5
Major requirements	63.0
Electives	9.0-10.5

Total credit hours required 100.5-102.0

General education requirements (28.5 credit hrs.)

Communications

ENGL 1010	English Composition I ☑	4.5
ENGL 1020	English Composition II ☑	4.5

Humanities/social sciences

PHOT 1005	Basic Photography I - Digital	6.0
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Quantitative/numeracy skills

Mathematics or Financial Literacy	4.5
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See Quantitative/numeracy skills course options (p. 220)

NOTE: Students planning to transfer should select from the transfer list options at Quantitative/Numeracy Skills (p. 220)

Additional

INFO 1001	Information Systems and Literacy ☑	4.5
HMRL 1010	Human Relations Skills ☑	4.5
	OR	
RDLS 1200	College Success Strategies ☑	4.5

Major requirements for Video/Audio Communication Arts (63.0 credit hrs.)

ARTS 1020	2-D Design	4.5
DIMA 1450	Design for Motion Graphics I	4.5
PHOT 1025	Digital Photography	6.0
PHOT 1500	Moving Image Lab	6.0
VACA 1020	Audio I	4.5
VACA 1110	Introduction to Scriptwriting	4.5
VACA 1130	Video I - Studio	4.5
VACA 2120	Screenwriting Principles	4.5

VACA 2130	Video II - Field	4.5
VACA 2131	Video III - Project Development	4.5
VACA 2220	Digital Media Editing	4.5
VACA 2240	Cinematography	4.5
VACA 2540	Video Portfolio Development	3.0
VACA 2940	MetroVision Practicum	3.0
	OR	
VACA 2981	Internship	variable

Electives, select 9.0-10.5 credit hours from the following:

ARTS 1010	Elementary Drawing	4.5
DIMA 1220	Character, Narrative, and Storyboard Development	4.5
DIMA 1620	Introduction to 3-D Modeling and Animation	4.5
HUMS 2310	Film History and Appreciation ☞	4.5
PHOT 1540	Photojournalism	6.0
THEA 2010	Script Analysis	4.5
THEA 2020	Fundamentals of Acting I	4.5
THEA 2030	Playwriting I	4.5
VACA 2020	Audio II	4.5
VACA 2030	Audio III	4.5
VACA 2050	Pro-Tools	4.5
VACA 2060	Audio Mixing and Summing	4.5
VACA 2070	Modern Recording Techniques	4.5
VACA 2230	Video Post-Production	4.5
VACA 2900	Special Topics in Video/Audio	variable

Video/Audio Communication Arts - Digital Cinema (VDCC1)

Award: Certificate of achievement

Pathway to associate degree: Video/Audio Communication Arts (VAAAS)

Program location: Elkhorn Valley Campus

This certificate provides students with basic skills using tools in digital film production. Students may seek employment in entry-level production environments, freelance positions, or as independent filmmakers.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academic-Programs/Programs-of-Study/Humanities-and-Visual-Arts/Visual-Arts/Video-and-Audio-Communications.aspx.

Graduation Requirements

General education	13.5
Major requirements	37.5
Total credit hours required	51.0

General education requirements (13.5 credit hrs.)

Communications

ENGL 1010	English Composition I ☞ ☹	4.5
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Humanities/social sciences

HUMS 2310	Film History and Appreciation ☞	4.5
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Quantitative/numeracy skills

Mathematics or Financial Literacy	4.5
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See Quantitative/numeracy skills options (p. 44)

Major requirements for Video/Audio Communication Arts – Digital Cinema (37.5 credit hrs.)

PHOT 1500	Moving Image Lab	6.0
VACA 1020	Audio I	4.5
VACA 1110	Introduction to Scriptwriting	4.5
VACA 2120	Screenwriting Principles	4.5
VACA 2130	Video II - Field	4.5
VACA 2131	Video III - Project Development	4.5
VACA 2220	Digital Media Editing	4.5
VACA 2240	Cinematography	4.5

Video/Audio Communication Arts - Screenwriting (VACS1)

Award: Certificate of achievement

Pathway to associate degree: General Studies (GSAAS)

Program location: Elkhorn Valley Campus

This certificate of achievement provides students with an in-depth opportunity to learn writing for the screen in traditional media, short and feature film, and new media. Students may seek employment in the production industry as a commercial screenwriter, corporate/industrial screenwriter, or as an independent screenwriter.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academic-Programs/Programs-of-Study/Humanities-and-Visual-Arts/Visual-Arts/Video-and-Audio-Communications.aspx.

Graduation Requirements

General education	18.0
Major requirements	33.0
Total credit hours required	51.0

General education requirements (18.0 credit hrs.)

Communications

ENGL 1010	English Composition I ☞ ☹	4.5
ENGL 1020	English Composition II ☞ ☹	4.5

Humanities

HUMS 2310	Film History and Appreciation ☞	4.5
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Quantitative/numeracy skills

Mathematics or Financial Literacy	4.5
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See Quantitative/numeracy skills course options (p. 44)

Major requirements for Video/Audio Communication Arts - Screenwriting (33.0 credit hrs.)

PHOT 1500	Moving Image Lab	6.0
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THEA 2010	Script Analysis	4.5
THEA 2020	Fundamentals of Acting I	4.5
THEA 2030	Playwriting I	4.5
VACA 1110	Introduction to Scriptwriting	4.5
VACA 2120	Screenwriting Principles	4.5
VACA 2240	Cinematography	4.5

Internship must be taken for 4.5 credit hours if taken in lieu of VACA 2030 Audio III.

Video/Audio Communication Arts - Sound Recording (VSRC1)

Award: Certificate of achievement

Pathway to associate degree: General Studies (GSAAS)

Program location: Elkhorn Valley Campus

This certificate provides students with basic professional skills to work in the audio recording field. Students earning a certificate may seek employment in entry-level recording environments, including live music performance, sound for television and film, and the sound recording studio.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mcneb.edu/Academic-Programs/Programs-of-Study/Humanities-and-Visual-Arts/Visual-Arts/Video-and-Audio-Communications.aspx.

Graduation Requirements

General education	13.5
Major requirements	37.5
Total credit hours required	51.0

General education requirements (13.5 credit hrs.)

Communications

ENGL 1010	English Composition I	4.5
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Humanities/social sciences

Humanities/social sciences	4.5
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See Humanities/social sciences course options (p. 42)

Quantitative/numeracy skills

Mathematics or Financial Literacy	4.5
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See Quantitative/numeracy skills course options (p. 44)

Major requirements for Video/Audio Communication Arts – Sound Recording (37.5 credit hrs.)

Students should work with faculty to select courses from the list that meet their career goals.

PHOT 1500	Moving Image Lab	6.0
VACA 1020	Audio I	4.5
VACA 1110	Introduction to Scriptwriting	4.5
VACA 2020	Audio II	4.5
VACA 2050	Pro-Tools	4.5
VACA 2060	Audio Mixing and Summing	4.5
VACA 2070	Modern Recording Techniques	4.5
VACA 2030	Audio III	4.5
	OR	
VACA 2981	Internship	variable

BUSINESS, LEGAL AND OFFICE

Accounting/Bookkeeping

- Accounting, associate in applied science degree (p. 72)
- Bookkeeping, certificate of achievement (p. 73)

Business Management

- Business Management - Generalist, associate in applied science degree (p. 74)
- Business Management - Financial Planning, certificate of achievement (p. 77)
- Business Management - Financial Studies, certificate of achievement (p. 78)
- Business Management - Management Specialist, certificate of achievement (p. 79)
- Business Management - Not-for-Profit Management, certificate of achievement (p. 79)
- Business Transfer, associate in arts degree (p. 76)
- Financial Studies, career certificate (p. 80)
- General Management, career certificate (p. 81)
- Not-for-Profit Management, career certificate (p. 81)
- Customer Service Management, career certificate (p. 80)
- Professional Skills, career certificate (p. 81)
- Spanish for Business, career certificate (p. 81)

Entrepreneurship

- Business Start-Up, career certificate (p. 82)
- Entrepreneurship Generalist, certificate of achievement (p. 82)

Legal Studies

- Legal Studies Degree Options (p. 83)
 - Legal Studies – Legal Administrative Assistant (p. 83)
 - Legal Studies – Paralegal (p. 84)
 - Legal Studies – Pre-Law (p. 86)
- Legal Studies – Paralegal Accelerated Certificate, certificate of achievement (p. 87)
- Legal Secretary, career certificate (p. 88)
- Immigration Laws, Policies, and Procedures, career certificate (p. 88)

Office Technology

- Office Technology Degree Options (p. 89)
 - Office Technology – Administrative Assistant (p. 89)
 - Office Technology – Office Professional (p. 90)
- Office Technology - Microcomputer Office Applications, certificate of achievement (p. 91)
- Customer Service Representative, career certificate (p. 92)

Accounting/Bookkeeping

Bookkeeping, accounting, and auditing clerks are financial record keepers. They update and maintain accounting records, including those that calculate expenditures, receipts, accounts payable and receivable, and profits and loss. Bookkeepers have roles in both small businesses' and large companies' accounting departments. Responsibilities range from posting transactions and balancing to verifying and reconciling accounts. They ensure the completeness and accuracy of data and code documents according to company procedures. Auditors verify postings and documents to assure accuracy and completeness. Though bookkeeping, accounting, and auditing clerks generally do not require a bachelor's degree, to become a Certified Public Accountant (CPA) does require a bachelor's degree. The requirements to become a CPA are set by each state board of accountancy and include completing a program of study in accounting at a college or university, passing the Uniform CPA Exam, and obtaining a specific amount of professional work experience in public accounting (the required amount and type of experience varies according to licensing jurisdiction).

The skills taught in the accounting program are used by professionals in business management, public administration, entrepreneurship, finance, and other commercial fields in order to forecast and control commercial endeavors.

Bookkeeping, accounting, and auditing clerks work in an office environment. They may experience eye and muscle strain, backaches, headaches, and repetitive motion injuries from using computers on a daily basis. Clerks may have to sit for extended periods while reviewing detailed data.

Many bookkeeping, accounting, and auditing clerks work regular business hours and a standard 40-hour week, although some may work occasional evenings and weekends.

Bookkeeping, accounting, and auditing clerks may work longer hours to meet deadlines at the end of the fiscal year, during tax time, or when monthly or quarterly financial reports are being prepared. Extended work hours may also occur when yearly accounting audits are performed. Additionally, those who work in hotels, restaurants, and stores may put in overtime during peak holiday and vacation seasons.

Degree: Associate in Applied Science

Accounting

Certificate of Achievement:

Bookkeeping

Accounting (ACAAS)

Award: Associate in applied science degree

Program location: Elkhorn Valley Campus, Fort Omaha Campus, South Omaha Campus, Online

This degree aids students in developing skills, knowledge, and aptitudes necessary to seek employment in paraprofessional accounting positions. The program encompasses a broad range of accounting, business topics, and applications.

Graduation Requirements

General education	27.0
Major requirements	73.0–74.5
Total credit hours required	100.0-103.0

General education requirements (27.0 credit hrs.)

Communications

English level I	4.5
English level II	4.5

ENGL 1230 and ENGL 1240 are recommended.

See Communications course options (p. 42)

Humanities/social sciences

Select one course from the following:

ARTS 1110	Art History-Ancient to Gothic	4.5
ARTS 1120	Art History-Renaissance to Modern	4.5
ENGL 2470	Introduction to Women's Literature	4.5
ENGL 2530	Ethnic Literature	4.5
ENGL 2610	British Literature I	4.5
ENGL 2620	British Literature II	4.5
GEOG 1050	Introduction to Human Geography	4.5
HIST 1050	Introduction to Black History	4.5
HIST 1110	World Civilization from Prehistory to 1500	4.5
HIST 1120	World Civilization from 1500 to Present	4.5
HIST 2050	Modern Europe Since 1789	4.5
HUMS 1000	Humanities through the Arts	4.5
MUSC 1010	Introduction to Music I	4.5
MUSC 1020	Introduction to Music II	4.5
PHIL 2030	Introduction to Ethics	4.5
PSYC 1010	Introduction to Psychology	4.5
SOCI 1010	Introduction to Sociology	4.5
SOCI 1250	Introduction to Anthropology	4.5
SOCI 2060	Multicultural Issues	4.5
THEA 1000	Introduction to Theatre	4.5

PHIL 2030 is recommended.

Quantitative/numeracy skills

MATH 1220	Business Mathematics	4.5
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Take MATH 1220 or higher level MATH course.

Additional

HMRL 1010	Human Relations Skills	4.5
INFO 1001	Information Systems and Literacy	4.5

Major requirements for Accounting (73.0-74.5 credit hrs.)

Since the core courses for the Accounting and Business Management degrees are interchangeable, students can easily change their degree of choice during the first year of courses.

ACCT 1100	Accounting I	4.0
ACCT 1110	Accounting II	4.0
ACCT 1120	Accounting III	4.0
ACCT 2120	Intermediate Accounting I	4.0
ACCT 2130	Intermediate Accounting II	4.5
ACCT 2140	Intermediate Accounting III	4.0
ACCT 1215	QuickBooks and Excel for Small Business	4.5
OR		
ACCT 2230	Microcomputer Business Applications	4.0
ACCT 2330	Managerial Cost Accounting	4.0
ACCT 2940	Business Plan Capstone	1.5
BSAD 1000	Introduction to Business	4.5
BSAD 1010	Principles of Marketing	4.5
BSAD 1100	Business Law I	4.5
BSAD 1110	Business Law II	4.5
BSAD 2100	Principles of Management	4.5
ECON 1000	Macroeconomics	4.5
ECON 1100	Microeconomics	4.5
FINA 2230	Business Finance	4.5

ACCT 2120 can be taken concurrently with ACCT 1120.

FINA 2230: It pays to be prepared. It is strongly recommended that students complete math requirements early in the program of study. Taking FINA 2230 immediately after completing accounting courses is suggested. Additional prerequisite(s) may be required.

Select one course from the following:

ACCT 1070	Individual Income Tax Accounting	4.0
ACCT 1071	Income Taxes in Business Practice	4.5

Accounting Curriculum Plan

Below is a suggested guide for students planning to seek employment in accounting after two years of full-time study.

First Year

First quarter

ACCT 1100	Accounting I	4.0
BSAD 1000	Introduction to Business	4.5
ENGL 1010	English Composition I	4.5
OR		
ENGL 1230	Business Writing	4.5

INFO 1001	Information Systems and Literacy	✔️🗎	4.5
MATH 1220	Business Mathematics	✔️	4.5
Second quarter			
ACCT 1110	Accounting II	✔️🗎	4.0
ECON 1000	Macroeconomics	✔️	4.5
ENGL 1020	English Composition II	✔️🗎	4.5
	OR		
ENGL 1240	Oral and Written Reports	✔️	4.5
HMRL 1010	Human Relations Skills	✔️🗎	4.5
Third quarter			
ACCT 1120	Accounting III	✔️🗎	4.0
BSAD 1010	Principles of Marketing	✔️	4.5
ECON 1100	Microeconomics	✔️	4.5
	Humanities/social sciences elective		4.5
Second Year			
Fifth quarter			
ACCT 2120	Intermediate Accounting I	✔️	4.0
ACCT 2330	Managerial Cost Accounting	✔️	4.0
BSAD 1100	Business Law I	✔️	4.5
BSAD 2100	Principles of Management	✔️	4.5
Sixth quarter			
ACCT 2130	Intermediate Accounting II	✔️	4.5
ACCT 2230	Microcomputer Business Applications	✔️	4.0
BSAD 1110	Business Law II	✔️	4.5
Seventh quarter			
ACCT 2140	Intermediate Accounting III	✔️	4.0
ACCT 2940	Business Plan Capstone		1.5
FINA 2230	Business Finance	✔️	4.5
	Elective		4.0-4.5

Bookkeeping (BKPCE)

Award: Certificate of achievement

Pathway to associate degree: Business Management - Business Management Generalist (BGAAS)

Program location: Elkhorn Valley Campus, Fort Omaha Campus, South Omaha Campus

This certificate of achievement provides career preparation in bookkeeping processes. Graduates may seek employment as bookkeepers in business, industry, or government agencies.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mcneb.edu/Academics/Programs-of-Study/Business-Human-Services/Accounting.a.spx.

Graduation Requirements

General education	22.5
Major requirements	28.0-30.5
Total credit hours required	50.5-53.0

General education requirements (22.5 credit hrs.)

The general education requirement for this certificate program exceeds the minimum standard number of hours. For more information, contact Student Services.

Communications

English level I	4.5
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See Communications course options (p. 42)

Social sciences

ECON 1000	Macroeconomics	✔️	4.5
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Quantitative/numeracy skills

MATH 1220	Business Mathematics	✔️	4.5
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Take MATH 1220 or higher level MATH course

See Quantitative/numeracy skills options (p. 44)

Additional

HMRL 1010	Human Relations Skills	✔️🗎	4.5
INFO 1001	Information Systems and Literacy	✔️🗎	4.5

Major requirements for Bookkeeping (28.0-30.5 credit hrs.)

Students interested in a business degree/certificate should consult with faculty or an advisor when planning a course of study.

Select one of the following groups:

Group 1:

ACCT 1050	Bookkeeping	✔️	3.0
ACCT 1100	Accounting I	✔️🗎	4.0

Group 2:

ACCT 1100	Accounting I	✔️🗎	4.0
ACCT 1110	Accounting II	✔️🗎	4.0

Also required:

ACCT 1060	Payroll Accounting	✔️	4.5
ACCT 1215	QuickBooks and Excel for Small Business	✔️🗎	4.5
BSAD 1000	Introduction to Business	✔️	4.5
FINA 1200	Wealth-Building Fundamentals and Personal Finance	✔️	4.5

Select one course from the following:

ACCT 1220	Spreadsheet Basics for Accounting and Business		3.0
BSAD 1600	Principles of Supervision	✔️	4.5
BSAD 2100	Principles of Management	✔️	4.5
BSAD 2600	Human Resources Management	✔️	4.5

The Business program is accredited by the Accreditation Council for Business Schools and Programs (ACBSP), an accrediting organization for institutions that support and have their emphasis directed toward excellence in teaching.

Business Management

The nature of managerial jobs varies as significantly as the range of administrative services required by organizations. Managers coordinate and direct the many support services that allow organizations to operate efficiently. They perform a broad range of duties: payroll, conference planning and travel, information and data processing, secretarial and reception services, materials scheduling and distribution, printing and reproduction, records management, telecommunications management, personal property procurement, and more. They manage support services for organizations as diverse as insurance companies, computer manufacturers, and government offices. Very often, managers are responsible for production processes in manufacturing and benefit from having a business management degree.

Specific duties for these managers vary by degree of responsibility and authority. First-line managers directly supervise a staff that performs various support services. Mid-level managers, on the other hand, develop departmental plans, set goals and deadlines, implement procedures to improve productivity and customer service, and define the responsibilities of supervisory-level managers. Some mid-level administrative services managers oversee first-line supervisors from various departments, including the clerical staff. Mid-level managers also may be involved in the hiring and dismissal of employees, but they generally have no role in the formulation of personnel policy. Some of these managers advance to upper level positions, such as vice president of administrative services, which are discussed in the Occupational Outlook Handbook statement on top executives.

People interested in becoming managers at any function within business organizations should have good leadership and communication skills and be able to establish effective working relationships with many different people, ranging from other managers, supervisors, and professionals to production workers and other employees who support the efforts of the organization. They should be analytical, detail-oriented, flexible, and decisive. They must be able to coordinate several activities at once, quickly analyze and resolve specific problems, and cope with deadlines. A business management education can provide these skills and give students a fundamental understanding of the world of business.

Degree: Associate in Applied Science

Business Management - Generalist

Degree: Associate in Arts

Business Transfer

Certificates of Achievement:

Business Management - Financial Planning
 Business Management - Financial Studies
 Business Management - Management Specialist
 Not-for-Profit Management (leads to general studies degree)

Career Certificates:

Customer Service Management (leads to general studies degree)
 Financial Studies
 General Management
 Not-for-Profit Management (leads to general studies degree)
 Professional Skills (leads to general studies degree)
 Spanish for Business (leads to general studies degree)

Business Management - Generalist (BGAAS)

Award: Associate in applied science degree

Program location: Elkhorn Valley Campus, Fort Omaha Campus, Sarpy Center, South Omaha Campus, Online

This degree provides practical application of business principles to a variety of career paths. Most courses also have direct application to life experiences.

Graduation Requirements

General education	27.0-27.5
Major requirements	49.5-52.5
Elective requirements	27.0
Total credit hours required	103.5-107.0

General education requirements (27.0-27.5 credit hrs.)

Communications

English level I	4.5
English level II	4.5

ENGL 1230 and ENGL 1240 are recommended. (p. 42)

See Communications course options (p. 42)

Humanities/social sciences

Select one of the following:

ARTS 1110	Art History-Ancient to Gothic ☞ ☹	4.5
ARTS 1120	Art History-Renaissance to Modern ☹ ☹	4.5
ENGL 2470	Introduction to Women's Literature	4.5
ENGL 2530	Ethnic Literature	4.5
ENGL 2610	British Literature I ☹	4.5
ENGL 2620	British Literature II	4.5
GEOG 1050	Introduction to Human Geography ☹	4.5
HIST 1050	Introduction to Black History ☹	4.5
HIST 1110	World Civilization from Prehistory to 1500 ☹	4.5
HIST 1120	World Civilization from 1500 to Present ☹ ☹	4.5
HIST 2050	Modern Europe Since 1789 ☹	4.5
HUMS 1000	Humanities through the Arts ☹	4.5
MUSC 1010	Introduction to Music I	4.5
MUSC 1020	Introduction to Music II	4.5
PHIL 2030	Introduction to Ethics ☹	4.5
PHIL 2200	Introduction to Comparative Religion ☹	4.5
PSYC 1010	Introduction to Psychology ☹ ☹	4.5

SOCI 1010	Introduction to Sociology	4.5
SOCI 1250	Introduction to Anthropology	4.5
SOCI 2060	Multicultural Issues	4.5
THEA 1000	Introduction to Theatre	4.5

Quantitative/Numeracy Skills

MATH 1220	Business Mathematics	4.5
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MATH 1220 or higher level MATH course

See Quantitative/numeracy skills course options (p. 44)

Additional

HMRL 1010	Human Relations Skills	4.5
INFO 1001	Information Systems and Literacy	4.5
	OR	
ACCT 2230	Microcomputer Business Applications	4.0

Major requirements for Business Management - Generalist (49.5-52.5 credit hrs.)

Since the core courses for the accounting and business management degrees are interchangeable, students can easily change their degree of choice during the first year of courses.

ACCT 1100	Accounting I	4.0
ACCT 1110	Accounting II	4.0
ACCT 1120	Accounting III	4.0
BSAD 1000	Introduction to Business	4.5
BSAD 1010	Principles of Marketing	4.5
BSAD 1100	Business Law I	4.5
BSAD 1110	Business Law II	4.5
BSAD 2100	Principles of Management	4.5
ECON 1000	Macroeconomics	4.5
ECON 1100	Microeconomics	4.5
FINA 2230	Business Finance	4.5
ACCT 2940	Business Plan Capstone	1.5
	OR	
BSAD 2940	Business Plan Capstone	1.5
	OR	
FINA 2940	Financial Plan Development and Case Analysis	4.5

Elective requirements for Business Management - Generalist (27.0 credit hrs.)

Select 27.0 credit hrs. from the following courses:

Business electives	27.0
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Business electives should be selected from ACCT, BSAD, ECON, FINA, ENTR, INSU, or REES. FINA 1200 is recommended.

Business Management - Generalist Curriculum Plan

Below is a suggested guide for students planning careers in business management after two years of full-time study.

First Year

First quarter

ACCT 1100	Accounting I	4.0
BSAD 1000	Introduction to Business	4.5
	English level I	4.5
MATH 1220	Business Mathematics	4.5

Second quarter

ACCT 1110	Accounting II	4.0
ECON 1000	Macroeconomics	4.5
ENGL 1020	English Composition II	4.5
	OR	

ENGL 1240	Oral and Written Reports	4.5
HMRL 1010	Human Relations Skills	4.5

Third quarter

ACCT 1120	Accounting III	4.0
ECON 1100	Microeconomics	4.5
	Gen. Ed.	4.5
	Option track	3.0-7.5

Second Year

Fifth quarter

INFO 1001	Information Systems and Literacy	4.5
	OR	

ACCT 2230	Microcomputer Business Applications	4.0
BSAD 1100	Business Law I	4.5
	Option track	3.0-4.5
	Option track	3.0-4.5

Sixth quarter

BSAD 1110	Business Law II	4.5
BSAD 2100	Principles of Management	4.5
	Option track	3.0-7.5
	Option track	3.0-7.5

Seventh quarter

BSAD 1010	Principles of Marketing	4.5
BSAD 2940	Business Plan Capstone	1.5
FINA 1200	Wealth-Building Fundamentals and Personal Finance	4.5
FINA 2230	Business Finance	4.5
	Option track	3.0-4.5
	Elective recommended	4.5

Business Transfer (BSTAA)**Award:** Associate in arts degree**Program location:** Elkhorn Valley Campus, Fort Omaha Campus, South Omaha Campus, Online

This degree provides students with the dual option of seeking entry-level business positions and/or continuing their studies at a four-year institution. Currently, Bellevue University, Midland University, University of Nebraska–Lincoln, Northwest Missouri State, and University of Nebraska at Omaha accept this degree. Areas of emphasis include accounting, economics, management, and marketing.

Graduation Requirements

General education	55.5-57.5
Major requirements	43.5
Total credit hours required	99.0-101.0

General education requirements (55.5 - 57.5 credit hrs.)

The general education requirements for this degree exceed the minimum standard number of hours. For more information, contact Student Services.

Communications

ENGL 1010	English Composition I	4.5
ENGL 1020	English Composition II	4.5
SPCH 1110	Public Speaking	4.5

Cultural diversity

Select one course from the following:

ENGL 2530	Ethnic Literature	4.5
HIST 1050	Introduction to Black History	4.5
PHIL 2200	Introduction to Comparative Religion	4.5
SOCI 2060	Multicultural Issues	4.5

Humanities

Select two courses from the following:

ARTS 1110	Art History-Ancient to Gothic	4.5
ARTS 1120	Art History-Renaissance to Modern	4.5
ENGL 2470	Introduction to Women's Literature	4.5
ENGL 2530	Ethnic Literature	4.5
ENGL 2610	British Literature I	4.5
ENGL 2620	British Literature II	4.5
MUSC 1010	Introduction to Music I	4.5
MUSC 1020	Introduction to Music II	4.5
PHIL 1010	Introduction to Philosophy	4.5
PHIL 1100	Critical Reasoning	4.5
PHIL 2030	Introduction to Ethics	4.5
PHIL 2200	Introduction to Comparative Religion	4.5
THEA 1000	Introduction to Theatre	4.5

Natural sciences

Natural sciences	6.0-7.5
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See *Natural Sciences* (p. 221) course options

Social sciences

Select two courses from the following:

GEOG 1010	Fundamentals of Geography	4.5
GEOG 1050	Introduction to Human Geography	4.5
HIST 1010	United States History to 1877	4.5
HIST 1020	United States History from 1865 to Present	4.5
HIST 1110	World Civilization from Prehistory to 1500	4.5
HIST 1120	World Civilization from 1500 to Present	4.5
HIST 2050	Modern Europe Since 1789	4.5
PSYC 1010	Introduction to Psychology	4.5
SOCI 1010	Introduction to Sociology	4.5
SOCI 1250	Introduction to Anthropology	4.5
SOCI 2050	Current Social Problems	4.5
SOCI 2160	Marital and Family Relationships	4.5

Quantitative/numeracy skills

MATH 1420	College Algebra	5.0
MATH 1420:	Additional prerequisite(s) may be required.	

Additional

HMRL 1010	Human Relations Skills	4.5
INFO 1001	Information Systems and Literacy	4.5
OR		
ACCT 2230	Microcomputer Business Applications	4.0

Major requirements for Business Transfer (43.5 credit hrs.)

ACCT 1100	Accounting I	4.0
ACCT 1110	Accounting II	4.0
ACCT 1120	Accounting III	4.0
BSAD 1000	Introduction to Business	4.5
BSAD 1010	Principles of Marketing	4.5
BSAD 1100	Business Law I	4.5
BSAD 2100	Principles of Management	4.5
ECON 1000	Macroeconomics	4.5
ECON 1100	Microeconomics	4.5

Select one course from the following:

BSAD 2700	Introduction to International Business and Global Entrepreneurship	4.5
BSAD 2720	International Marketing Management	4.5
ECON 2720	International Economics	4.5

UNO and UNL may have more specific requirements. Refer to <https://www.mccneb.edu/Prospective-Students/Transfer-Students/Articulation.aspx> for current information.

For the most current transfer listings, visit <https://www.mccneb.edu/Prospective-Students/Transfer-Students/Articulation.aspx>.

To optimize credit transfer to the business programs within the University of Nebraska system, follow the detailed business transfer guides listed under UNL and UNO as they may have more specific requirements.

Business Transfer Curriculum Plan

Below is a suggested guide for students planning to complete the Business Transfer degree after two years of full-time study.

It pays to be prepared. It is recommended that students complete math requirements early in the program of study.

First Year

First quarter

BSAD 1000	Introduction to Business	✓	4.5
ENGL 1010	English Composition I	✓	4.5
HMRL 1010	Human Relations Skills	✓	4.5
MATH 1420	College Algebra	✓	5.0

Second quarter

ACCT 1100	Accounting I	✓	4.0
ECON 1000	Macroeconomics	✓	4.5
ENGL 1020	English Composition II	✓	4.5
	Humanities elective		4.5

Third quarter

ACCT 1110	Accounting II	✓	4.0
ECON 1100	Microeconomics	✓	4.5
SPCH 1110	Public Speaking	✓	4.5
	Social science elective		4.5

Second Year

Fifth quarter

ACCT 1120	Accounting III	✓	4.0
INFO 1001	Information Systems and Literacy	✓	4.5
	OR		
ACCT 2230	Microcomputer Business Applications	✓	4.0
BSAD 1100	Business Law I	✓	4.5
BSAD 2100	Principles of Management	✓	4.5

Sixth quarter

BSAD 1010	Principles of Marketing	✓	4.5
	Humanities elective		4.5
	Social science elective		4.5

Humanities elective: PHIL 2030 is recommended.

Seventh quarter

Cultural diversity elective	4.5
International business elective	4.5
Natural science elective	6.0

Business Management - Financial Planning (BMPC1)

Award: Certificate of achievement

Pathway to associate degree: Business Management - Generalist (BGAAS)

Program location: Elkhorn Valley Campus, Fort Omaha Campus, Sarpy Center, Online

This certificate of achievement provides students with practical experience in fields of personal investment strategies related to retirement planning, estate planning, and tax-advantaged investments. Upon completion of this program, potential employment opportunities exist with companies, government agencies, and nonprofit organizations in the financial services industry.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Business-Human-Services/Finance-and-Insurance.aspx.

Graduation Requirements

General education	13.5
Major requirements	36.0
Total credit hours required	49.5

General education requirements (13.5 credit hrs.)

Communications

English level I	4.5
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See Communications course options (p. 42)

Humanities/social sciences

Select one of the following:

ARTS 1110	Art History-Ancient to Gothic	✓	4.5
ARTS 1120	Art History-Renaissance to Modern	✓	4.5
ENGL 2470	Introduction to Women's Literature		4.5
ENGL 2530	Ethnic Literature		4.5
ENGL 2610	British Literature I	✓	4.5
ENGL 2620	British Literature II		4.5
GEOG 1050	Introduction to Human Geography	✓	4.5
HIST 1050	Introduction to Black History	✓	4.5
HIST 1110	World Civilization from Prehistory to 1500	✓	4.5
HIST 1120	World Civilization from 1500 to Present	✓	4.5
HIST 2050	Modern Europe Since 1789	✓	4.5
HUMS 1000	Humanities through the Arts	✓	4.5
MUSC 1010	Introduction to Music I		4.5

MUSC 1020	Introduction to Music II	4.5
PHIL 2030	Introduction to Ethics ☞	4.5
PHIL 2200	Introduction to Comparative Religion ☞	4.5
PSYC 1010	Introduction to Psychology ☞ ☹	4.5
SOCI 1010	Introduction to Sociology ☞ ☹	4.5
SOCI 1250	Introduction to Anthropology ☞	4.5
SOCI 2060	Multicultural Issues ☞	4.5
THEA 1000	Introduction to Theatre ☞	4.5

Quantitative/numeracy skills

MATH 1220	Business Mathematics ☞	4.5
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MATH 1220 or higher level MATH course; MATH 1310 is recommended.

See Quantitative/numeracy skills course options (p. 44)

Major requirements for Financial Planning (36.0 credit hrs.)

FINA 2200	Investment Planning ☞	4.5
FINA 2209	Risk Management and Insurance ☞	4.5
FINA 2210	Financial Planning Principles ☞	4.5
FINA 2230	Business Finance ☞	4.5
FINA 2310	Income Tax Planning ☞	4.5
FINA 2320	Retirement Planning and Employee Benefits ☞	4.5
FINA 2330	Estate Planning ☞	4.5
FINA 2940	Financial Plan Development and Case Analysis ☞	4.5

The Certificate of Achievement in Financial Planning is a registered program with Certified Financial Planning Board of Standards Inc. For more information about the CFP® certification, contact the Certified Financial Planners Board of Standards (www.CFP-Board.org).

Business Management - Financial Studies (BMFCE)

Award: Certificate of achievement

Pathway to associate degree: Business Management - Generalist (BGAAS)

Program location: Online

The skills developed in this certificate of achievement may be in one or a combination of careers involving contemporary financial studies. Opportunities for state or national certification may also be available.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Business-Human-Services/Finance-and-Insurance.aspx.

Graduation Requirements

General education	13.5
Major requirements	9.0
Elective requirements	27.0
Total credit hours required	49.5

General education requirements (13.5 credit hrs.)**Communications**

English level I	4.5
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See Communications course options (p. 42)

Humanities/social sciences**Select one of the following:**

ARTS 1110	Art History-Ancient to Gothic ☞ ☹	4.5
ARTS 1120	Art History-Renaissance to Modern ☞ ☹	4.5
ENGL 2470	Introduction to Women's Literature	4.5
ENGL 2530	Ethnic Literature	4.5
ENGL 2610	British Literature I ☞	4.5
ENGL 2620	British Literature II	4.5
GEOG 1050	Introduction to Human Geography ☞	4.5
HIST 1050	Introduction to Black History ☞	4.5
HIST 1110	World Civilization from Prehistory to 1500 ☞	4.5
HIST 1120	World Civilization from 1500 to Present ☞ ☹	4.5
HIST 2050	Modern Europe Since 1789 ☞	4.5
HUMS 1000	Humanities through the Arts ☹	4.5
MUSC 1010	Introduction to Music I	4.5
MUSC 1020	Introduction to Music II	4.5
PHIL 2030	Introduction to Ethics ☞	4.5
PHIL 2200	Introduction to Comparative Religion ☞	4.5
PSYC 1010	Introduction to Psychology ☞ ☹	4.5
SOCI 1010	Introduction to Sociology ☞ ☹	4.5
SOCI 1250	Introduction to Anthropology ☞	4.5
SOCI 2060	Multicultural Issues ☞	4.5
THEA 1000	Introduction to Theatre ☞	4.5

Quantitative/numeracy skills

MATH 1220	Business Mathematics ☞	4.5
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MATH 1220 or higher level MATH course

See Quantitative/numeracy skills course options (p. 44)

Major requirements for Business Management - Financial Studies (9.0 credit hrs.)

BSAD 1100	Business Law I ☞	4.5
FINA 2230	Business Finance ☞	4.5

Elective requirements for Business Management - Financial Studies (27.0 credit hrs.)

Select 27.0 credit hrs. from the following courses:

Business electives 27.0

Students should select business electives from ENTR, FINA, INSU, and/or REES prefixes.

Business Management - Management Specialist (BMSCE)

Award: Certificate of achievement

Pathway to associate degree: Business Management - Generalist (BGAAS)

Program location: Elkhorn Valley Campus, Fort Omaha Campus, Fremont Area Center, Sarpy Center, South Omaha Campus, Online

This certificate of achievement recognizes the development of entry-level interpersonal and applied managerial skills for an entrepreneurial or employment setting.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mcneb.edu/Academics/Programs-of-Study/Business-Human-Services/Business-Management.aspx.

Graduation Requirements

General education	13.5
Major requirements	8.5
Elective requirements	27.0
Total credit hours required	49.0

General education requirements (13.5 credit hrs.)

Communications

English level I 4.5

See Communications course options (p. 42)

Humanities/social sciences

Select one of the following:

ARTS 1110	Art History-Ancient to Gothic	4.5
ARTS 1120	Art History-Renaissance to Modern	4.5
ENGL 2470	Introduction to Women's Literature	4.5
ENGL 2530	Ethnic Literature	4.5
ENGL 2610	British Literature I	4.5
ENGL 2620	British Literature II	4.5
GEOG 1050	Introduction to Human Geography	4.5
HIST 1050	Introduction to Black History	4.5
HIST 1110	World Civilization from Prehistory to 1500	4.5
HIST 1120	World Civilization from 1500 to Present	4.5
HIST 2050	Modern Europe Since 1789	4.5
HUMS 1000	Humanities through the Arts	4.5

MUSC 1010	Introduction to Music I	4.5
MUSC 1020	Introduction to Music II	4.5
PHIL 2030	Introduction to Ethics	4.5
PHIL 2200	Introduction to Comparative Religion	4.5
PSYC 1010	Introduction to Psychology	4.5
SOCI 1010	Introduction to Sociology	4.5
SOCI 1250	Introduction to Anthropology	4.5
SOCI 2060	Multicultural Issues	4.5
THEA 1000	Introduction to Theatre	4.5

Quantitative/numeracy skills

MATH 1220	Business Mathematics	4.5
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MATH 1220 or higher level MATH course

See Quantitative/numeracy skills course options (p. 44)

Major requirements for Business Management - Management Specialist (8.5 credit hrs.)

ACCT 1100	Accounting I	4.0
FINA 2230	Business Finance	4.5

Elective requirements for Business Management - Management Specialist (27.0 credit hrs.)

Select 27.0 credit hrs. from the following courses:

Business electives 27.0

Students should select business electives from ACCT, BSAD, ENTR, and/or ECON prefixes.

Business Management – Not-for-Profit Management (BMNCE)

Award: Certificate of achievement

Pathway to associate degree: General Studies (GSAAS)

Program location: Elkhorn Valley Campus, Fort Omaha Campus, South Omaha Campus

This certificate of achievement prepares students to perform managerial functions in a variety of community services and agencies.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mcneb.edu/Academics/Programs-of-Study/Business-Human-Services/Business-Management.aspx.

Graduation Requirements

General education	13.5
Major requirements	30.0
Elective requirements	7.0-9.0
Total credit hours required	50.5-52.5

General education requirements (13.5 credit hrs.)

Communications

ENGL 1220	Technical Writing	4.5
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Humanities/social sciences**Select one of the following:**

ARTS 1110	Art History-Ancient to Gothic ☞	4.5
ARTS 1120	Art History-Renaissance to Modern ☞ ☹	4.5
ENGL 2470	Introduction to Women's Literature	4.5
ENGL 2530	Ethnic Literature	4.5
ENGL 2610	British Literature I ☞	4.5
ENGL 2620	British Literature II	4.5
GEOG 1050	Introduction to Human Geography ☞	4.5
HIST 1050	Introduction to Black History ☞	4.5
HIST 1110	World Civilization from Prehistory to 1500 ☞	4.5
HIST 1120	World Civilization from 1500 to Present ☞ ☹	4.5
HIST 2050	Modern Europe Since 1789 ☞	4.5
HUMS 1000	Humanities through the Arts ☹	4.5
MUSC 1010	Introduction to Music I	4.5
MUSC 1020	Introduction to Music II	4.5
PHIL 2030	Introduction to Ethics ☞	4.5
PHIL 2200	Introduction to Comparative Religion ☞	4.5
PSYC 1010	Introduction to Psychology ☞ ☹	4.5
SOCI 1010	Introduction to Sociology ☞ ☹	4.5
SOCI 1250	Introduction to Anthropology ☞	4.5
SOCI 2060	Multicultural Issues ☞	4.5
THEA 1000	Introduction to Theatre ☞	4.5

Quantitative/numeracy skills

Mathematics	4.5
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See Quantitative/numeracy skills course options (p. 44)

Major requirements for Business Management – Not-for-Profit Management (30.0 credit hrs.)

ACCT 1050	Bookkeeping ☞	3.0
BSAD 1100	Business Law I ☞	4.5
	OR	
ECON 1100	Microeconomics ☞	4.5
BSAD 1250	Introduction to Not-for-Profit Management	4.5
BSAD 2100	Principles of Management ☞	4.5
ENGL 1240	Oral and Written Reports ☞	4.5
ENGL 2210	Grant Writing	4.5
ENTR 2050	Marketing for the Entrepreneur ☞	4.5

Elective requirements for Business Management – Not-for-Profit Management (7.0-9.0 credit hrs.)

BSAD 2981	Internship in Business	4.5
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Select one of the following courses:

ARTS 2220	Art Gallery Management	4.5
HMSV 1010	Introduction to Human Services ☞	4.5
THEA 2200	Arts Administration	4.5

Customer Service Management (BCSSD)

Award: Career certificate

Pathway to associate degree: General Studies (GSAAS)

Program location: Elkhorn Valley Campus, Fort Omaha Campus, South Omaha Campus

This career certificate develops skills for working with customers and employees in business settings where extensive employee and customer interactions are critical.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Business-Human-Services/Business-Management.aspx.

Requirements for Customer Service Management career certificate (27.0 credit hrs.)

BSAD 1600	Principles of Supervision ☞	4.5
BSAD 2100	Principles of Management ☞	4.5
HMRL 1010	Human Relations Skills ☞ ☹	4.5
INFO 1010	Customer Service Skills ☞	4.5
SPCH 1110	Public Speaking ☞ ☹	4.5
SPCH 1300	Interpersonal Communication	4.5

Financial Studies (BMFCC)

Award: Career certificate

Pathway to associate degree: Business Management - Generalist (BGAAS)

Program location: Online

This career certificate recognizes a focus on one or a combination of careers involving financial studies. Opportunities for state or national certification may also be available.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Business-Human-Services/Finance-and-Insurance.aspx.

Requirements for Financial Studies career certificate (27.0 credit hrs.)

Select 27.0 credit hrs. from the following courses:
 Business electives 27.0

Students should select business electives from ENTR, FINA, INSU, and/or REES prefixes.

Advising Notes

Financial Planning classes (FINA 2200, FINA 2209, FINA 2210, FINA 2230, FINA 2310, FINA 2320, FINA 2330, and FINA 2940) are approved by the CFP Board as meeting requirements to sit for the national CFP exam. These classes also have special fees.

Real Estate classes at MCC are approved by the Nebraska State Real Estate Commission. People seeking to fulfill real estate license requirements usually take REES 1000 and REES 1100. Online REES classes are also nationally certified by ARRELLO.

INSU 1000 and INSU 1100 are approved by the Nebraska State Insurance Commission as preparation for the state licensure exams.

General Management (BMGCC)

Award: Career certificate

Pathway for associate degree: Business Management - Generalist (BGAAS)

Program location: Elkhorn Valley Campus, Fremont Area Center, Fort Omaha Campus, Sarpy Center, South Omaha Campus, online

Opportunities for those with skills in entrepreneurship, accounting, management, and marketing/sales generally remain in demand despite changes in the business cycle. Selections of elective classes permit a focus on specific career areas.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Business-Human-Services/Business-Management.aspx.

Requirements for General Management career certificate (27.0 credit hrs.)

Select 27.0 credit hrs. from the following courses:
 Business electives 27.0

Students should select business electives from ACCT, BSAD, and/or ENTR prefixes.

Not-for-Profit Management (BNPSD)

Award: Career certificate

Pathway for associate degree: General Studies (GSAAS)

Program location: Elkhorn Valley Campus, Fort Omaha Campus, South Omaha Campus

This career certificate prepares students to perform managerial functions in a variety of community services and agencies.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Business-Human-Services/Business-Management.aspx.

Requirements for Not-for-Profit Management career certificate (25.0-27.0 credit hrs.)

BSAD 1250	Introduction to Not-for-Profit Management	4.5
BSAD 2100	Principles of Management ☹	4.5
BSAD 2981	Internship in Business	4.5
ENGL 2210	Grant Writing	4.5
ENTR 2050	Marketing for the Entrepreneur ☹	4.5
HMSV 1010	Introduction to Human Services ☹	4.5
	OR	
THEA 2200	Arts Administration	4.5

Professional Skills (PSKSD)

Award: Career certificate

Pathway to associate degree: General Studies (GSAAS)

This career certificate gives individuals the skills employers want - skills in goal setting, problem solving, teamwork, listening and interpersonal communication, customer service, and applied math. The program works closely with many employers in the MCC service area to help place individuals in entry-level, career-path employment.

Requirements for Professional Skills career certificate (27.0 credit hrs.)

ENGL 1210	Applied Communications	4.5
MATH 1220	Business Mathematics ☹	4.5
WORK 1400	Employability Skills	4.5
WORK 1410	Secrets to Business Success ☹	3.0
	Electives	10.5

Elective credits may be chosen from 1000- and 2000-level courses throughout MCC's catalog to fit with a student's career interest area.

Spanish for Business (SBPS1)

Award: Career certificate

Pathway to associate degree: General Studies (GSAAS)

Program location: Elkhorn Valley Campus, Fort Omaha Campus, South Omaha Campus

Speaking and understanding Spanish is a valuable skill in today's business world. This career certificate is for students who wish to better communicate with Hispanic business clients. It will prepare them to hold beginning to intermediate conversations with Spanish-speaking individuals.

Requirements for Spanish for Business career certificate (24.0 credit hrs.)

SPAN 1050	Spanish for Business I	4.5
SPAN 1051	Spanish for Business II	4.5
SPAN 2050	Intermediate Spanish for Business I	4.5
SPAN 2051	Intermediate Spanish for Business II	4.5
SPAN 2981	Spanish for Business Internship	variable

Entrepreneurship

While providing a pathway to a general studies degree, these certificates prepare students with a background in small business management that enables them to be successful in starting a new business.

Certificate of Achievement:

Entrepreneurship Generalist (leads to general studies degree)

Career Certificate:

Business Start-Up (leads to general studies degree)

Entrepreneurship Generalist (BEGCE)

Award: Certificate of achievement

Pathway to associate degree: General Studies (GSAAS)

Program location: Elkhorn Valley Campus, Fort Omaha Campus, South Omaha Campus

The Entrepreneurship Generalist certificate of achievement supports those with existing businesses as well as those seeking to develop new business opportunities by combining career field and entrepreneurial skill development.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mcneb.edu/Academics/Programs-of-Study/Business-Human-Services/Entrepreneurship.aspx.

Graduation Requirements

General education	13.5
Major requirements	13.5
Electives	22.5
Total credit hours required	49.5

General education requirements (13.5 credit hrs.)**Communications**

ENGL level I 4.5

Humanities/social sciences

Humanities/social sciences 4.5

See Humanities/Social Sciences course options (p. 42)

Quantitative/numeracy skills

Quantitative/numeracy skills 4.5

See Quantitative/Numeracy Skills course options (p. 44)

Major requirements for Entrepreneurship Generalist (13.5 credit hrs.)

ENTR 1050	Introduction to Entrepreneurship	4.5
ENTR 2040	Entrepreneurship Feasibility Study	4.5
ENTR 2090	Entrepreneurship Business Plan	4.5

Electives for Entrepreneurship Generalist (22.5 credit hrs.)**Entrepreneurship Elective**

Select one of the following courses:

ENTR 2050	Marketing for the Entrepreneur	4.5
ENTR 2060	Entrepreneurship Legal Issues	4.5
ENTR 2070	Entrepreneurship Financial Topics	4.5

Career Field Electives

Select 18.0 credit hrs. from the following courses:

Courses from any academic prefix 18.0

Students should work with faculty to select courses that meet their career development goals.

Business Start-Up (BSUCC)

Award: Career certificate

Pathway to associate degree: General Studies (GSAAS)

Program location: Elkhorn Valley Campus, Fort Omaha Campus, South Omaha Campus

Business Start-Up supports those with existing businesses as well as those seeking to develop new business opportunities by combining career field and entrepreneurial skill development.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mcneb.edu/Academics/Programs-of-Study/Business-Human-Services/Entrepreneurship.aspx.

Requirements for Business Start-Up career certificate (36.0 credit hrs.)

ENTR 1050	Introduction to Entrepreneurship	4.5
ENTR 2040	Entrepreneurship Feasibility Study	4.5
ENTR 2090	Entrepreneurship Business Plan	4.5

Entrepreneurship electives

Select one of the following courses:

ENTR 2050	Marketing for the Entrepreneur	4.5
ENTR 2060	Entrepreneurship Legal Issues	4.5
ENTR 2070	Entrepreneurship Financial Topics	4.5

Career field electives

Select 18.0 credit hrs. from the following courses:
 Courses from any academic prefix 18.0

Students should work with faculty to select courses that meet their career development goals.

Legal Studies

Legal Studies includes coursework dealing with legal ideas, legal institutions, and the legal process. Depending upon the program selected, graduates may be seeking advanced education to become a lawyer or seek employment in law, business, or government offices working under the supervision of a lawyer. In either case, the law office provides an intellectually stimulating, challenging, and fast-paced work environment.

Those pursuing education in legal studies need to have or develop strong skills in reading, writing, oral communication, and critical thinking as well as related skills such as research and problem solving. It is also helpful to be detail oriented. Paralegals are often members of a legal team working with and for the client. The student should possess strong technological and computer skills.

Degree: Associate in Applied Science

- Legal Studies - Legal Administrative Assistant
- Legal Studies - Paralegal
- Legal Studies - Pre-Law

Certificate of Achievement:

- Legal Assistant - Accelerated

Career Certificate:

- Immigration Laws, Policies, and Procedures (leads to general studies degree)
- Legal Secretary

Legal Studies Degree Options

Award: Associate in applied science degree

Program location: South Omaha Campus

This degree prepares students for transfer to pre-law programs or for a career as either a paralegal or a legal administrative assistant.

Options available under this degree are:

- Legal Studies – Legal Administrative Assistant (LSAAO) (p. 83)
- Legal Studies – Paralegal (LSPAO) (p. 84)
- Legal Studies – Pre-Law (LSPLO) (p. 86)

Legal Studies – Legal Administrative Assistant (LSAAO)

Award: Associate in applied science degree

Program location: South Omaha Campus

This degree option prepares legal administrative assistants for entry-level employment in law and law-related fields such as

administrative or executive assistants, office supervisors, or other support staff.

Graduation Requirements

General education	27.0
Major requirements	40.5
Option requirements	33.0
Total credit hours required	100.5

General education requirements (27.0 credit hrs.)

Communications

ENGL 1010	English Composition I	4.5
ENGL 1020	English Composition II	4.5

Humanities/social sciences

PHIL 1100	Critical Reasoning	4.5
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Quantitative/numeracy skills

FINA 1000	Financial Literacy	4.5
	OR	
MATH	MATH 1220 or higher	4.5

Additional

INFO 1001	Information Systems and Literacy	4.5
HMRL 1010	Human Relations Skills	4.5

Major requirements for Legal Studies (40.5 credit hrs.)

BSAD 1100	Business Law I	4.5
LAWS 1101	Introduction to Law	4.5
LAWS 1110	Litigation	4.5
LAWS 1111	Microsoft Word for the Law Office	4.5
LAWS 1230	Legal Research and Writing I	4.5
LAWS 2240	Legal Research and Writing II	4.5
LAWS 2324	Criminal Law and Procedures	4.5
POLS 2050	American National Government	4.5
	OR	
POLS 2060	The Constitution	4.5
SPCH 1110	Public Speaking	4.5

Option requirements for Legal Administrative Assistant (33.0 credit hrs.)

INFO 1008	Business Office Communications	4.5
INFO 1012	Electronic Filing and Calculating	4.5
INFO 1013	Keyboard Skillbuilding	2.0
INFO 1213	Database Fundamentals	4.5
INFO 1214	Business Presentations and Publications	4.5
INFO 1215	Document Processing	4.5
INFO 1219	Professional Practices	4.5
INFO 2981	Internship	variable

The Legal Administrative Assistant option is not a program for the education of paralegals.

Legal Studies - Legal Administrative Assistant Curriculum Plan

Below is a suggested guide for students planning to complete associate degrees in Legal Studies – Legal Administrative Assistant after two years of full-time study.

First Year

First quarter

INFO 1001	Information Systems and Literacy ☞ ☹	4.5
ENGL 1010	English Composition I ☞ ☹	4.5
PHIL 1100	Critical Reasoning ☞	4.5

Second quarter

ENGL 1020	English Composition II ☞ ☹	4.5
POLS 2050	American National Government ☞	4.5
	OR	
POLS 2060	The Constitution ☞	4.5
SPCH 1110	Public Speaking ☞ ☹	4.5

Third quarter

LAWS 1101	Introduction to Law ☞	4.5
LAWS 1110	Litigation	4.5
LAWS 1111	Microsoft Word for the Law Office ☞	4.5

Fourth quarter

BSAD 1100	Business Law I ☞	4.5
HMRL 1010	Human Relations Skills ☞ ☹	4.5
LAWS 2324	Criminal Law and Procedures	4.5

Second Year

Fifth quarter

INFO 1008	Business Office Communications ☞	4.5
INFO 1012	Electronic Filing and Calculating ☞	4.5
INFO 1013	Keyboard Skillbuilding ☞	2.0

Sixth quarter

INFO 1213	Database Fundamentals ☞	4.5
INFO 1214	Business Presentations and Publications ☞	4.5

Seventh quarter

INFO 1215	Document Processing ☞	4.5
LAWS 1230	Legal Research and Writing I	4.5
MATH 1220	Business Mathematics ☞	4.5

Eighth quarter

INFO 1219	Professional Practices ☞	4.5
INFO 2981	Internship	variable
LAWS 2240	Legal Research and Writing II	4.5

Legal Studies – Paralegal (LSPA0)

Award: Associate in applied science degree

Program location: South Omaha Campus

This degree option prepares paralegals for entry-level employment in law-related occupations including public and private law practice or corporate/government activities related to law. It enables graduates to pursue further education at the college junior level.

Graduates are qualified to:

- perform basic legal research and supporting memoranda using both computerized and manual search methods;
- draft correspondence, pleadings, contracts, and other legal documents appropriately for attorney use; and
- prioritize and complete work assignments in a timely, professional, and ethical manner.

Although graduates are not authorized to provide direct legal services to the public, they are authorized to perform substantive legal work under the direct supervision of a lawyer. This program does not train lawyers or legal administrators.

This program has special admission requirements. Interested individuals should contact Student Services or the program director for details.

Graduation Requirements

General education	27.0
Major requirements	40.5
Option requirements	12.5
Electives	22.0-22.5
Total credit hours required	102.0-102.5

Paralegal Program Admission

The Paralegal program has special admission requirements. The application process includes the completion of both LAWS 1100 and LAWS 1101 with grades of C or better and the submission of the Paralegal Program Application with original high school transcripts or GED documentation. Students are notified as to their acceptance into the program.

Students are advised to work closely with the program advisor or program director to make sure that they are registered for classes at the most beneficial time for graduation from the program. Students should not complete all of their general education requirements before starting the Paralegal program.

Paralegal Program Application

General education requirements (27.0 credit hrs.)

Communications

ENGL 1010	English Composition I ☞ ☹	4.5
ENGL 1020	English Composition II ☞ ☹	4.5

Humanities/social sciences

PHIL 1100	Critical Reasoning ☞	4.5
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Quantitative/numeracy skills

FINA 1000	Financial Literacy ☞	4.5
	OR	
MATH	MATH 1220 or higher	4.5

Additional

INFO 1001	Information Systems and Literacy ☞ ☹	4.5
HMRL 1010	Human Relations Skills ☞ ☹	4.5

Major requirements for Legal Studies (40.5 credit hrs.)

BSAD 1100	Business Law I ☞	4.5
LAWS 1101	Introduction to Law ☞	4.5
LAWS 1110	Litigation	4.5
LAWS 1111	Microsoft Word for the Law Office ☞	4.5
LAWS 1230	Legal Research and Writing I	4.5
LAWS 2240	Legal Research and Writing II	4.5
LAWS 2324	Criminal Law and Procedures	4.5
POLS 2050	American National Government ☞	4.5
	OR	
POLS 2060	The Constitution ☞	4.5
SPCH 1110	Public Speaking ☞ ☹	4.5

Paralegal students should complete LAWS 1101 prior to taking LAWS 1110

Option requirements for Legal Studies – Paralegal (12.5 credit hrs.)

LAWS 1100	The Paralegal Profession	4.5
LAWS 2981	Internship I	4.0
LAWS 2982	Internship II	4.0

Elective requirements for Legal Studies – Paralegal (22.0-22.5 credit hrs.)

Select 22.0-22.5 credit hours from the following:

ACCT 1070	Individual Income Tax Accounting	4.0
	OR	
BSAD 1110	Business Law II ☞	4.5
	OR	
REES 1100	Real Estate Law ☞	4.5
LAWS 2320	Torts	4.5
LAWS 2322	Family Law	4.5
LAWS 2323	Employment Law	4.5
LAWS 2325	Bankruptcy, Credit, and Collections Law	4.5
LAWS 2326	Evidence and Discovery	4.5
LAWS 2327	Immigration Law	4.5
LAWS 2420	Estate Administration	4.5
LAWS 2421	Insurance Law	4.5
LAWS 2422	Law of Corporations	4.5

Legal-specialty courses taken at another college are transferred only if they are from an ABA-approved program with substantially the same content, are for the same or more earned credit hours, and earned a grade of C or better. Credit is not available by portfolio or written examination.

Students are required to take at least 18.0 quarter credit hours of legal specialty courses through traditional classroom (on-campus) instruction.

To request transfer of credit, students must request that original transcripts be submitted by the source college or university directly to the MCC Records Office. The Records Office staff will then refer any legal specialty courses to the Academic Dean and Director of the Paralegal Program for determination of acceptability for transfer. No more than 9.0 quarter credit hours of legal specialty credit may be by transfer.

The Paralegal option is approved by the American Bar Association.

Legal Studies - Paralegal Curriculum Plan

Below is a suggested guide for students planning to complete associate degrees in Legal Studies – Paralegal after two years of full-time study.

First Year

First quarter

INFO 1001	Information Systems and Literacy ☞ ☹	4.5
ENGL 1010	English Composition I ☞ ☹	4.5
PHIL 1100	Critical Reasoning ☞	4.5

Second quarter

ENGL 1020	English Composition II ☞ ☹	4.5
MATH 1310	Intermediate Algebra ☞	4.5
POLS 2050	American National Government ☞	4.5
	OR	
POLS 2060	The Constitution ☞	4.5

Third quarter

LAWS 1100	The Paralegal Profession	4.5
LAWS 1101	Introduction to Law ☞	4.5
SPCH 1110	Public Speaking ☞ ☹	4.5

Fourth quarter

BSAD 1100	Business Law I ☞	4.5
HMRL 1010	Human Relations Skills ☞ ☹	4.5
LAWS 1110	Litigation	4.5
LAWS 1111	Microsoft Word for the Law Office ☞	4.5

Second Year

Paralegal electives should be taken during the second year of study.

Fifth quarter

	Elective	4.5
LAWS 1230	Legal Research and Writing I	4.5
LAWS 2324	Criminal Law and Procedures	4.5

Sixth quarter

	Elective	4.5
	Elective	4.5
LAWS 2240	Legal Research and Writing II	4.5

Seventh quarter

	Elective	4.5
LAWS 2982	Internship II	4.0

Eighth quarter

	Elective	4.5
LAWS 2981	Internship I	4.0

Legal Studies – Pre-Law (LSPLO)

Award: Associate in applied science degree

Program location: South Omaha Campus

This degree option provides a broad foundation in the critical thinking, oral and written communication, and general research skills that prepare students who are interested in pre-law or similar courses of study at four-year institutions. Each four-year institution publishes its requirements for admission, general education, and degree major requirements.

Graduation Requirements

General education	27.0
Major requirements	40.5
Option requirements	31.5
Total credit hours required	99.0

General education requirements (27.0 credit hrs.)**Communications**

ENGL 1010	English Composition I	4.5
ENGL 1020	English Composition II	4.5

Humanities/social sciences

PHIL 1100	Critical Reasoning	4.5
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Quantitative/numeracy skills

FINA 1000	Financial Literacy	4.5
	OR	
MATH	MATH 1220 or higher	4.5

Additional

INFO 1001	Information Systems and Literacy	4.5
HMRL 1010	Human Relations Skills	4.5

Major requirements for Legal Studies (40.5 credit hrs.)

BSAD 1100	Business Law I	4.5
LAWS 1101	Introduction to Law	4.5
LAWS 1110	Litigation	4.5
LAWS 1111	Microsoft Word for the Law Office	4.5
LAWS 1230	Legal Research and Writing I	4.5
LAWS 2240	Legal Research and Writing II	4.5
LAWS 2324	Criminal Law and Procedures	4.5
POLS 2050	American National Government	4.5
	OR	
POLS 2060	The Constitution	4.5
SPCH 1110	Public Speaking	4.5

Option requirements for Legal Studies – Pre-Law(31.5 credit hrs.)**Select 31.5 credit hours from the following:**

ECON 1000	Macroeconomics	4.5
ECON 1100	Microeconomics	4.5
HIST 1010	United States History to 1877	4.5
HIST 1020	United States History from 1865 to Present	4.5
PHIL 1010	Introduction to Philosophy	4.5
PHIL 1030	Professional Ethics	4.5
PHIL 2400	Philosophy and Literature	4.5
PHIL 2600	Contemporary Issues in Philosophy	4.5
PSYC 1010	Introduction to Psychology	4.5

The Pre-Law option is not a program for the education of paralegals.

Legal Studies - Pre-Law Curriculum Plan

Below is a suggested guide for students planning to complete associate degrees in Legal Studies – Pre-Law option after two years of full-time study.

First Year**First Quarter**

INFO 1001	Information Systems and Literacy	4.5
ENGL 1010	English Composition I	4.5
PHIL 1100	Critical Reasoning	4.5

Second Quarter

ENGL 1020	English Composition II	4.5
POLS 2050	American National Government	4.5
	OR	
POLS 2060	The Constitution	4.5
SPCH 1110	Public Speaking	4.5

Third Quarter

LAWS 1101	Introduction to Law	4.5
LAWS 1110	Litigation	4.5
MATH 1310	Intermediate Algebra	4.5

Fourth Quarter

BSAD 1100	Business Law I	4.5
HMRL 1010	Human Relations Skills	4.5
LAWS 2324	Criminal Law and Procedures	4.5

Second Year

Pre-Law electives should be taken during the second year of study.

Fifth Quarter

	Elective	4.5
LAWS 1111	Microsoft Word for the Law Office	4.5
LAWS 1230	Legal Research and Writing I	4.5

Sixth Quarter		
	Elective	4.5
	Elective	4.5
LAWS 2240	Legal Research and Writing II	4.5
Seventh Quarter		
	Elective	4.5
	Elective	4.5
Eighth Quarter		
	Elective	4.5
	Elective	4.5

Legal Studies – Paralegal Accelerated Certificate (LSACC)

Award: Certificate of achievement

Pathway to associate degree: Legal Studies - Paralegal (LSPA0)

Program location: South Omaha Campus

This degree option prepares paralegals for entry-level employment in law-related occupations including public and private law practice or corporate/government activities related to law. Graduates are qualified to:

- perform basic legal research and supporting memoranda using both computerized and manual search methods.
- draft correspondence, pleadings, contracts, and other legal documents appropriately for attorney use.
- prioritize and complete work assignments in a timely, professional, and ethical manner.

Although graduates are not authorized to provide direct legal services to the public, they are authorized to perform substantive legal work under the direct supervision of a lawyer. This program does not train lawyers or legal administrators.

This program has special admission requirements. To major in this accelerated certificate, students must have a bachelor's degree from a recognized college/university and submit a transcript to the Records Office.

The application process includes the completion of both LAWS 1100 and LAWS 1101 with grades of C or better and the submission of the Paralegal Program application with original high school transcripts or GED documentation. Students are notified as to their acceptance into the program.

Students are advised to work closely with the program advisor or program director to make sure that they are registered for classes at the most beneficial time for graduation from the program.

A link to the Paralegal Program application and an informative PowerPoint presentation about the program can be found at www.mccneb.edu/Academic-Programs/Programs-of-Study/Business-Human-Services/Legal-Studies.aspx.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Business-Human-Services/Legal-Studies.aspx.

Graduation Requirements

Major requirements	39.5
Elective requirements	27.0
Total credit hours required	66.5

Major requirements for Paralegal Accelerated Certificate (39.5 credit hrs.)

BSAD 1100	Business Law I ☞	4.5
LAWS 1100	The Paralegal Profession	4.5
LAWS 1101	Introduction to Law ☞	4.5
LAWS 1110	Litigation	4.5
LAWS 1111	Microsoft Word for the Law Office ☞	4.5
LAWS 1230	Legal Research and Writing I	4.5
LAWS 2240	Legal Research and Writing II	4.5
LAWS 2981	Internship I	4.0
LAWS 2982	Internship II	4.0

Elective requirements for Paralegal Accelerated Certificate (27.0 credit hrs.)

Select 27.0 credit hours from the following:

BSAD 1110	Business Law II ☞	4.5
	OR	
REES 1100	Real Estate Law ☞	4.5
LAWS 2320	Torts	4.5
LAWS 2322	Family Law	4.5
LAWS 2323	Employment Law	4.5
LAWS 2324	Criminal Law and Procedures	4.5
LAWS 2325	Bankruptcy, Credit, and Collections Law	4.5
LAWS 2326	Evidence and Discovery	4.5
LAWS 2327	Immigration Law	4.5
LAWS 2420	Estate Administration	4.5
LAWS 2421	Insurance Law	4.5
LAWS 2422	Law of Corporations	4.5

Legal Studies - Paralegal Accelerated Certificate Curriculum Plan

Below is a suggested guide for students planning to complete the Legal Studies – Paralegal Accelerated Certificate after one year of full-time study.

First Year

First quarter

LAWS 1100	The Paralegal Profession	4.5
LAWS 1101	Introduction to Law ☞	4.5
LAWS 1111	Microsoft Word for the Law Office ☞	4.5

Second quarter

BSAD 1100	Business Law I ☞	4.5
	Elective	4.5
LAWS 1110	Litigation	4.5
LAWS 1230	Legal Research and Writing I	4.5

Third quarter

	Elective	4.5
	Elective	4.5
LAWS 2240	Legal Research and Writing II	4.5
LAWS 2981	Internship I	4.0

Fourth quarter

	Elective	4.5
	Elective	4.5
LAWS 2982	Internship II	4.0

Immigration Laws, Policies, and Procedures (IPPC)**Award:** Career certificate**Pathway to associate degree:** General Studies (GSAAS)**Program location:** Online

This career certificate prepares students for careers in non-governmental organizations, local and federal government agencies, private and public institutions and businesses. This program does not qualify any person who is not a licensed attorney to practice immigration law.

The Immigration Laws, Policies, and Procedures certificate is not an option for the education of paralegals.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Business-Human-Services/Legal-Studies.aspx.

Requirements for Immigration Laws, Policies, and Procedures (25.5-27.0 credit hrs.)

LAWS 1500	Introduction to US Immigration Law ☞	4.5
LAWS 1501	Immigration Regulatory Agencies ☞	4.5
LAWS 1503	Immigration and Families ☞	4.5
LAWS 1505	Removal and Advocacy in Immigration Court ☞	4.5
LAWS 1509	Ethics and Immigration Advocacy and Compliance ☞	4.5
LAWS 1581	Service Learning ☞	4.5
	OR	
LAWS 2985	Internship: Immigration Advocacy ☞	4.5

LAWS 1581 or LAWS 2985 can be taken for 3.0 or 4.5 credit hrs.

Legal Secretary (LSSCC)**Award:** Career certificate**Pathway to associate degree:** Legal Studies - Legal Administrative Assistant (LSAAO)**Program location:** South Omaha Campus

The Legal Secretary is not a program for the education of paralegals.

This career certificate provides skill development for entry level, support positions in law and law-related fields such as administrative assistants.

Gainful employment data for this program (such as costs and jobs related to the program) can be found at www.mccneb.edu/Current-Students/Resources/Student-Services-SOS/Student-Right-to-Know.aspx.

Requirements for Legal Secretary (35.5 credit hrs.)

LAWS 1101	Introduction to Law ☞	4.5
LAWS 1110	Litigation	4.5
LAWS 1111	Microsoft Word for the Law Office ☞	4.5
LAWS 1230	Legal Research and Writing I	4.5
LAWS 2981	Internship I	4.0
ENGL 1010	English Composition I ☞ ☹	4.5
ENGL 1020	English Composition II ☞ ☹	4.5
INFO 1001	Information Systems and Literacy ☞ ☹	4.5

Office Technology

Even as workplace technology and processes steadily improve, many professionals feel less productive than ever; these very tools are undermining our ability to get work done. The Office Technology program prepares students for careers in the business/corporate setting. This program provides students with a complete knowledge of basic business applications. These skills provide the foundation needed to succeed in today's rapidly changing business world.

Degree: Associate in Applied Science

Office Technology - Administrative Assistant

Office Technology - Office Professional

Certificate of Achievement:

Office Technology - Microcomputer Office Applications

Career Certificate:

Customer Service Representative

Office Technology Degree Options

Award: Associate in applied science degree

Program location: Fort Omaha Campus, South Omaha Campus, Online

Office technology specialists are utilized in a broad range of businesses and industries, including both for-profit and nonprofit. This degree provides students with the knowledge and skills necessary for positions in an office environment. Throughout the course of study, students develop the skills needed to work toward Microsoft Office Specialist Certification.

Options available for this degree are:

Office Technology – Administrative Assistant (OTAAO) (p. 89)

Office Technology – Office Professional (OTOPO) (p. 90)

Office Technology – Administrative Assistant (OTAAO)

Award: Associate in applied science degree

Program location: Fort Omaha Campus, South Omaha Campus, Online

This flexible and broadly based degree achieves maximum individual development of each person’s knowledge and skills relative to the wide range of duties encountered in either for-profit or nonprofit enterprises. Aspiring supervisors, executive assistants, and general office workers find this program useful in developing their productivity and capacity for advancement.

Graduation Requirements

General education	27.0
Major requirements	54.0
Option requirements	16.5
Total credit hours required	97.5

General education requirements (27.0 credit hrs.)

Communications

English level I	4.5
English level II	4.5

See Communications course options (p. 42)

ENGL 1220 Technical Writing and ENGL 1230 Oral and Written Reports are recommended.

Humanities/social sciences

Humanities/social sciences	4.5
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See Humanities/social sciences course options (p. 42)

Quantitative/numeracy skills

MATH 1220 Business Mathematics	4.5
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or higher level MATH course

Additional

INFO 1001 Information Systems and Literacy	4.5
HMRL 1010 Human Relations Skills	4.5
OR	
RDLS 1200 College Success Strategies	4.5

Major requirements for Office Technology (54.0 credit hrs.)

INFO 1008 Business Office Communications	4.5
INFO 1012 Electronic Filing and Calculating	4.5
INFO 1013 Keyboard Skillbuilding	2.0
INFO 1211 Microsoft Word	4.5
INFO 1212 Spreadsheets	4.5
INFO 1213 Database Fundamentals	4.5
INFO 1214 Business Presentations and Publications	4.5
INFO 1215 Document Processing	4.5
INFO 1219 Professional Practices	4.5
INFO 2242 Business Office Collaboration Technology	4.5
INFO 2260 Workplace Technologies	4.5
INFO 2948 Office Professional Capstone	5.0
INFO 2980 Office Technology Practicum	2.0
OR	
INFO 2981 Internship	variable

Option requirements for Office Technology – Administrative Assistant (16.5 credit hrs.)

ACCT 1050 Bookkeeping	3.0
ACCT 1060 Payroll Accounting	4.5
BSAD 1000 Introduction to Business	4.5
BSAD 1600 Principles of Supervision	4.5

The degree option is an area of interest within a program. Although students may complete single or multiple options within this program, only the major degree is awarded.

Office Technology - Administrative Assistant Curriculum Plan

Below is a suggested guide for students planning careers as administrative assistants after two years of full-time study.

First Year

First quarter

English level I	4.5
INFO 1001 Information Systems and Literacy	4.5
INFO 1013 Keyboard Skillbuilding	2.0
MATH 1220 Business Mathematics	4.5

Second quarter

English level II	4.5
INFO 1012 Electronic Filing and Calculating	4.5
INFO 1211 Microsoft Word	4.5

Third quarter

BSAD 1000	Introduction to Business ☑	4.5
INFO 1008	Business Office Communications ☑	4.5
INFO 1213	Database Fundamentals ☑	4.5

Fourth quarter

ACCT 1050	Bookkeeping ☑	3.0
INFO 1212	Spreadsheets ☑ ☒	4.5
INFO 1219	Professional Practices ☑	4.5

Second Year

Fifth quarter

ACCT 1060	Payroll Accounting ☑	4.5
INFO 1214	Business Presentations and Publications ☑	4.5
INFO 1215	Document Processing ☑	4.5
INFO 2242	Business Office Collaboration Technology ☑	4.5

Sixth quarter

INFO 2260	Workplace Technologies ☑	4.5
BSAD 1600	Principles of Supervision ☑	4.5
HMRL 1010	Human Relations Skills ☑ ☒	4.5

Seventh quarter

INFO 2948	Office Professional Capstone ☑	5.0
INFO 2980	Office Technology Practicum OR	2.0
INFO 2981	Internship	variable
	Humanities/social sciences elective	4.5

Office Technology – Office Professional (OTOPO)

Award: Associate in applied science degree

Program location: Fort Omaha Campus, South Omaha Campus, Online

Office professionals are the core of most businesses. As businesses continue to expand and work with increasingly complex technology, the need for advanced training and professional certification becomes more important every day. This degree prepares students to keep the offices organized and running smoothly and work with much of the valuable data that companies need to flourish.

Graduation Requirements

General education	27.0
Major requirements	54.0
Option requirements	18.0
Total credit hours required	99.0

General education requirements (27.0 credit hrs.)

Communications

English level I	4.5
English level II	4.5

See Communications course options (p. 42)

ENGL 1220 Technical Writing and ENGL 1230 Oral and Written Reports are recommended.

Humanities/social sciences

Humanities/social sciences	4.5
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See Humanities/social sciences course options (p. 42)

Quantitative/numeracy skills

MATH 1220	Business Mathematics ☑	4.5
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or higher level MATH course

Additional

INFO 1001	Information Systems and Literacy ☑ ☒	4.5
HMRL 1010	Human Relations Skills ☑ ☒ OR	4.5
RDLS 1200	College Success Strategies ☑	4.5

Major requirements for Office Technology (54.0 credit hrs.)

INFO 1008	Business Office Communications ☑	4.5
INFO 1012	Electronic Filing and Calculating ☑	4.5
INFO 1013	Keyboard Skillbuilding ☑	2.0
INFO 1211	Microsoft Word ☑	4.5
INFO 1212	Spreadsheets ☑ ☒	4.5
INFO 1213	Database Fundamentals ☑	4.5
INFO 1214	Business Presentations and Publications ☑	4.5
INFO 1215	Document Processing ☑	4.5
INFO 1219	Professional Practices ☑	4.5
INFO 2242	Business Office Collaboration Technology ☑	4.5
INFO 2260	Workplace Technologies ☑	4.5
INFO 2948	Office Professional Capstone ☑	5.0
INFO 2980	Office Technology Practicum OR	2.0
INFO 2981	Internship	variable

Option requirements for Office Technology – Office Professional (18.0 credit hrs.)

INFO 1010	Customer Service Skills ☑	4.5
INFO 1317	WordPress Office Professional ☑	4.5

Select two courses from the following:

BSAD 1000	Introduction to Business ☑	4.5
BSAD 1250	Introduction to Not-for-Profit Management	4.5
HIMS 1111	Healthcare Careers ☑ ☒	4.5
HMRL 1050	Leadership: Training and Skill Development	4.5

The degree option is an area of interest within a program. Although students may complete single or multiple options within this program, only the major degree is awarded.

Office Technology - Office Professional Curriculum Plan

Below is a suggested guide for students planning employment as office professionals after two years of full-time study.

First Year

First quarter

	English level I	4.5
INFO 1001	Information Systems and Literacy ☞ ☹	4.5
INFO 1013	Keyboard Skillbuilding ☞	2.0
MATH 1220	Business Mathematics ☞	4.5

Second quarter

	English level II	4.5
INFO 1012	Electronic Filing and Calculating ☞	4.5
INFO 1211	Microsoft Word ☞	4.5

Third quarter

INFO 1008	Business Office Communications ☞	4.5
INFO 1010	Customer Service Skills ☞	4.5
INFO 1213	Database Fundamentals ☞	4.5

Fourth quarter

INFO 1212	Spreadsheets ☞ ☹	4.5
INFO 1219	Professional Practices ☞	4.5
INFO	Office Technology-Office Professional Option	4.5

Second Year

Fifth quarter

INFO 1214	Business Presentations and Publications ☞	4.5
INFO 1215	Document Processing ☞	4.5
INFO 1317	WordPress Office Professional ☞	4.5

Sixth quarter

HMRL 1010	Human Relations Skills ☞ ☹	4.5
INFO 2242	Business Office Collaboration Technology ☞	4.5
INFO 2260	Workplace Technologies ☞	4.5

Seventh quarter

	Humanities/social sciences elective	4.5
INFO 2948	Office Professional Capstone ☞	5.0
INFO	Office Technology-Office Professional Option	4.5
INFO 2980	Office Technology Practicum OR	2.0
INFO 2981	Internship	Variable

Office Technology - Microcomputer Office Applications (OTMCE)

Award: Certificate of achievement

Pathway to associate degree: Office

Technology: Administrative Assistant (OTAAO); or Office Professional (OTOPO)

Program location: Fort Omaha Campus, South Omaha Campus, Online

This certificate of achievement provides students with the basic knowledge and skills necessary for entry-level clerical positions in an office environment.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Information-Technology-and-E-Learning/Information-Technology.aspx.

Graduation Requirements

General education	18.0
Major requirements	33.5
Total credit hours required	51.5

General education requirements (18.0 credit hrs.)

The general education requirements for this certificate program exceed the minimum standard number of hours. For more information, contact Student Services.

Communications

English level I 4.5

See Communications course options (p. 42)

ENGL 1220 is recommended.

Humanities/social sciences

Humanities/social sciences 4.5

See Humanities/social sciences course options (p. 42)

Quantitative/numeracy skills

MATH 1220 Business Mathematics ☞ 4.5

or higher level MATH course

Additional

INFO 1001 Information Systems and Literacy ☞ ☹ 4.5

Major requirements for Office Technology - Microcomputer Office Applications (33.5 credit hrs.)

INFO 1008	Business Office Communications ☞	4.5
INFO 1012	Electronic Filing and Calculating ☞	4.5
INFO 1013	Keyboard Skillbuilding ☞	2.0
INFO 1211	Microsoft Word ☞	4.5
INFO 1212	Spreadsheets ☞ ☹	4.5
INFO 1213	Database Fundamentals ☞	4.5
INFO 1214	Business Presentations and Publications ☞	4.5
INFO 1215	Document Processing ☞	4.5

Office Technology - Microcomputer Office Applications Curriculum Plan

Below is a suggested guide for students planning careers in microcomputer office applications after one year of full-time study.

First Year

First quarter

	English level I	4.5
INFO 1010	Customer Service Skills ☞	4.5
INFO 1013	Keyboard Skillbuilding ☞	2.0
MATH 1220	Business Mathematics ☞	4.5

Second quarter

INFO 1008	Business Office Communications ☞	4.5
INFO 1012	Electronic Filing and Calculating ☞	4.5
INFO 1211	Microsoft Word ☞	4.5

Third quarter

INFO 1212	Spreadsheets ☞ ☹	4.5
INFO 1213	Database Fundamentals ☞	4.5
INFO 1214	Business Presentations and Publications ☞	4.5

Fourth quarter

	Humanities/social sciences elective	4.5
INFO 1215	Document Processing ☞	4.5

Customer Service Representative (PSCSD)

Award: Career certificate

Pathway to associate degree: General Studies (GSAAS)

This career certificate prepares students to work as customer service representatives for business and industry.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Information-Technology-and-E-Learning/Information-Technology.aspx.

Requirements for Customer Service Representative career certificate 27.0 credit hrs.)

BSAD 1000	Introduction to Business ☞	4.5
HMRL 1010	Human Relations Skills ☞ ☹	4.5
	OR	
WORK 1400	Employability Skills	4.5
INFO 1001	Information Systems and Literacy ☞ ☹	4.5
INFO 1008	Business Office Communications ☞	4.5
INFO 1010	Customer Service Skills ☞	4.5
INFO 1211	Microsoft Word	4.5

COMMUNITY AND HUMAN SERVICES

Criminal Justice

- Criminal Justice Degree Options (p. 93)
 - Criminal Justice - Corrections (p. 93)
 - Criminal Justice - Law Enforcement (p. 94)

Early Childhood Education

- Early Childhood Educator, associate in applied science degree (p. 95)
- Early Childhood Educator - Assistant, certificate of achievement (p. 97)
- Early Childhood Education Director, career certificate (p. 98)
- Early Childhood Generalist, career certificate (p. 98)

Fire Science Technology

- Fire Science Technology, associate in applied science degree (p. 99)

Human Services

- Human Services Degree Options (p. 100)
 - Human Services - Chemical Dependency Counseling (p. 100)
 - Human Services - General Human Services (p. 102)
- Human Services Transfer, associate in applied science degree (p. 104)
- Human Services - Chemical Dependency, certificate of achievement (p. 103)
- Human Services - General, certificate of achievement (p. 104)

Criminal Justice

In addition to police careers, the Criminal Justice program also leads to the following opportunities:

- 911 dispatcher
- defense attorney
- game warden
- state trooper
- court bailiff
- district attorney
- prison guard
- U.S. marshal
- crime lab specialist
- FBI agent
- probation/parole officer

criminal justice professor

forest ranger

secret service

Degree: Associate in Applied Science

Criminal Justice - Corrections

Criminal Justice - Law Enforcement

Online Degree: Associate in Applied Science

Criminal Justice - Corrections

Criminal Justice - Law Enforcement

Criminal Justice Degree Options

Award: Associate in applied science degree

Program location: Elkhorn Valley Campus, Fort Omaha Campus, Sarpy Center, South Omaha Campus, Online

This degree provides practical knowledge of the criminal justice system and operations. Study focuses on local, state, and federal law enforcement, judicial processes, corrections, and homeland security. The degree also explores the criminal justice system's role within society.

Employment opportunities exist in a variety of local, state, and federal law enforcement, corrections, and security fields. Examples include police officer, deputy sheriff, probation officer, juvenile detention officer, correctional officer, crime scene investigator, and loss prevention specialist. Individuals considering a degree or employment in a criminal justice profession must be aware of strict employment qualifications. Factors that usually disqualify candidates from employment include a criminal record (e.g., theft, assault, murder), history of drug abuse, significant psychological/personal disorders, physiological disorders, neuromuscular dysfunction, and dishonesty. Criminal justice agencies carefully scrutinize candidates in order to select those who maintain the public's trust and confidence at all times.

Options available under this degree are:

Criminal Justice - Corrections (CJCNO) (p. 93)

Criminal Justice - Law Enforcement (CJLEO) (p. 94)

Criminal Justice - Corrections (CJCNO)

Award: Associate in applied science

Program location: Elkhorn Valley Campus, Fort Omaha Campus, Sarpy Center, South Omaha Campus, Online

Graduation Requirements

General education	27.0
Major requirements	40.5
Option requirements	31.5
Total credit hours required	99.0

General education requirements (27.0 credit hrs.)**Communications**

English level I	4.5
English level II	4.5

See Communications course options (p. 42)

Social Sciences

SOCI 1010	Introduction to Sociology	4.5
	OR	
PSYC 1010	Introduction to Psychology	4.5

Quantitative/numeracy skills

Mathematics or Financial Literacy	4.5
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See Quantitative/numeracy skills course options (p. 44)

MATH 1220 Business Math is strongly recommended.

Additional

HMRL 1010	Human Relations Skills	4.5
INFO 1001	Information Systems and Literacy	4.5

Major requirements for Criminal Justice (40.5 credit hrs.)

CRIM 1010	Introduction to Criminal Justice	4.5
CRIM 1020	Introduction to Corrections	4.5
CRIM 1030	Courts and the Judicial Process	4.5
CRIM 1140	Reporting Techniques for Criminal Justice	4.5
CRIM 2000	Criminal Law	4.5
CRIM 2050	Principles of Interviewing and Interrogation	4.5
CRIM 2150	Contemporary Issues in Criminal Justice	4.5
CRIM 2260	Criminal Investigation	4.5
CRIM 2310	Rules of Evidence	4.5

Upon successful completion of a P.O.S.T. accredited academy or basic police academy course accredited by the Nebraska Law Enforcement Training Center, a maximum of 13.5 credit hours may be granted upon petition for CRIM 1010, CRIM 2000, and CRIM 2260.

Option requirements for Criminal Justice - Corrections (31.5 credit hrs.)

CRIM 2010	Introduction to Probation and Parole	4.5
CRIM 2020	Legal Issues in Corrections	4.5
CRIM 2120	Community-Based Corrections	4.5
CRIM 2220	Correctional Client	4.5
CRIM 2320	Correctional Facilities	4.5

Elective Courses**Students should select two electives that are not in their option requirements:**

CRIM 2010	Introduction to Probation and Parole	4.5
CRIM 2030	Police and Society	4.5
CRIM 2120	Community-Based Corrections	4.5
CRIM 2220	Correctional Client	4.5
CRIM 2300	Community Relations	4.5
CRIM 2330	Introduction to Forensic Crime Scene Investigation	4.5
CRIM 2400	Introduction to Homeland Security	4.5
CRIM 2430	Emergency Response to Terrorism	4.5
CRIM 2500	Introduction to Private Security Management	4.5
CRIM 2900	Special Topics in Criminal Justice	variable
CRIM 2960	Internship	variable

Criminal Justice - Law Enforcement (CJLEO)

Award: Associate in applied science

Program location: Elkhorn Valley Campus, Fort Omaha Campus, Sarpy Center, South Omaha Campus, Online

Graduation Requirements

General education	27.0
Major requirements	40.5
Option requirements	31.5
Total credit hours required	99.0

General education requirements (27.0 credit hrs.)**Communications**

English level I	4.5
English level II	4.5

See Communications course options (p. 42)

Social Sciences

SOCI 1010	Introduction to Sociology	4.5
	OR	
PSYC 1010	Introduction to Psychology	4.5

Quantitative/numeracy skills

Mathematics or Financial Literacy	4.5
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See Quantitative/numeracy skills course options (p. 44)

MATH 1220 Business Math is strongly recommended.

Additional

HMRL 1010	Human Relations Skills	4.5
INFO 1001	Information Systems and Literacy	4.5

Major requirements for Criminal Justice (40.5 credit hrs.)

CRIM 1010	Introduction to Criminal Justice ☞	4.5
CRIM 1020	Introduction to Corrections ☞	4.5
CRIM 1030	Courts and the Judicial Process ☞	4.5
CRIM 1140	Reporting Techniques for Criminal Justice ☞	4.5
CRIM 2000	Criminal Law ☞	4.5
CRIM 2050	Principles of Interviewing and Interrogation ☞	4.5
CRIM 2150	Contemporary Issues in Criminal Justice ☞	4.5
CRIM 2260	Criminal Investigation ☞	4.5
CRIM 2310	Rules of Evidence ☞	4.5

Upon successful completion of a P.O.S.T. accredited academy or basic police academy course accredited by the Nebraska Law Enforcement Training Center, a maximum of 13.5 credit hours may be granted upon petition for CRIM 1010, CRIM 2000, and CRIM 2260.

Option requirements for Criminal Justice - Law Enforcement (31.5 credit hrs.)

CRIM 2030	Police and Society ☞	4.5
CRIM 2190	Police Field Services ☞	4.5
CRIM 2300	Community Relations ☞	4.5
CRIM 2330	Introduction to Forensic Crime Scene Investigation ☞	4.5
CRIM 2400	Introduction to Homeland Security ☞	4.5

Elective Courses

Students should select two electives that are not in their option requirements:

CRIM 2010	Introduction to Probation and Parole ☞	4.5
CRIM 2030	Police and Society ☞	4.5
CRIM 2120	Community-Based Corrections ☞	4.5
CRIM 2220	Correctional Client ☞	4.5
CRIM 2300	Community Relations ☞	4.5
CRIM 2330	Introduction to Forensic Crime Scene Investigation ☞	4.5
CRIM 2400	Introduction to Homeland Security ☞	4.5
CRIM 2430	Emergency Response to Terrorism ☞	4.5
CRIM 2500	Introduction to Private Security Management ☞	4.5
CRIM 2900	Special Topics in Criminal Justice	variable
CRIM 2960	Internship	variable

Early Childhood Education

The Early Childhood Education program prepares students for employment as a head teacher or director of childcare facilities. Learning opportunities center on curriculum planning, managing, and teaching within a childcare facility. Skills essential to working with parents and children in a variety of settings and activities are stressed.

A criminal background investigation and checks of the child abuse/neglect, adult protective services and State Patrol sex offender registries will be required of each student the Early Childhood Education Program. Based on the result of the criminal background and registry checks, a student may be prevented from taking certain courses, accessing certain laboratory/practicum experiences, or completing the program. A nonrefundable fee of \$35 will be assessed to the student's MCC student account for the criminal background and registry checks.

The Early Childhood Education program is accredited by the National Association for the Education of Young Children, which means it was required to meet high standards in the preparation of early childhood education employees.

Degree: Associate in Applied Science

Early Childhood Educator

Certificate of Achievement:

Early Childhood Educator – Assistant

Career Certificate:

Early Childhood Education Director

Early Childhood Generalist

Early Childhood Educator (ECAS1)

Award: Associate in applied science degree

Program location: Learning Community of North Omaha

This degree prepares students for employment as a head teacher or director in a variety of early childhood education settings in the state of Nebraska. Learning opportunities are centered on curriculum planning, knowledge of child development (typical and atypical), family and community relationships, positive behavioral support and appropriate behavioral management, observation and assessment, language and literacy, health and nutrition, and environmental planning. The courses provide a variety of field and clinical experiences to help the student be more prepared for teaching in the classroom. Practicum courses include requirements for working with infants, toddlers, preschoolers, and school-agers, in addition to the student's age choice for the final student teaching practicum.

Individuals who are considering going into the field of early childhood education should be aware that checks with the Adult and Child Abuse Registries are conducted before employment is offered. Such checks are also done on individuals enrolled in practicum courses. This practice is consistent with Nebraska state statutes. Updated Nebraska licensing regulations require students working directly with children to have a current criminal background check. These two checks must be completed before a student can engage in any field or clinical experience within any ECED program class.

All courses in the Early Childhood Education program require a minimum of four field and/or clinical experience hours within early childhood education settings except for ECED 1220, ECED 1221, ECED 1222, ECED 1240, ECED 1241, and ECED 2090 or ECED 2091.

Graduation Requirements

General education	31.5
Major requirements	75.0
Total credit hours required	106.5

General education requirements (31.5 credit hrs.)

Communications

English level I	4.5
English level II	4.5

See Communications course options (p. 42)

Social sciences

PSYC 1120 Human Growth and Development	4.5
Social sciences	4.5

See Social sciences course options (p. 42)

Quantitative/numeracy skills

Select one course from the following:

MATH 1220 Business Mathematics	4.5
MATH 1310 Intermediate Algebra	4.5
FINA 1000 Financial Literacy	4.5

Students planning to transfer to a four-year program should select MATH 1310.

Additional

HMRL 1010 Human Relations Skills	4.5
INFO 1001 Information Systems and Literacy	4.5

Major requirements for Early Childhood Educator (75.0 credit hrs.)

ECED 1050 Expressive Arts	4.5
ECED 1060 Observation, Assessment, and Guidance	4.5
ECED 1110 Infant and Toddler Development	4.5
ECED 1120 Preschool Child Development	4.5
ECED 1150 Introduction to Early Childhood Education	4.5
ECED 1160 Early Language and Literacy	4.5
ECED 1220 Prepracticum	1.5
ECED 1221 Infant Practicum	1.5
ECED 1222 Toddler Practicum	1.5
ECED 1230 School-Age Child Development and Programming	3.0
ECED 1240 Preschool-Age Practicum	1.5
ECED 1241 School-Age Practicum	1.5
ECED 1260 Children's Health and Nutrition	4.5
ECED 2050 Children with Exceptionalities	4.5

ECED 2060 Early Childhood Education Curriculum Planning	4.5
ECED 2061 Child Guidance Techniques	4.5
ECED 2070 Family and Community Relationships	4.5
ECED 2090 Early Childhood Student Teaching Practicum	6.0
OR	
ECED 2091 Early Childhood Administrative Practicum	6.0
ECED 2095 Current Topics in Early Childhood Education	4.5
ECED 2450 Administration of Early Childhood Education Programs	4.5

ECED 1221 (p. 263), ECED 1222 (p. 263), ECED 1240 (p. 264), ECED 1241 (p. 264), ECED 2090 (p. 264) or ECED 2091 (p. 265): Students enrolling in practicums should visit the Early Childhood practicum website at mccneb.edu/Academic-Programs/Programs-of-Study/Social-Sciences/Early-Childhood-Education/Early-Childhood-Practicum.aspx.

Students who plan to transfer to a four-year institution need to select from the general education transfer course options (p. 220) and see and maintain regular contact with an ECED faculty advisor.

This program is accredited through the National Association for the Education of Young Children (NAEYC), which means it was required to meet high standards in the preparation of early childhood education employees.

Early Childhood Educator Curriculum Plan

Below is a suggested guide for students planning careers in early childhood education after two years of full-time study.

First Year

First quarter

ECED 1060 Observation, Assessment, and Guidance	4.5
ECED 1110 Infant and Toddler Development	4.5
ECED 1150 Introduction to Early Childhood Education	4.5
ECED 1220 Prepracticum	1.5
ENGL 1010 English Composition I	4.5

ENGL 1010: general education requirements are available Summer quarter. If ENGL 1010 is not taken prior to ECED 1060, it must be a corequisite.

Second quarter

ECED 1050 Expressive Arts	4.5
ECED 1120 Preschool Child Development	4.5
ECED 1221 Infant Practicum	1.5
ECED 1222 Toddler Practicum	1.5
ECED 1260 Children's Health and Nutrition	4.5

Third quarter

ECED 1230	School-Age Child Development and Programming ☺	3.0
ECED 1240	Preschool-Age Practicum	1.5
ECED 1241	School-Age Practicum	1.5
PSYC 1120	Human Growth and Development ☺	4.5
MATH 1220	Business Mathematics ☺ OR	4.5
MATH 1310	Intermediate Algebra ☺ OR	4.5
FINA 1000	Financial Literacy ☺	4.5

FINA 1000, MATH 1220, MATH 1310, PSYC 1120: general education requirements available Summer quarter

Second Year

Fifth quarter

ECED 1160	Early Language and Literacy ☺	4.5
ECED 2060	Early Childhood Education Curriculum Planning	4.5
ECED 2061	Child Guidance Techniques	4.5
INFO 1001	Information Systems and Literacy ☺ ☹	4.5

INFO 1001: general education requirements available Summer quarter

Sixth quarter

ECED 2070	Family and Community Relationships ☺	4.5
ECED 2095	Current Topics in Early Childhood Education ☺	4.5
ECED 2450	Administration of Early Childhood Education Programs ☺	4.5
ENGL 1020	English Composition II ☺ ☹	4.5

ENGL 1020, HMRL 1010: general education requirements available Summer quarter

Seventh quarter

ECED 2050	Children with Exceptionalities ☺	4.5
ECED 2090	Early Childhood Student Teaching Practicum OR	6.0
ECED 2091	Early Childhood Administrative Practicum	6.0
HMRL 1010	Human Relations Skills ☺ ☹ Humanities/social science elective	4.5 4.5

Humanities/social sciences: general education requirements available Summer quarter

Early Childhood Educator – Assistant (ECTC1)

Award: Certificate of achievement

Pathway to associate degree: Early Childhood Educator (ECAS1)

Program location: Fort Omaha Campus, Online

This certificate of achievement provides training/learning opportunities for paraprofessionals who assist head teachers in carrying out various responsibilities. These responsibilities include planning and organizing activities used in the care of young children.

Individuals who are considering going into the field of early childhood education should be aware that checks with the Adult and Child Abuse Registries are conducted before employment is offered. Such checks are also done on individuals enrolled in practicum courses. This practice is consistent with Nebraska state statutes.

All courses in the Early Childhood Education program require a minimum of four field experience hours within early childhood education settings except for ECED 1220, ECED 1221, ECED 1222, ECED 1240, ECED 1241, and ECED 2090.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Social-Sciences/Early-Childhood-Education.aspx.

Graduation Requirements

General education	13.5
Major requirements	37.5
Total credit hours required	51.0

General education requirements (13.5 credit hrs.)

Communications

English level I	4.5
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See Communications course options (p. 42)

Social sciences

PSYC 1120	Human Growth and Development ☺	4.5
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Quantitative/numeracy skills

Select one course from the following:

MATH 1220	Business Mathematics ☺	4.5
MATH 1310	Intermediate Algebra ☺	4.5
FINA 1000	Financial Literacy ☺	4.5

Students planning to transfer to a four-year program should select MATH 1310.

Major requirements for Early Childhood Educator – Assistant (37.5 credit hrs.)

ECED 1050	Expressive Arts ☺	4.5
ECED 1060	Observation, Assessment, and Guidance	4.5
ECED 1110	Infant and Toddler Development ☺	4.5

ECED 1120	Preschool Child Development ☞	4.5
ECED 1150	Introduction to Early Childhood Education ☞	4.5
ECED 1220	Prepracticum	1.5
ECED 1221	Infant Practicum	1.5
ECED 1222	Toddler Practicum	1.5
ECED 1230	School-Age Child Development and Programming ☞	3.0
ECED 1240	Preschool-Age Practicum	1.5
ECED 1241	School-Age Practicum	1.5
ECED 1260	Children's Health and Nutrition ☞	4.5

ECED 1221 (p. 263), ECED 1222 (p. 263), ECED 1240 (p. 264), ECED 1241 (p. 264): Students enrolling in practicums should visit the Early Childhood practicum website at mccneb.edu/Academic-Programs/Programs-of-Study/Social-Sciences/Early-Childhood-Education/Early-Childhood-Practicum.aspx.

Early Childhood Educator - Assistant Curriculum Plan

Below is a suggested guide for students planning careers in early childhood education after one year of full-time study.

First Year

First quarter

ECED 1060	Observation, Assessment, and Guidance	4.5
ECED 1110	Infant and Toddler Development ☞	4.5
ECED 1050	Expressive Arts ☞	4.5
ECED 1220	Prepracticum	1.5
ENGL 1010	English Composition I ☞ ☹	4.5

ENGL 1010: general education requirements available Summer quarter

Second quarter

ECED 1050	Expressive Arts ☞	4.5
ECED 1120	Preschool Child Development ☞	4.5
ECED 1221	Infant Practicum	1.5
ECED 1260	Children's Health and Nutrition ☞	4.5

Third quarter

ECED 1230	School-Age Child Development and Programming ☞	3.0
ECED 1241	School-Age Practicum	1.5
PSYC 1120	Human Growth and Development ☞	4.5
MATH 1220	Business Mathematics ☞	4.5
	OR	
MATH 1310	Intermediate Algebra ☞	4.5
	OR	
FINA 1000	Financial Literacy ☞	4.5

FINA 1000, MATH 1220, MATH 1310, PSYC 1120: general education requirements available Summer quarter

Early Childhood Education Director (ECDCC)

Award: Career certificate

Pathway to associate degree: Early Childhood Educator (ECAS1)

Program location: Fort Omaha Campus, South Omaha Campus

This career certificate allows early childhood education professionals the opportunity to further their education, enhance their careers, improve their service to the community, and stay competitive in the marketplace.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Social-Sciences/Early-Childhood-Education.aspx.

Requirements for Early Childhood Education Director career certificate (33.0 credit hrs.)

ECED 1060	Observation, Assessment, and Guidance	4.5
ECED 1110	Infant and Toddler Development ☞	4.5
ECED 1120	Preschool Child Development ☞	4.5
ECED 2091	Early Childhood Administrative Practicum	6.0
ECED 2450	Administration of Early Childhood Education Programs ☞	4.5
HMRL 1010	Human Relations Skills ☞ ☹	4.5

Select one course from the following:

ENGL 1010	English Composition I ☞ ☹	4.5
ENGL 1210	Applied Communications	4.5
ENGL 1220	Technical Writing ☞	4.5
ENGL 1230	Business Writing ☞	4.5

Students planning to transfer should select ENGL 1010.

Early Childhood Generalist (ECGSD)

Award: Career certificate

Pathway to associate degree: Early Childhood Educator (ECAS1)

Program location: Fort Omaha Campus

This career certificate focuses on specific early childhood education content and demonstrates specific skills.

All courses in the Early Childhood Education program require a minimum of four field experience hours within early childhood education settings except for ECED 1220, ECED 1221, ECED 1240, and ECED 2090.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Social-Sciences/Early-Childhood-Education.aspx.

Requirements for Early Childhood Generalist career certificate (31.5 credit hrs.)

ECED 1060	Observation, Assessment, and Guidance	4.5
ECED 1110	Infant and Toddler Development ☞	4.5
ECED 1120	Preschool Child Development ☞	4.5
ECED 2091	Early Childhood Administrative Practicum	6.0
ECED 2450	Administration of Early Childhood Education Programs ☞	4.5
HMRL 1010	Human Relations Skills ☞ ☹	4.5

Select one course from the following:

ENGL 1010	English Composition I ☞ ☹	4.5
ENGL 1210	Applied Communications	4.5
ENGL 1220	Technical Writing ☞	4.5
ENGL 1230	Business Writing ☞	4.5

Students planning to transfer should select ENGL 1010.

Fire Science Technology

Degree: Associate in Applied Science

Fire Science Technology

Fire Science Technology (FSAAS)

Award: Associate in applied science degree

Program location: South Omaha Campus

This degree provides a unique opportunity to build professional skills and expand career possibilities. Insurance investigators and adjusters, industrial safety specialists, fire protection system designers and professionals, and volunteer firefighters benefit from enrolling in the Fire Science Technology program.

Graduation Requirements

General education	27.0
Major requirements	72.0
Total credit hours required	99.0

General education requirements (27.0 credit hrs.)

Communications

English level I	4.5
English level II ☞	4.5

Social sciences

Social science	4.5
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See Social sciences course options (p. 42)

Quantitative/numeracy skills

MATH 1240	Applied Mathematics	4.5
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Additional

HMRL 1010	Human Relations Skills ☞ ☹	4.5
INFO 1001	Information Systems and Literacy ☞ ☹	4.5

Major requirements for Fire Science Technology (72.0 credit hrs.)

FIST 1000	Principles of Emergency Services	3.0
FIST 1020	Fire Behavior and Combustion	4.0
FIST 1030	Hazardous Materials Chemistry	3.0
FIST 1040	Principles of Property and Casualty Insurance ☞	3.0
FIST 1050	Building Construction for Fire Protection	3.0
FIST 1060	Occupational Safety and Health for Emergency Services	3.0
FIST 1070	Fire Protection Systems ☞	3.0
FIST 1080	Fire Protection Hydraulics and Water Supply	4.0
FIST 1090	Firefighter I	10.0
FIST 2000	Incident Command System	3.0
FIST 2010	Fire Investigation I	3.0
FIST 2011	Fire Investigation II	3.0
FIST 2020	Fire Prevention, Inspection and Codes ☞	4.0
FIST 2030	Legal Aspects of Emergency Services	3.0
FIST 2040	Principles of Fire & Emergency Services Safety & Survival	3.0
FIST 2050	Introduction to Fire and Emergency Services Administration ☞	3.0
FIST 2060	Strategy and Tactics	4.0
FIST 2070	Hazardous Materials Operations	3.5
FIST 2090	Firefighter II	5.5
EMSP 1010	Heartsaver First Aid with CPR and AED	1.0

Human Services

The Human Services program prepares students for entry-level positions in public and private community agencies and institutions involved with helping professions. The human services worker is prepared to work as a team member, generally working under the direction of a professional, in providing help to the client.

Those working in the human services field have specialized training as a helping professional. They hold a variety of positions in residential care, correctional facilities, substance abuse treatment facilities, homeless shelters and food banks, organizations dedicated to children and families, poverty and employment services, child and elder care operations, mental health agencies, and domestic violence efforts. Their role may include helping others obtain services, monitoring and keeping records, organizing or leading group activities, assisting clients in mastering everyday living skills, and modeling healthy behaviors for residents or clients.

The Human Services program has been accredited by The Council for Standards in Human Service Education since 1995.

The Chemical Dependency Counseling option (associate degree) meets the standards established by the Nebraska Department of Health and Human Services, Division of Alcoholism, Drug Abuse, and Addiction Services as a Provisionally Licensed Alcohol and Drug Counselor (PLADC).

The associate degree option in General Human Services provides the opportunity to become a Human Services Board-Certified Practitioner through the Center for Credentialing and Education.

Degree: Associate in Applied Science

Human Services - Chemical Dependency Counseling

Human Services - General Human Services

Human Services Transfer

Certificate of Achievement:

Human Services – Chemical Dependency

Human Services – General

Human Services Degree Options

Award: Associate in applied science degree

Program location: Fort Omaha Campus

This degree prepares students for entry-level positions in public and private community agencies and institutions involved with helping professions. Human services workers are prepared to work as a team member, generally working under the direction of a professional, in providing help to the client. The Council for Standards in Human Services Education accredits the Human Services program.

Options available under this degree are:

Human Services - Chemical Dependency Counseling (CDAA1) (p. 100)

Human Services - General Human Services (HSAA2) (p. 102)

Human Services - Chemical Dependency Counseling (CDAA1)

Award: Associate in applied science degree

Program location: Fort Omaha Campus

This degree prepares students for positions in public and private sectors. A variety of learning experiences focus on theoretical and practical knowledge in working with chemically dependent individuals and their families. Students have the opportunity to develop skills that enable them to work with individuals or groups within the area of chemical dependency counseling. The intent of the program is to facilitate meeting Nebraska certification standards. State certification requirements are subject to change at the discretion of the Department of Health and Human Services.

Graduation Requirements

General education	27.0-27.5
Major requirements	41.5
Option requirements	28.5
Total credit hours required	97.0-97.5

The associate degree requires successful completion of all requirements listed and that all courses with an HMSV prefix have a C grade or better.

General education requirements (27.0-27.5 credit hrs.)

Communications

ENGL 1010	English Composition I	☞ ☹	4.5
ENGL 1020	English Composition II	☞ ☹	4.5

It is important for students in the Human Services program to take both English requirements in the first two quarters of the program.

Social sciences

PSYC 1010	Introduction to Psychology	☞ ☹	4.5
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Quantitative/numeracy skills

Select one of the following courses:

MATH 1220	Business Mathematics	☞	4.5
MATH 1310	Intermediate Algebra	☞	4.5
MATH 1420	College Algebra	☞	5.0
FINA 1000	Financial Literacy	☞	4.5

Additional

HMRL 1010	Human Relations Skills	☞ ☹	4.5
INFO 1001	Information Systems and Literacy	☞ ☹	4.5

Major requirements for Human Services (41.5 credit hrs.)

Courses

HMSV 1120	Helping Skills and Techniques		4.5
HMSV 1130	Introduction to Counseling Theories	☹	4.5
HMSV 1140	Assessment, Case Planning, and Management	☞	4.5
HMSV 2050	Ethics and Professionalism	☞	4.5
HMSV 2110	Group Counseling		4.5
HMSV 2150	Multicultural Counseling		4.5
HMSV 2450	Crisis Intervention		4.5
PSYC 1120	Human Growth and Development	☞	4.5
PSYC 2350	Fundamentals of Abnormal Psychology	☞	4.5
EMSP 1010	Heartsaver First Aid with CPR and AED		1.0

EMSP 1010 is required for those who do not currently hold a valid CPR/first aid card and students must submit documentation that verifies current certification in adult CPR and basic first aid before participating in practicum courses.

Option requirements for Chemical Dependency (28.5 credit hrs.)**Courses**

HMSV 1160	Medical and Social Aspects of Addictions ☞	4.5
HMSV 2130	Treatment Issues in Chemical Dependency ☞	4.5
HMSV 2160	Advanced Group Skills	4.5
HMSV 2994	Practicum I - Chemical Dependency Counseling	5.0
HMSV 2995	Practicum II - Chemical Dependency Counseling	5.0
HMSV 2996	Practicum III - Chemical Dependency Counseling	5.0

Some courses may be taken pass/fail without tests for continuing education units (CEUs) in various professions without pursuing a degree in the program.

In order to submit an application to participate in practicum, students must have been accepted to MCC and have completed all of the first year classes. All classes with an HMSV prefix must have a grade of C or better.

Individuals considering a degree or employment in the human services or chemical dependency fields should be aware of strict practicum admission qualifications. Adult Protective Services and Child Protective Services checks are conducted before practicum placement is offered. The College reserves the right to share the results of any such investigation with any institution at which students intend to participate in a practicum experience. This practice is consistent with Nebraska state statutes. Consult the Human Services program manual for other prerequisites to practicum placement.

Due to the limited number of chemical dependency practicum sites in the Omaha area, MCC cannot guarantee students entry into the chemical dependency counseling practicum courses (HMSV 2994, HMSV 2995, and HMSV 2996) in any given quarter. Consequently, graduation from the program may be delayed. It is possible that a shortage of practicum sites for the general human services practicum courses (HMSV 2991, HMSV 2992, and HMSV 2993) might occur.

Human Services - Chemical Dependency Counseling Curriculum Plan

Below is a suggested guide for students planning careers in chemical dependency after two years of full-time study.

First Year**First Quarter**

ENGL 1010	English Composition I ☞ ☹	4.5
INFO 1001	Information Systems and Literacy ☞ ☹	4.5
	Mathematics or Financial Literacy	4.5
PSYC 1010	Introduction to Psychology ☞ ☹	4.5

Second quarter

ENGL 1020	English Composition II ☞ ☹	4.5
HMSV 1160	Medical and Social Aspects of Addictions ☞	4.5
PSYC 1120	Human Growth and Development ☞	4.5

Third quarter

HMSV 1120	Helping Skills and Techniques	4.5
HMSV 1140	Assessment, Case Planning, and Management ☞	4.5
HMSV 2130	Treatment Issues in Chemical Dependency ☞	4.5
HMRL 1010	Human Relations Skills ☞ ☹	4.5
SOCI 1010	Introduction to Sociology ☞ ☹	4.5

Fourth quarter

HMSV 1130	Introduction to Counseling Theories ☹	4.5
HMSV 2050	Ethics and Professionalism ☞	4.5
HMSV 2110	Group Counseling	4.5
HMSV 2150	Multicultural Counseling	4.5

Second Year**Fifth quarter**

HMSV 2160	Advanced Group Skills	4.5
HMSV 2450	Crisis Intervention	4.5
HMSV 2994	Practicum I - Chemical Dependency Counseling	5.0

Sixth quarter

HMSV 2995	Practicum II - Chemical Dependency Counseling	5.0
PSYC 2350	Fundamentals of Abnormal Psychology ☞	4.5

Seventh quarter

HMSV 2996	Practicum III - Chemical Dependency Counseling	5.0
	Other requirements	3.0-7.5

Human Services - General Human Services (HSAA2)

Award: Associate in applied science degree

Program location: Fort Omaha Campus

This degree prepares students for entry-level positions in public and private community agencies and institutions involved with helping professions. Human services workers are prepared to work as a team member, generally working under the direction of a professional, in providing help to the client. The Council for Standards in Human Services Education accredits the Human Services program.

Graduation Requirements

General education	27.0-27.5
Major requirements	41.5
Option requirements	28.5
Total credit hours required	97.0-97.5

The associate degree requires successful completion of all requirements listed and that all courses with an HMSV prefix have a C grade or better.

General education requirements (27.0-27.5 credit hrs.)

Communications

ENGL 1010	English Composition I	4.5
ENGL 1020	English Composition II	4.5

It is important for students in the Human Services program to take both English requirements in the first two quarters of the program.

Social sciences

PSYC 1010	Introduction to Psychology	4.5
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Quantitative/numeracy skills

Select one of the following courses:

MATH 1220	Business Mathematics	4.5
MATH 1310	Intermediate Algebra	4.5
MATH 1420	College Algebra	5.0
FINA 1000	Financial Literacy	4.5

Additional

HMRL 1010	Human Relations Skills	4.5
INFO 1001	Information Systems and Literacy	4.5

Major requirements for Human Services (41.5 credit hrs.)

Courses

HMSV 1120	Helping Skills and Techniques	4.5
HMSV 1130	Introduction to Counseling Theories	4.5
HMSV 1140	Assessment, Case Planning, and Management	4.5
HMSV 2050	Ethics and Professionalism	4.5
HMSV 2110	Group Counseling	4.5
HMSV 2150	Multicultural Counseling	4.5
HMSV 2450	Crisis Intervention	4.5
PSYC 1120	Human Growth and Development	4.5

PSYC 2350	Fundamentals of Abnormal Psychology	4.5
EMSP 1010	Heartsaver First Aid with CPR and AED	1.0

EMSP 1010 is required for those who do not currently hold a valid CPR/first aid card and students must submit documentation that verifies current certification in adult CPR and basic first aid before participating in practicum courses.

Option requirements for Human Services - General Human Services (28.5 credit hrs.)

Courses

HMSV 1010	Introduction to Human Services	4.5
HMSV 1150	Community Resources	4.5
HMSV 2120	Social Services Policy and Exceptional Populations	4.5
HMSV 2991	Practicum I - General Human Services	5.0
HMSV 2992	Practicum II - General Human Services	5.0
HMSV 2993	Practicum III - General Human Services	5.0

Some courses may be taken pass/fail without tests for continuing education units (CEUs) in various professions without pursuing a degree in the program.

In order to submit an application to participate in practicum, students must have been accepted to MCC and have completed all of the first year classes. All classes with an HMSV prefix must have a grade of C or better.

Individuals considering a degree or employment in the human services or chemical dependency fields should be aware of strict practicum qualifications. Adult Protective Services and Child Protective Services checks are conducted before practicum placement is offered. The College reserves the right to share the results of any such investigation with any institution at which students intend to participate in a practicum experience. This practice is consistent with Nebraska state statutes. Consult the Human Services program manual for other prerequisites to practicum placement.

Due to the limited number of chemical dependency practicum sites in the Omaha area, MCC cannot guarantee students entry into the chemical dependency counseling practicum courses (HMSV 2994, HMSV 2995, and HMSV 2996) in any given quarter. Consequently, graduation from the program may be delayed. It is possible that a shortage of practicum sites for the general human services practicum courses (HMSV 2991, HMSV 2992, and HMSV 2993) might occur.

Human Services - General Human Services Curriculum Plan

Below is a suggested guide for students planning careers in human services after two years of full-time study.

First year

First quarter

ENGL 1010	English Composition I	4.5
INFO 1001	Information Systems and Literacy	4.5
	Mathematics or Financial Literacy	4.5

Second quarter

ENGL 1020	English Composition II	4.5
HMSV 1010	Introduction to Human Services	4.5
PSYC 1010	Introduction to Psychology	4.5

Third quarter

HMSV 1120	Helping Skills and Techniques	4.5
HMSV 1140	Assessment, Case Planning, and Management	4.5
HMSV 1150	Community Resources	4.5
HMRL 1010	Human Relations Skills	4.5

Fourth quarter

HMSV 1130	Introduction to Counseling Theories	4.5
HMSV 2050	Ethics and Professionalism	4.5
HMSV 2150	Multicultural Counseling	4.5
PSYC 1120	Human Growth and Development	4.5

Second year

Fifth quarter

HMSV 2110	Group Counseling	4.5
HMSV 2450	Crisis Intervention	4.5
HMSV 2991	Practicum I - General Human Services	5.0

Sixth quarter

HMSV 2120	Social Services Policy and Exceptional Populations	4.5
HMSV 2992	Practicum II - General Human Services	5.0
PSYC 2350	Fundamentals of Abnormal Psychology	4.5

Seventh quarter

HMSV 2993	Practicum III - General Human Services	5.0
	Other requirements	4.0-6.0

Human Services - Chemical Dependency (CDCC1)

Award: Certificate of achievement

Pathway to associate degree: Human Services - Chemical Dependency Counseling (CDAA1)

Program location: Elkhorn Valley Campus, Fort Omaha Campus, South Omaha Campus

This certificate of achievement provides knowledge and skills in medical and social aspects of addiction; treatment issues in addictions; interpersonal communication; helping skills and techniques; introduction to counseling; assessment, case planning, and management; professional ethics and issues; and crisis intervention.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mcneb.edu/Academics/Programs-of-Study/Business-Human-Services/Human-Service.s.aspx.

Graduation Requirements

General education	22.5-23.0
Major requirements	31.5
Total credit hours required	54.0-54.5

General education requirements (22.5-23.0 credit hrs.)

Communications

ENGL 1010	English Composition I	4.5
ENGL 1020	English Composition II	4.5

Social sciences

PSYC 1010	Introduction to Psychology	4.5
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Quantitative/numeracy skills

Select one of the following courses:

MATH 1220	Business Mathematics	4.5
MATH 1310	Intermediate Algebra	4.5
MATH 1420	College Algebra	5.0
FINA 1000	Financial Literacy	4.5

Additional

INFO 1001	Information Systems and Literacy	4.5
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Major requirements for Human Services – Chemical Dependency (31.5 credit hrs.)

HMSV 1120	Helping Skills and Techniques	4.5
HMSV 1130	Introduction to Counseling Theories	4.5
HMSV 1140	Assessment, Case Planning, and Management	4.5
HMSV 1160	Medical and Social Aspects of Addictions	4.5
HMSV 2050	Ethics and Professionalism	4.5
HMSV 2130	Treatment Issues in Chemical Dependency	4.5
HMSV 2450	Crisis Intervention	4.5

Human Services – General (HSGCE)

Award: Certificate of achievement

Pathway to associate degree: Human Services - General (HSAA2)

Program location: Elkhorn Valley Campus, Fort Omaha Campus, South Omaha Campus

This certificate of achievement provides knowledge and skills in interpersonal communication; an overview of human services; helping skills/techniques; community resources; an introduction to counseling theories; assessment, case planning, and management; professional ethics and issues; and crisis intervention.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Business-Human-Services/Human-Services.aspx.

Graduation Requirements

General education	22.5-23.0
Major requirements	31.5
Total credit hours required	54.0-54.5

General education requirements (22.5-23.0 credit hrs.)

Communications

ENGL 1010	English Composition I	4.5
ENGL 1020	English Composition II	4.5

Social sciences

PSYC 1010	Introduction to Psychology	4.5
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Quantitative/numeracy skills

Select one of the following courses:

MATH 1220	Business Mathematics	4.5
MATH 1310	Intermediate Algebra	4.5
MATH 1420	College Algebra	5.0
FINA 1000	Financial Literacy	4.5

Additional

INFO 1001	Information Systems and Literacy	4.5
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Major requirements for Human Services – General (31.5 credit hrs.)

Courses

HMSV 1010	Introduction to Human Services	4.5
HMSV 1120	Helping Skills and Techniques	4.5
HMSV 1130	Introduction to Counseling Theories	4.5
HMSV 1140	Assessment, Case Planning, and Management	4.5
HMSV 1150	Community Resources	4.5
HMSV 2050	Ethics and Professionalism	4.5
HMSV 2150	Multicultural Counseling	4.5

Human Services Transfer (HSTAA)

Award: Associate in applied science degree

Program location: Fort Omaha Campus

The Human Services Transfer degree is designed to develop essential knowledge and skills required in the Human Services field and to efficiently accommodate transfer to four year human services-related fields from around the area. Social work programs at some area colleges and universities also accept the human service transfer degree; please check your transfer guides.

Graduation Requirements

General education	51.0
Major requirements	49.5
Total credit hours required	100.5

All required classes with a HMSV prefix must have a grade of C or better to graduate in this program.

General education requirements (51.0 credit hrs.)

Communications

ENGL 1010	English Composition I	4.5
ENGL 1020	English Composition II	4.5
SPCH 1110	Public Speaking	4.5

Humanities

Select one course from the following:

ARTS 1110	Art History-Ancient to Gothic	4.5
ARTS 1120	Art History-Renaissance to Modern	4.5
ENGL 2470	Introduction to Women's Literature	4.5
ENGL 2530	Ethnic Literature	4.5
ENGL 2610	British Literature I	4.5
ENGL 2620	British Literature II	4.5
MUSC 1010	Introduction to Music I	4.5
MUSC 1020	Introduction to Music II	4.5
PHIL 1010	Introduction to Philosophy	4.5
PHIL 2030	Introduction to Ethics	4.5
PHIL 2200	Introduction to Comparative Religion	4.5
THEA 1000	Introduction to Theatre	4.5

Students are advised to check the transfer guides at <https://www.mccneb.edu/Prospective-Students/Transfer-Students/Articulation.aspx> for the school they plan to attend prior to selecting elective courses.

Natural sciences

Natural science	6.0
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See Natural sciences course options (p. 221)

Students are advised to check the transfer guides at <https://www.mccneb.edu/Prospective-Students/Transfer-Students/Articulation.aspx> for the school they plan to attend prior to selecting elective courses.

Social sciences

PSYC 1010	Introduction to Psychology	☞ ☹	4.5
Select 9.0 hours from the following:			
ECON 1000	Macroeconomics	☞	4.5
	OR		
POLS 2050	American National Government	☞	4.5
GEOG 1010	Fundamentals of Geography	☞	4.5
GEOG 1050	Introduction to Human Geography	☞	4.5
HIST 1010	United States History to 1877	☞	4.5
HIST 1110	World Civilization from Prehistory to 1500	☞	4.5
HIST 1120	World Civilization from 1500 to Present	☞ ☹	4.5
HIST 2050	Modern Europe Since 1789	☞	4.5
PSYC 2350	Fundamentals of Abnormal Psychology	☞	4.5
SOCI 1250	Introduction to Anthropology	☞	4.5
SOCI 2050	Current Social Problems	☞	4.5
SOCI 2160	Marital and Family Relationships	☞	4.5
SOWK 1010	Introduction to Social Work	☞	4.5

Students are advised to check the transfer guides at <https://www.mccneb.edu/Prospective-Students/Transfer-Students/Articulation.aspx> for the school they plan to attend prior to selecting elective courses.

Quantitative/numeracy skills

MATH 1310	Intermediate Algebra	☞	4.5
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Additional

HMRL 1010	Human Relations Skills	☞ ☹	4.5
INFO 1001	Information Systems and Literacy	☞ ☹	4.5

Major requirements for Human Services Transfer (49.5 credit hrs.)

HMSV 1010	Introduction to Human Services	☞	4.5
HMSV 1120	Helping Skills and Techniques		4.5
HMSV 1130	Introduction to Counseling Theories	☹	4.5
HMSV 1140	Assessment, Case Planning, and Management	☞	4.5
HMSV 1150	Community Resources	☞	4.5
HMSV 2050	Ethics and Professionalism	☞	4.5
HMSV 2110	Group Counseling		4.5
HMSV 2120	Social Services Policy and Exceptional Populations		4.5
HMSV 2150	Multicultural Counseling		4.5
PSYC 1120	Human Growth and Development	☞	4.5
SOCI 1010	Introduction to Sociology	☞ ☹	4.5

CONSTRUCTION

Architectural Design Technology

- Architectural Design Technology Degree Options (p. 106)
 - Architectural Design Technology - AEC Professions (p. 107)
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- Architectural Documentation Software, career certificate (p. 108)
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Civil Engineering Technology

- Civil Engineering Technology, associate in applied science degree (p. 109)
- Computer-Aided Design, career certificate (p. 110)
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Construction and Building Science

- Construction and Building Science Degree Options (p. 110)
 - Construction and Building Science – Construction Management (p. 111)
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- Commercial Construction, career certificate (p. 112)
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Electrical Apprenticeship

- Electrical Apprenticeship, associate in applied science degree (p. 114)

Electrical Technology

- Electrical Technology, associate in applied science degree (p. 115)
- Electrical Technology – Building Electrical, certificate of achievement (p. 116)

Heating, Air Conditioning, and Refrigeration

- Heating, Air Conditioning, and Refrigeration Technology, associate in applied science degree (p. 116)
- Heating, Air Conditioning, and Refrigeration Technology, certificate of achievement (p. 117)
- Air Conditioning, career certificate (p. 117)

- Heat Pump, career certificate (p. 118)
- Heat Systems, career certificate (p. 118)
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Plumbing

- Plumbing Fundamentals, career certificate (p. 119)

Plumbing Apprenticeship

- Plumbing Apprenticeship, associate in applied science degree (p. 119)
- Plumbing Apprenticeship - Pre-Apprenticeship Plumbing, certificate of achievement (p. 120)

Architectural Design Technology

The new Construction Education Center at the Fort Omaha campus replicates an authentic job site, where all the construction-related trades work together. For students, this provides a high quality learning experience, with a hands-on learning environment using the latest technology found in the professions.

The Architectural Design Technology program combines drawing skills with architectural knowledge and powerful CAD software tools to prepare students for careers as professional architectural design technicians in the offices of architects, engineers, contractors, and materials suppliers. Students build a strong foundation of knowledge by learning classical drafting techniques, the art and language of architecture, the design process, how methods and materials shape buildings, the relationship among structural types, space usage, and how architecture reflects the culture for which it is built. Students apply these fundamentals, along with the latest architectural software principles and techniques, to practical lab projects.

Degree: Associate in Applied Science

Architectural Design Technology - AEC Professions
 Architectural Design Technology - Architectural Design
 Architectural Design Technology - Architectural Documentation

Career Certificates

Architectural Documentation Software
 Architectural Imaging Software

Architectural Design Technology Degree Options

Award: Associate in applied science degree

Program location: Fort Omaha Valley Campus

This degree trains students in the means, methods, and cultural significance of the built environment in a project-based, problem-enhanced curriculum. Architecture blends science, technology, engineering, art, and math in the creation and operation of the facilities that support and enrich society.

Architectural studies strengthen interpersonal communication and public speaking skills; develop critical thinking and collaborative skills; and give a solid background in interdisciplinary arts, social awareness, and appreciation of diverse cultures.

Students who successfully complete this degree can go directly into the architecture engineering and construction industry workforce. This degree also provides a strong technical foundation for students who choose to go on to a baccalaureate institution to major in architecture, engineering, construction, or related humanities or education fields.

This degree builds a strong foundation by blending classical drafting techniques with state-of-the-art computer-aided design. Students may build an opportunity for employment as a technician in the drafting rooms of architects, engineers, contractors, and materials suppliers.

Options available under this degree are:

Architectural Design Technology - AEC Professions (ADAEO) (p. 107)

Architectural Design Technology - Architectural Design (ADADO) (p. 107)

Architectural Design Technology - Architectural Documentation (ADDSO) (p. 108)

Architectural Design Technology - AEC Professions (ADAEO)

Award: Associate in applied science degree

Program location: Fort Omaha Campus

Students in this degree build a strong foundation by blending classical drafting and design visualization techniques with state-of-the-art computer-aided design using the software applications common in professional degree programs. Those planning to transfer to a professional architecture program should find many, if not all, of the foundation and general education courses transfer to regional and national four- and six-year institutions.

Graduation Requirements

General education	27.0-27.5
Major requirements	45.0
Option requirements	36.5
Total credit hours required	108.5-109.00

General education requirements (27.0 - 27.5 credit hrs.)

Communications

English level I	4.5
English level II	4.5

See Communications course options (p. 42)

Humanities/social sciences

ARCH 1000	Appreciation of Architecture	4.5
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Quantitative/numeracy skills

MATH	MATH 1240 or higher	4.5-5.0
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Students in this program must select MATH 1420

Additional

HMRL 1010	Human Relations Skills	4.5
INFO 1001	Information Systems and Literacy	4.5

Major requirements for Architectural Design Technology (45.0 credit hrs.)

ARCH 1120	Beginning REVIT (Building)	4.5
ARCH 1130	Intermediate REVIT (Building)	4.5
ARCH 1140	Advanced REVIT Architecture	4.5
ARCH 1200	Wood-Frame Architecture	9.0
ARCH 2410	Commercial Architecture	9.0
CNST 1020	Blueprint Reading	4.5
SCET 1120	AutoCAD Essentials	9.0

Option requirements for Architectural Design Technology - AEC Professions (36.5 credit hrs.)

ARCH 1010	Visual Literacy and Graphic Communication I	4.5
ARCH 1015	Visual Literacy and Graphic Communication II	4.5
ARCH 2520	Beginning 3-D Studio Max	4.0
ARCH 2530	Intermediate 3-D Studio Max	4.0
MATH 1430	Trigonometry	4.5
MATH 2410	Analytic Geometry and Calculus I	7.5
PHYS 210A	General Physics IA	2.5
PHYS 210B	General Physics IB	2.5
PHYS 210C	General Physics IC	2.5

Architectural Design Technology - Architectural Design (ADADO)

Award: Associate in applied science degree

Program location: Fort Omaha Campus

This degree builds a strong foundation by blending classical drafting techniques with state-of-the-art computer-aided design. Students may build an opportunity for employment as a technician in the drafting rooms of architects, engineers, contractors, and materials suppliers.

Graduation Requirements

General education	27.0
Major requirements	45.0
Option requirements	26.0
Total credit hours required	98.0

General education requirements (27.0 - 27.5 credit hrs.)

Communications

English level I	4.5
English level II	4.5

See Communications course options (p. 42)

Humanities/social sciences

ARCH 1000 Appreciation of Architecture 4.5

Quantitative/numeracy skills

MATH MATH 1240 or higher 4.5-5.0

Additional

HMRL 1010 Human Relations Skills 4.5

INFO 1001 Information Systems and Literacy 4.5

Major requirements for Architectural Design Technology (45.0 credit hrs.)

ARCH 1120 Beginning REVIT (Building) 4.5

ARCH 1130 Intermediate REVIT (Building) 4.5

ARCH 1140 Advanced REVIT Architecture 4.5

ARCH 1200 Wood-Frame Architecture 9.0

ARCH 2410 Commercial Architecture 9.0

CNST 1020 Blueprint Reading 4.5

SCET 1120 AutoCAD Essentials 9.0

Option requirements for Architectural Design Technology - Architectural Design (26.0 credit hrs.)

ARCH 2420 Renovation Architecture 9.0

ARCH 2520 Beginning 3-D Studio Max 4.0

ARCH 2530 Intermediate 3-D Studio Max 4.0

ARCH 2600 High-Rise Architecture 9.0

The degree option is an area of interest within a program. Although students may complete single or multiple options within this program, only the major degree is awarded.

Architectural Design Technology - Architectural Documentation (ADDSO)

Award: Associate in applied science degree

Program location: Fort Omaha Campus

This degree prepares students to enter the architecture, engineering, and construction industry as BIM/CAD technicians. The coursework instructs students in the theory and practical applications necessary to document construction requirements for existing and proposed projects. All core classes are offered hands-on in state-of-the-art computer labs where students develop a digital portfolio consisting of complete architectural documents for light and commercial projects.

Graduation Requirements

General education	27.0
Major requirements	45.0
Option requirements	27.0
Total credit hours required	99.0

General education requirements (27.0 - 27.5 credit hrs.)

Communications

English level I 4.5

English level II 4.5

See Communications course options (p. 42)

Humanities/social sciences

ARCH 1000 Appreciation of Architecture 4.5

Quantitative/numeracy skills

MATH MATH 1240 or higher 4.5-5.0

Additional

HMRL 1010 Human Relations Skills 4.5

INFO 1001 Information Systems and Literacy 4.5

Major requirements for Architectural Design Technology (45.0 credit hrs.)

ARCH 1120 Beginning REVIT (Building) 4.5

ARCH 1130 Intermediate REVIT (Building) 4.5

ARCH 1140 Advanced REVIT Architecture 4.5

ARCH 1200 Wood-Frame Architecture 9.0

ARCH 2410 Commercial Architecture 9.0

CNST 1020 Blueprint Reading 4.5

SCET 1120 AutoCAD Essentials 9.0

Option requirements for Architectural Design Technology - Architectural Documentation (27.0 credit hrs.)

ARCH 1010 Visual Literacy and Graphic Communication I 4.5

ARCH 1015 Visual Literacy and Graphic Communication II 4.5

ARCH 1150 Advanced AutoCAD 4.5

ARCH 2700 Construction Detailing I 4.5

ARCH 2710 Construction Detailing II 4.5

ARCH 2720 Construction Detailing III 4.5

The degree option is an area of interest within a program. Although students may complete single or multiple options within this program, only the major degree is awarded.

Architectural Documentation Software (ADSCC)

Award: Career certificate

Pathway to associate degree: Architectural Design Technology - Architectural Documentation (ADDSO)

Program location: Fort Omaha Campus

This career certificate provides an intermediate skill level with construction documentation software currently used in the architecture, engineering, and construction industry.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mcneb.edu/Academics/Programs-of-Study/Construction-Education/Architectural-Design-Technology.aspx.

Requirements for Architectural Documentation Software career certificate (27.0 credit hrs.)

ARCH 1120	Beginning REVIT (Building)	4.5
ARCH 1130	Intermediate REVIT (Building)	4.5
ARCH 1140	Advanced REVIT Architecture	4.5
ARCH 1150	Advanced AutoCAD	4.5
SCET 1120	AutoCAD Essentials	9.0

Architectural Imaging Software (AAIS1)

Award: Career certificate

Pathway to associate degree: Architectural Design Technology - Architectural Design (ADADO)

Program location: Fort Omaha Campus

Students who earn this career certificate have shown that they have an intermediate skill level with the graphic software currently used in the offices of architects and engineers.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Construction-Education/Architectural-Design-Technology.aspx.

Requirements for Architectural Imaging career certificate (26.0 credit hrs.)

ARCH 1120	Beginning REVIT (Building)	4.5
ARCH 1130	Intermediate REVIT (Building)	4.5
ARCH 2520	Beginning 3-D Studio Max	4.0
ARCH 2530	Intermediate 3-D Studio Max	4.0
SCET 1120	AutoCAD Essentials	9.0

Civil Engineering Technology

The Civil Engineering Technology program prepares students for employment in the civil engineering field as civil engineering technicians. Civil engineering technology is one of the broadest fields in engineering because it is involved with many facets of infrastructure, including roads, bridges, utilities, buildings, and water treatment facilities. The Civil Engineering Technology program offers training in high-tech subjects and equipment like GPS satellite surveying and CAD drafting facilities.

Degree: Associate in Applied Science

Civil Engineering Technology

Career Certificates

Computer-Aided Design

Surveying

Civil Engineering Technology (CETA1)

Award: Associate in applied science degree

Program location: Fort Omaha Campus

This degree emphasizes the skills necessary for graduates seeking employment in civil engineering occupations. The

program emphasizes the related use of computers and software. The degree provides a strong foundation in current basic civil engineering techniques and prepares students for occupational entry and advancement as a civil engineering technician. Graduates are readily employed as engineering technicians in construction, transportation, surveying, and testing laboratories.

Graduation Requirements

General education	27.0
Major requirements	83.0
Total credit hours required	110.0

General education requirements (27 credit hrs.)

Communications

English level I	4.5
English level II	4.5

ENGL 1220 Technical Writing OR ENGL 1225 Applied Communications I and ENGL 1240 Oral and Written Reports OR ENGL 1245 Applied Communications II are recommended.

See Communications course options (p. 42)

Humanities/social sciences

SPCH 1220	Communication in Small Groups	4.5
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Quantitative/Numeracy Skills

MATH 1430	Trigonometry	4.5
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Additional

HMRL 1010	Human Relations Skills	4.5
INFO 1001	Information Systems and Literacy	4.5

Major requirements for Civil Engineering Technology (83.0 credit hrs.)

Students interested in a Civil Engineering Technology option should consult with a faculty advisor.

SCET 1000	Civil Engineering Fundamentals	4.5
SCET 1090	ArcGIS Fundamentals	4.5
SCET 1120	AutoCAD Essentials	9.0
SCET 1130	REVIT (Structure)	4.5
SCET 1150	AutoCAD Civil 3-D Fundamentals	9.0
SCET 1160	Advanced AutoCAD Civil 3-D	9.0
SCET 1170	Advanced REVIT Structure	4.5
SCET 1200	Surveying Fundamentals	5.5
SCET 2010	Fluid Mechanics	4.5
CNST 2120	Construction Law and Document Management	4.5
SCET 2250	Advanced Surveying	5.5
SCET 2300	Structures I - Engineering Statics	4.5
SCET 2310	Structures II - Strength of Materials	4.5
SCET 2410	Civil Site Design	4.5
PHYS 1010	Applied Physics	4.5
PHYS 1010L	Applied Physics Lab	0.0

Computer-Aided Design (CECCC)

Award: Career certificate

Pathway to associate degree: Civil Engineering Technology (CETA1)

Program location: Fort Omaha Campus

This career certificate provides career preparation in engineering drafting and design practices. Recipients may seek employment in engineering drafting and design entry-level positions in engineering, architecture and design firms, and government agencies.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Construction-Education/Civil-Engineering-Technology.aspx.

Requirements for Computer-Aided Design career certificate (32.5 credit hrs.)

SCET 1120	AutoCAD Essentials	9.0
SCET 1130	REVIT (Structure)	4.5
SCET 1150	AutoCAD Civil 3-D Fundamentals	9.0
SCET 1200	Surveying Fundamentals	5.5
MATH 1430	Trigonometry ~Ⓢ	4.5

Surveying (CESSD)

Award: Career certificate

Pathway to associate degree: Civil Engineering Technology (CETA1)

Program location: Fort Omaha Campus

This career certificate provides career preparation in land surveying practices. Recipients may seek employment in surveying entry-level positions in engineering, architectural and design firms, and government agencies.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Construction-Education/Civil-Engineering-Technology.aspx.

Requirements for Surveying career certificate (33.5 credit hrs.)

SCET 1120	AutoCAD Essentials	9.0
SCET 1150	AutoCAD Civil 3-D Fundamentals	9.0
SCET 1200	Surveying Fundamentals	5.5
SCET 2250	Advanced Surveying	5.5
MATH 1430	Trigonometry ~Ⓢ	4.5

Construction and Building Science

The new Construction Education Center at the Fort Omaha campus replicates an authentic job site, where all the construction-related trades work together. For students, this provides a high quality learning experience, with a hands-on learning environment using the latest technology found in the professions.

The Construction and Building Science program offers students a wide array of choices in the field of construction. An associate degree, certificate of achievement, and career certificate are available across several options, including concrete/masonry, general, residential, commercial, management, remodeling, and technology. Students gain practical experience in a lab setting applying their skills to real-world situations.

Degree: Associate in Applied Science

Construction and Building Science - Construction Management

Construction and Building Science - Construction Technology

Certificates of Achievement

Construction and Building Science - Framing and Finishing Specialist

Career Certificates

Commercial Construction

Construction Management

General Construction/Remodeling

Masonry and Concrete Construction

Residential Carpentry

Construction and Building Science Degree Options

Award: Associate in applied science degree

Program location: Fort Omaha Campus

Construction technology is a growing and diverse field. This degree offers options in construction management or construction technology.

Options available under this degree are:

Construction and Building Science – Construction Management (CBCMO) (p. 111)

Construction and Building Science – Construction Technology (CBCTO) (p. 111)

Construction and Building Science – Construction Management (CBCMO)

Award: Associate in applied science degree

Program location: Fort Omaha Campus

This degree option provides students with knowledge and entry-level skills desirable for construction entrepreneurship and supervision of a variety of construction projects.

Graduation Requirements

General education	27.0-27.5
Major requirements	26.5
Option requirements	25.0
Electives	26.0-31.0
Total credit hours required	104.5-110.0

General education requirements (27.0-27.5 credit hrs.)

Communications

English level I 4.5

ENGL 1220 Technical Writing OR ENGL 1225 Applied Communications I is recommended. Students planning to transfer should select ENGL 1010.

English level II 4.5

ENGL 1240 Oral and Written Reports OR ENGL 1245 Applied Communications II is recommended. Students planning to transfer should select ENGL 1020.

Humanities/social sciences

Humanities/Social Science course 4.5

See Humanities/social sciences course options (p. 42)

PSYC 1000 or SPCH 1220 is recommended, but may not transfer.

Quantitative/numeracy skills

MATH MATH 1240 or higher 4.5-5.0

MATH 1240 Applied Mathematics is recommended but may not transfer.

Additional

HMRL 1010 Human Relations Skills   4.5

INFO 1001 Information Systems and Literacy   4.5

Major requirements for Construction and Building Science (26.5 credit hrs.)

Students interested in a Construction Technology option should consult with faculty or Student Services when planning their studies.

CNST 1005	Introduction to the Construction Industry	4.5
CNST 1020	Blueprint Reading	4.5
CNST 1030	Digital Blueprint Applications	4.5
CNST 1050	Introduction to Carpentry	4.5
CNST 2060	Building and Site Layout	4.5
CNST 2981	Internship	4.0

Option requirements for Construction and Building Science – Construction Management (25.0 credit hrs.)

CNST 2100	Construction Safety (30-Hour)	4.5
CNST 2120	Construction Law and Document Management	4.5
CNST 2130	Construction Estimating	7.0
CNST 2140	Job Site Management	4.5
CNST 2160	Advanced Construction Estimating and Scheduling	4.5

Electives for Construction and Building Science – Construction Management (26.0-31.0 credit hrs.)

Select 26.0 to 31.0 hours from the following:

CNST 1220	Remodeling and Deconstruction	6.5
CNST 1240	Interior Finish and Cabinetry	9.0
CNST 1360	Floor, Wall, Stair and Ceiling Framing	9.0
CNST 1370	Exterior Finish	6.5
CNST 1400	Introduction to Masonry	6.5
CNST 1510	Introduction to Concrete and Wall Forms	9.0
CNST 2360	Roof Framing	6.5

The degree option is an area of interest within a program. Although students may complete single or multiple options within this program, only the major degree is awarded.

Construction and Building Science - Construction Technology (CBCTO)

Award: Associate in applied science degree

Program location: Fort Omaha Campus

This degree option provides students with technical knowledge and skills desirable for success in the construction industry.

Graduation Requirements

General education	27.0-27.5
Major requirements	26.5
Option requirements	54.0
Total credit hours required	107.5-108.0

General education requirements (27.0-27.5 credit hrs.)

Communications

English level I 4.5

ENGL 1220 Technical Writing OR ENGL 1225 Applied Communications I is recommended. Students planning to transfer should select ENGL 1010.

English level II 4.5

ENGL 1240 Oral and Written Reports OR ENGL 1245 Applied Communications II is recommended. Students planning to transfer should select ENGL 1020.

Humanities/social sciences

Humanities/Social Science course 4.5

See Humanities/social sciences course options (p. 42)

PSYC 1000 or SPCH 1220 is recommended, but may not transfer.

Quantitative/numeracy skills

MATH MATH 1240 or higher 4.5-5.0

Students in this option must take MATH 1420 College Algebra.

Additional

HMRL 1010 Human Relations Skills 4.5

INFO 1001 Information Systems and Literacy 4.5

Major requirements for Construction and Building Science (26.5 credit hrs.)

Students interested in a Construction Technology option should consult with faculty or Student Services when planning their studies.

CNST 1005	Introduction to the Construction Industry	4.5
CNST 1020	Blueprint Reading	4.5
CNST 1030	Digital Blueprint Applications	4.5
CNST 1050	Introduction to Carpentry	4.5
CNST 2060	Building and Site Layout	4.5
CNST 2981	Internship	4.0

Option requirements for Construction and Building Science – Construction Technology (54.0 credit hrs.)

CNST 1110	Construction Safety (10-Hour)	1.0
CNST 1220	Remodeling and Deconstruction	6.5
CNST 1240	Interior Finish and Cabinetry	9.0
CNST 1360	Floor, Wall, Stair and Ceiling Framing	9.0
CNST 1370	Exterior Finish	6.5
CNST 1400	Introduction to Masonry	6.5
CNST 1510	Introduction to Concrete and Wall Forms	9.0
CNST 2360	Roof Framing	6.5

Construction and Building Science – Framing and Finishing Specialist (CBFCE)

Award: Certificate of achievement

Pathway to associate degree: Construction and Building Science - Construction Technology (CBCTO)

Program location: Fort Omaha Campus

This certificate of achievement provides basic framing and finishing skills using measuring devices and teaches the application of hand and power tools. Graduates are employable in large and small construction companies in both framing and finishing.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Construction-Education/Construction-And-Building-Science.aspx.

Graduation Requirements

General education	13.5
Major requirements	40.0
Total credit hours required	53.5

General education requirements (13.5 credit hrs.)

Communications

English level I 4.5

See Communications course options (p. 42)

ENGL 1220 is recommended but may not transfer.

Humanities/social sciences

Humanities/social sciences 4.5

See Humanities/social sciences course options (p. 42)

PSYC 1000 is recommended but may not transfer.

Quantitative/numeracy skills

Mathematics or Financial Literacy 4.5

See Quantitative/numeracy skills course options (p. 44)

MATH 1240 is recommended but may not transfer.

Major requirements for Construction and Building Science – Framing and Finishing Specialist (40.0 credit hrs.)

CNST 1020	Blueprint Reading	4.5
CNST 1050	Introduction to Carpentry	4.5
CNST 1240	Interior Finish and Cabinetry	9.0
CNST 1360	Floor, Wall, Stair and Ceiling Framing	9.0
CNST 1370	Exterior Finish	6.5
CNST 2360	Roof Framing	6.5

Commercial Construction (CCOSD)

Award: Career certificate

Pathway to associate degree: Construction and Building Science - Construction Technology (CBCTO)

Program location: Fort Omaha Campus

This career certificate is for students who have the desire or need to enter the field of commercial construction as soon as possible. Students partake in classroom and practical application exercises, which supply them with knowledge and skills in the construction management area. A 30-hour OSHA construction safety certification is included.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Construction-Education/Construction-And-Building-Science.aspx.

Requirements for Commercial Construction career certificate (31.5 credit hrs.)

CNST 1005	Introduction to the Construction Industry	4.5
CNST 1020	Blueprint Reading	4.5
CNST 1030	Digital Blueprint Applications	4.5
CNST 1050	Introduction to Carpentry	4.5
CNST 1510	Introduction to Concrete and Wall Forms	9.0
CNST 2100	Construction Safety (30-Hour)	4.5

Construction Management (CCMSD)

Award: Career certificate

Pathway to associate degree: Construction and Building Science - Construction Management (CBCMO)

Program location: Fort Omaha Campus

This career certificate is for well-seasoned craft workers who have six years or more experience and the desire or need for skills required to move into the area of supervision. Students partake in classroom and practical application exercises, which supply them with knowledge and skills in the construction management area. A 30-hour OSHA construction safety certification is included.

Gainful employment data for this program (such as costs and jobs related to the program) can be found at www.mccneb.edu/Current-Students/Resources/Student-Services-SOS/Student-Right-to-Know.aspx.

Requirements for Construction Management career certificate (34.0 credit hrs.)

CNST 1005	Introduction to the Construction Industry	4.5
CNST 1020	Blueprint Reading	4.5
CNST 1030	Digital Blueprint Applications	4.5
CNST 2100	Construction Safety (30-Hour)	4.5
CNST 2120	Construction Law and Document Management	4.5
CNST 2130	Construction Estimating	7.0
CNST 2160	Advanced Construction Estimating and Scheduling	4.5

General Construction/Remodeling (CCRSD)

Award: Career certificate

Pathway to associate degree: Construction and Building Science - Construction Technology (CBCTO)

Program location: Fort Omaha Campus

This career certificate assists practicing small contractors and remodelers as well as those seeking knowledge and skills for entry-level employment in this area. It is for those who wish to obtain knowledge in code compliance, understanding of OSHA

safety requirements, and expanded knowledge of materials and their proper use.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Construction-Education/Construction-And-Building-Science.aspx.

Requirements for General Construction/Remodeling career certificate (30.0 credit hrs.)

CNST 1005	Introduction to the Construction Industry	4.5
CNST 1020	Blueprint Reading	4.5
CNST 1050	Introduction to Carpentry	4.5
CNST 1110	Construction Safety (10-Hour)	1.0
CNST 1220	Remodeling and Deconstruction	6.5
CNST 1240	Interior Finish and Cabinetry	9.0

Masonry and Concrete Construction (CMCSD)

Award: Career certificate

Pathway to associate degree: General Studies (GSAAS)

Program location: Fort Omaha Campus

This career certificate supplies students with knowledge and skills to begin a career in masonry as well as supplies seasoned masons with advanced skills. Included are materials and testing, bonding and layout, advanced arch work, and a 30-hour OSHA construction safety certification.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Construction-Education/Construction-And-Building-Science.aspx.

Requirements for Masonry and Concrete career certificate (27.0 credit hrs.)

CNST 1050	Introduction to Carpentry	4.5
CNST 1110	Construction Safety (10-Hour)	1.0
CNST 1400	Introduction to Masonry	6.5
CNST 1510	Introduction to Concrete and Wall Forms	9.0
WELD 1100	Industrial Cutting Processes	3.0
WELD 1500	Shielded Metal Arc Welding (Stick) - Flat	3.0

Residential Carpentry (CRCSD)

Award: Career certificate

Pathway to associate degree: Construction and Building Science - Construction Technology (CBCTO)

Program location: Fort Omaha Campus

This career certificate is for students who have the desire or need to enter the field of residential carpentry as soon as possible. Students partake in classroom and practical application

exercises, which supply them with knowledge and skills in the residential carpentry area. A 30-hour OSHA construction safety certification is included.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Construction-Education/Construction-And-Building-Science.aspx.

Requirements for Residential Carpentry career certificate (30.0 credit hrs.)

CNST 1005	Introduction to the Construction Industry	4.5
CNST 1020	Blueprint Reading	4.5
CNST 1050	Introduction to Carpentry	4.5
CNST 1110	Construction Safety (10-Hour)	1.0
CNST 1360	Floor, Wall, Stair and Ceiling Framing	9.0
CNST 1370	Exterior Finish	6.5

Electrical Apprenticeship

The Electrical Apprenticeship program prepares students to become licensed electricians. The electrical curriculum is approved by the State of Nebraska Electrical Board. After completing the Electrical Apprenticeship program and the required on-the-job training (four years verifiable experience) students are prepared to take the examination for the Journeyman's Electrician License administered by the state of Nebraska.

Students who successfully complete a College-approved apprenticeship program through one of the local unions or an approved in-house company apprenticeship program may receive up to 56 credits toward an associate degree.

Degree: Associate in Applied Science

Electrical Apprenticeship

Electrical Apprenticeship (AREAO)

Award: Associate in applied science degree

Program location: Fort Omaha Campus

This degree is for students preparing to become licensed electricians. The courses are offered on an evening schedule only, allowing students to seek employment with electrical contractors during the day. Students receive college credit for successful completion of the coursework at the same time they are preparing for the licensing exam. Students should be employed full time in an electrical trade while taking classes. For more information about this program, contact the apprenticeship coordinator at 531-622-4034.

Graduation Requirements

General education	27.0
Major requirements	16.5
Apprenticeship classes	56.0
Total credit hours required	99.5

General education requirements (27.0 credit hrs.)

Communications

English level I	4.5
English level II	4.5

See Communications course options (p. 42)

ENGL 1220 and ENGL 1240 are recommended.

Humanities/social sciences

Humanities/social sciences	4.5
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See Humanities/social sciences course options (p. 42)

PSYC 1000 is recommended.

Quantitative/numeracy skills

Mathematics	4.5
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See Quantitative/numeracy skills course options (p. 44)

MATH 1240 is recommended.

Additional

HMRL 1010	Human Relations Skills	4.5
INFO 1001	Information Systems and Literacy	4.5

Major requirements for Electrical Apprenticeship (16.5 credit hrs.)

CNST 2100	Construction Safety (30-Hour)	4.5
INCT 1212	Motor and Machine Controls	9.0

Apprenticeship requirements for Electrical Apprenticeship (56.0 credit hrs.)

ELAP 1110	Electrical IA	7.0
ELAP 1120	Electrical IB	7.0
ELAP 1210	Electrical IIA	7.0
ELAP 1220	Electrical IIB	7.0
ELAP 2310	Electrical IIIA	7.0
ELAP 2320	Electrical IIIB	7.0
ELAP 2410	Electrical IVA	7.0
ELAP 2420	Electrical IVB	7.0

Electrical Technology

The new Construction Education Center at the Fort Omaha campus replicates an authentic job site, where all the construction-related trades work together. For students, this provides a high quality learning experience, with a hands-on learning environment using the latest technology found in the professions.

The Electrical Technology program provides education and training for students who wish to join the electrical field. Students entering into this program study electrical systems in residential wiring, commercial wiring, and industrial motor controls.

MCC offers an accelerated track for students planning careers in electrical technology after one year of accelerated full-time study. In order to complete in one year, students entering the accelerated program must be at college English, reading, and math levels. Interested students should contact the construction education offices for program information.

Degree: Associate in Applied Science

Electrical Technology

Certificate of Achievement:

Electrical Technology - Building Electrical

Electrical Technology (ETAAS)

Award: Associate in applied science degree

Program location: Fort Omaha Campus

This degree provides education and training for students who wish to join the electrical field. This program exposes students to electrical systems in residential and commercial wiring as well as industrial motor controls.

Graduation Requirements

General education	27.0
Major requirements	63.5
Electives	9.0

Total credit hours required 99.5

General education requirements (27.0 credit hrs.)

Communications

English level I 4.5

ENGL 1220 Technical Writing OR ENGL 1225 Applied Communications I is recommended

English level II 4.5

ENGL 1240 Oral and Written Reports OR ENGL 1245 Applied Communications II is recommended

Humanities/social sciences

SPCH 1220 Communication in Small Groups 4.5

Quantitative/numeracy skills

MATH 1240 Applied Mathematics 4.5

Additional

HMRL 1010	Human Relations Skills	4.5
INFO 1001	Information Systems and Literacy	4.5

Major requirements for Electrical Technology (63.5 credit hrs.)

ELTR 1200	Basic Electricity	8.0
ELTR 1210	Residential Wiring	9.0
ELTR 1220	Commercial Wiring I	9.0
ELTR 1250	Electric Equipment Controls	6.0
ELTR 2100	Project Leadership	4.5
ELTR 2240	National Electrical Code	4.5
ELTR 2250	Commercial Wiring II	6.0
ELTR 2331	Electric Services and Transformers	6.0
ELTR 2981	Internship	4.0
CNST 1020	Blueprint Reading	4.5
CNST 1110	Construction Safety (10-Hour)	1.0
EMSP 1010	Heartsaver First Aid with CPR and AED	1.0

EMSP 1010 is required for those who do not currently hold a valid CPR/first aid card.

Electives for Electrical Technology (9 credit hrs.)

Select 9 credit hours from any of the construction education areas or from the following courses:

INCT 2231	Programmable Logic Controllers I	4.5
INCT 2232	Programmable Logic Controllers II	4.5
WELD 1100	Industrial Cutting Processes	3.0
WELD 1200	Gas Metal Arc Welding (MIG) - Steel I	3.0
WELD 1500	Shielded Metal Arc Welding (Stick) - Flat	3.0
WELD 1510	Shielded Metal Arc Welding (Stick) - Vertical	3.0

Electrical Technology – Building Electrical (ETBCE)

Award: Certificate of achievement

Pathway to associate degree: Electrical Technology (ETAAS)

Program location: Fort Omaha Campus

This certificate of achievement is for students who may work in the electrical field. Students gain knowledge of facilities and residential wiring.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Construction-Education/Electrical-Technology.aspx.

Graduation Requirements

General education	13.5
Major requirements	38.5
Total credit hours required	52.0

General education requirements (13.5 credit hrs.)

Communications

ENGL 1220	Technical Writing ☞	4.5
	OR	
ENGL 1225	Applied Communications I	4.5

Quantitative/numeracy skills

MATH 1240	Applied Mathematics	4.5
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Humanities/social sciences

SPCH 1220	Communication in Small Groups	4.5
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Major requirements for Electrical Technology – Building Electrical (38.5 credit hrs.)

ELTR 1200	Basic Electricity	8.0
ELTR 1210	Residential Wiring	9.0
ELTR 1220	Commercial Wiring I	9.0
ELTR 2240	National Electrical Code	4.5
ELTR 2331	Electric Services and Transformers	6.0
CNST 1110	Construction Safety (10-Hour)	1.0
EMSP 1010	Heartsaver First Aid with CPR and AED	1.0

EMSP 1010 is required for those who do not currently hold a valid CPR/first aid card.

Heating, Air Conditioning, and Refrigeration

The new Construction Education Center at the Fort Omaha campus replicates an authentic job site, where all the construction-related trades work together. For students, this provides a high quality learning experience, with a hands-on learning environment using the latest technology found in the professions.

The Heating, Air Conditioning, and Refrigeration program provides students with a diversified background in heating, air conditioning, and refrigeration systems. The program combines

class work with hands-on activities to facilitate learning and understanding of these fields. Potential employment opportunities exist in local air conditioning, refrigeration, and heating companies, both large and small.

Degree: Associate in Applied Science

Heating, Air Conditioning, and Refrigeration

Certificate of Achievement:

Heating, Air Conditioning, and Refrigeration

Career Certificate:

Air Conditioning
Heat Pump
Heat Systems
Refrigeration

Heating, Air Conditioning, and Refrigeration Technology (HAAAS)

Award: Associate in applied science degree

Program location: Fort Omaha Campus

This degree provides students with a diversified background in air conditioning, refrigeration, and heating systems. The program combines class work with hands-on activities to facilitate learning and understanding of these fields. Potential employment opportunities exist in local air conditioning, refrigeration, and heating companies, both large and small.

Graduation Requirements

General education	27.0
Major requirements	81.5
Total credit hours required	108.5

General education requirements (27.0 credit hrs.)

Communications

English level I	4.5
English level II	4.5

ENGL 1220 (p. 273) Technical Writing OR ENGL 1225 (p. 273) Applied Communications I and ENGL 1240 (p. 273) Oral and Written Communications OR ENGL 1245 (p. 273) Applied Communications II are recommended.

Humanities/social sciences

SPCH 1220	Communication in Small Groups	4.5
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Quantitative/numeracy skills

MATH 1240	Applied Mathematics	4.5
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Additional

HMRL 1010	Human Relations Skills ☞ ☹	4.5
INFO 1001	Information Systems and Literacy ☞ ☹	4.5

Major requirements for Heating, Air Conditioning, and Refrigeration Technology (81.5 credit hrs.)

HVAC 1000	Refrigeration Electrical Theory and Application	6.0
HVAC 1010	Refrigeration Service Principles and Basic Automatic Controls	6.0

HVAC 1020	Refrigeration Shop Practices	4.5
HVAC 1210	Gas Heat	4.5
HVAC 1211	Electric Heat	4.5
HVAC 1330	Commercial Refrigeration Installation	4.5
HVAC 1331	Commercial Refrigeration Service	4.5
HVAC 1500	Air Conditioning, Domestic Refrigeration, and Appliance Repair	4.5
HVAC 1540	All-Weather Systems (Conventional)	4.5
HVAC 2220	All-Weather Systems (Heat Pumps)	4.5
HVAC 2221	Installation and Service Problems	4.5
HVAC 2310	Refrigeration Certification	2.0
HVAC 2320	Advanced Commercial Refrigeration	4.5
HVAC 2420	Advanced Residential Air Conditioning	4.5
HVAC 2550	Air Conditioning (Commercial)	4.5
HVAC 2560	Sheet Metal Layout	4.5
HVAC 2570	Automated Building Controls	4.5
CNST 1020	Blueprint Reading	4.5

Heating, Air Conditioning, and Refrigeration Technology (HARCE)

Award: Certificate of achievement

Pathway to associate degree: Heating, Air Conditioning, and Refrigeration Technology (HAAAS)

Program location: Fort Omaha Campus

This certificate of achievement provides students with practical experience in servicing and installing air conditioning, refrigeration, and heating equipment. Related instruction enables students to understand the basic principles involved in construction and operation of the equipment. Upon completion of the program, potential employment opportunities exist with companies that specialize in air conditioning, refrigeration, and heating service and installation.


For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academic-Programs/Programs-of-Study/Construction-Education/Heating-AC-and-Refrigeration.aspx.

Graduation Requirements

General education	13.5
Major requirements	39.0
Total credit hours required	52.5

General education requirements (13.5 credit hrs.)

Communications

ENGL 1220	Technical Writing 	4.5
	OR	
ENGL 1225	Applied Communications I	4.5

Humanities/Social Sciences

SPCH 1220	Communication in Small Groups	4.5
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Quantitative/numeracy skills

	Mathematics or Financial Literacy	4.5
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See Quantitative/numeracy skills course options (p. 44)

Major requirements for Heating, Air Conditioning and Refrigeration Technology (39.0 credit hrs.)

HVAC 1000	Refrigeration Electrical Theory and Application	6.0
HVAC 1010	Refrigeration Service Principles and Basic Automatic Controls	6.0
HVAC 1020	Refrigeration Shop Practices	4.5
HVAC 1210	Gas Heat	4.5
HVAC 1211	Electric Heat	4.5
HVAC 1330	Commercial Refrigeration Installation	4.5
HVAC 1331	Commercial Refrigeration Service	4.5
HVAC 1540	All-Weather Systems (Conventional)	4.5

Air Conditioning (AACSD)

Award: Career certificate

Pathway to associate degree: Heating, Air Conditioning, and Refrigeration Technology (HAAAS)

Program location: Fort Omaha Campus

This career certificate enables students to troubleshoot, repair, and service various types of air conditioning systems. Students also explore electrical theory, blueprint reading, and heat loss/heat gain.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academic-Programs/Programs-of-Study/Construction-Education/Heating-AC-and-Refrigeration.aspx.

Requirements for Air Conditioning career certificate (33.0 credit hrs.)

HVAC 1000	Refrigeration Electrical Theory and Application	6.0
HVAC 1210	Gas Heat	4.5
HVAC 1211	Electric Heat	4.5
HVAC 1540	All-Weather Systems (Conventional)	4.5
HVAC 2220	All-Weather Systems (Heat Pumps)	4.5
HVAC 2420	Advanced Residential Air Conditioning	4.5
CNST 1020	Blueprint Reading	4.5

Heat Pump (AHPSD)

Award: Career certificate

Pathway to associate degree: Heating, Air Conditioning, and Refrigeration Technology (HAAAS)

Program location: Fort Omaha Campus

This career certificate enables students to troubleshoot, service, and repair systems. Students have working knowledge of electric heat and gas heat used as back-up heat for the heat pump.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academic-Programs/Programs-of-Study/Construction-Education/Heating-AC-and-Refrigeration.aspx.

Requirements for Heat Pump career certificate (30.0 credit hrs.)

HVAC 1000	Refrigeration Electrical Theory and Application	6.0
HVAC 1010	Refrigeration Service Principles and Basic Automatic Controls	6.0
HVAC 1020	Refrigeration Shop Practices	4.5
HVAC 1210	Gas Heat	4.5
HVAC 1211	Electric Heat	4.5
HVAC 2220	All-Weather Systems (Heat Pumps)	4.5

Heat Systems (AHSSD)

Award: Career certificate

Pathway to associate degree: Heating, Air Conditioning, and Refrigeration Technology (HAAAS)

Program location: Fort Omaha Campus

This career certificate provides electrical knowledge for gas heating, oil burner heating, electric heat, practice insulation, and service of various systems. Students also study computer-controlled environments and write computer programs for changing temperature in various locations.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academic-Programs/Programs-of-Study/Construction-Education/Heating-AC-and-Refrigeration.aspx.

Requirements for Heat Systems career certificate (33.0 credit hrs.)

HVAC 1000	Refrigeration Electrical Theory and Application	6.0
HVAC 1210	Gas Heat	4.5
HVAC 1211	Electric Heat	4.5
HVAC 2220	All-Weather Systems (Heat Pumps)	4.5

HVAC 2221	Installation and Service Problems	4.5
HVAC 2570	Automated Building Controls	4.5
INFO 1001	Information Systems and Literacy	4.5



Refrigeration (ARFSD)

Award: Career certificate

Pathway to associate degree: Heating, Air Conditioning, and Refrigeration Technology (HAAAS)

Program location: Fort Omaha Campus

This career certificate provides students with electrical knowledge, refrigeration service principles, and shop practice including, soldering, brazing, flaring, and leak checking procedures. Students gain knowledge by installing and servicing refrigeration systems for residential and commercial units.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academic-Programs/Programs-of-Study/Construction-Education/Heating-AC-and-Refrigeration.aspx.

Requirements for Refrigeration career certificate (30.0 credit hrs.)

HVAC 1000	Refrigeration Electrical Theory and Application	6.0
HVAC 1010	Refrigeration Service Principles and Basic Automatic Controls	6.0
HVAC 1020	Refrigeration Shop Practices	4.5
HVAC 1330	Commercial Refrigeration Installation	4.5
HVAC 1331	Commercial Refrigeration Service	4.5
HVAC 1500	Air Conditioning, Domestic Refrigeration, and Appliance Repair	4.5

Plumbing

Plumbing Fundamentals (PLFCC)

Award: Career certificate

Pathway to associate degree: General Studies (GSAAS)

Program location: Fort Omaha Campus

Students completing this career certificate learn the knowledge and skills to begin a career in the plumbing industry.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mcneb.edu/Academics/Programs-of-Study/Construction-Education/Apprenticeship-Programs/Plumbing-Fundamentals.aspx.

Requirements for Plumbing Fundamentals career certificate (26.5 credit hrs.)

CNST 1110	Construction Safety (10-Hour)	1.0
PLBG 1010	Introduction to Plumbing	6.5
PLBG 1020	Basic Residential Plumbing	9.0
PLBG 1030	Basic Commercial Plumbing	9.0
EMSP 1010	Heartsaver First Aid with CPR and AED	1.0

EMSP 1010 is required for those who do not currently hold a valid CPR/first aid card.

Plumbing Apprenticeship

This Plumbing Apprenticeship degree prepares students already working in the field to become licensed plumbers. The plumbing curriculum is approved by the city of Omaha Plumbing Board. It is highly recommended that work experience and the apprenticeship program be done concurrently.

After completing the Plumbing Apprenticeship program and the required on-the-job training (four years of verifiable experience), the student may apply to take the examination for the Journeyman's Plumbing License administered by the city of Omaha. For additional details, contact the apprentice program coordinator at 531-622-4034.

Students who successfully complete a College-approved apprenticeship program through one of the local unions or an approved in-house company apprenticeship program may receive up to 56 credits toward an associate degree.

Degree: Associate in Applied Science

Plumbing Apprenticeship

Certificate of Achievement

Plumbing Apprenticeship - Pre-Apprenticeship Plumbing

Plumbing Apprenticeship (ARPAO)

Award: Associate in applied science degree

Program location: Fort Omaha Campus

This degree is for students preparing to become licensed plumbers. The courses are offered on an evening schedule only, allowing students to seek employment with plumbing contractors during the day. Students receive college credit for successful completion of coursework and at the same time complete the plumbing apprenticeship classroom hours requirement. For more information about this program, contact the apprenticeship coordinator at 531-622-4034.

Graduation Requirements

General education	27.0
Major requirements	7.5
Apprenticeship classes	65.5
Total credit hours required	100.0

General education requirements (27.0 credit hrs.)

Communications

English level I	4.5
English level II	4.5

See Communications course options (p. 42)

ENGL 1220 and ENGL 1240 are recommended.

Humanities/Social Sciences

Humanities/social sciences	4.5
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See Humanities/social sciences course options (p. 42)

PSYC 1000 or SPCH 1220 is recommended, but may not transfer.

Quantitative/numeracy skills

Mathematics	4.5
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See Quantitative/numeracy skills course options (p. 44)

MATH 1240 is recommended.

Additional

HMRL 1010	Human Relations Skills	4.5
INFO 1001	Information Systems and Literacy	4.5

Major requirements for Plumbing Apprenticeship (7.5 credit hrs.)

CNST 2100	Construction Safety (30-Hour)	4.5
INCT 2050	Problem-Solving	3.0

Apprenticeship requirements for Plumbing Apprenticeship (65.5 credit hrs.)

PLAP 1110	Plumbing IA	7.0
PLAP 1120	Plumbing IB	7.0
PLAP 1121	Plumbing IC	6.0
PLAP 1210	Plumbing IIA	7.0
PLAP 1220	Plumbing IIB	7.0
PLAP 1221	Plumbing IIC	6.0

PLAP 2310	Plumbing IIIA	7.0
PLAP 2320	Plumbing IIIB	7.0
PLAP 2330	Print Reading for Plumbers	3.5
PLAP 2410	Plumbing IVA	7.0
PLAP 2420	Plumbing IVB	7.0

Plumbing Apprenticeship - Pre-Apprenticeship Plumbing (ARPCE)

Award: Certificate of achievement

Pathway to associate degree: General Studies (GSAAS)

Program location: Fort Omaha Campus

This path is for students interested in learning about the plumbing profession, preparing them for a plumbing apprenticeship, or seeking the skills to find a job in that field.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Information-Technology-and-E-Learning.aspx.

Graduation Requirements

General education	13.5
Major requirements	38.5
Total credit hours required	52.0

General education requirements (13.5 credit hrs.)

Communications

ENGL 1220	Technical Writing	4.5
	OR	
ENGL 1225	Applied Communications I	4.5

Humanities/Social Sciences

Humanities/social sciences	4.5
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See Humanities/social sciences course options (p. **Error! Bookmark not defined.**)

PSYC 1000 or SPCH 1220 is recommended, but may not transfer.

Quantitative/numeracy skills

MATH 1240	Applied Mathematics	4.5
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Major requirements for Plumbing Apprenticeship - Pre-Apprenticeship Plumbing (38.5 credit hrs.)

CNST 1005	Introduction to the Construction Industry	4.5
CNST 1020	Blueprint Reading	4.5
CNST 1110	Construction Safety (10-Hour)	1.0
PLBG 1010	Introduction to Plumbing	6.5
PLBG 1020	Basic Residential Plumbing	9.0
PLBG 1030	Basic Commercial Plumbing	9.0
WELD 1300	Oxy-Acetylene Welding	3.0
EMSP 1010	Heartsaver First Aid with CPR and AED	1.0

EMSP 1010 is required for those who do not currently hold a valid CPR/first aid card.

CULINARY, HOSPITALITY, AND HORTICULTURE

Who We Are

We consist of culinary arts, hospitality, and horticulture studies. These options prepare students for a variety of careers in the culinary arts, management, hospitality, and horticulture industries.

Our Mission Statement

We are engaged in quality education for life-long learning through positive, hands-on, guest-centered experiences in Culinary Arts and Hospitality.

Our Vision Statement

To be the benchmark in culinary arts, hospitality, and horticulture education.

Culinary Arts and Management

- Culinary Arts and Management Degree Options (p. 121)
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 - Culinary Arts and Management - Baking and Pastry (p. 123)
- Baking and Pastry, certificate of achievement (p. 124)
- Culinary Arts and Management, certificate of achievement (p. 124)
- Culinary Arts Foundations, career certificate (p. 125)

Hospitality and Restaurant Leadership

- Hospitality and Restaurant Leadership Degree Options (p. 125)
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 - Hospitality and Restaurant Leadership - Hospitality Entrepreneurship (p. 127)
- ManageFirst, career certificate (p. 128)

Horticulture, Land Systems, and Management

- Horticulture, Land Systems, and Management (p. 129)
 - Horticulture, Land Systems, and Management - Floriculture (p. 129)
 - Horticulture, Land Systems, and Management - Grounds Management (p. 131)
 - Horticulture, Land Systems, and Management - Horticulture Management (p. 132)
 - Horticulture, Land Systems, and Management - Landscape Design (p. 133)
 - Horticulture, Land Systems, and Management - Small Market Farming (p. 134)
- Horticulture, Land Systems, and Management - Horticulture, certificate of achievement (p. 135)
- Arboriculture, career certificate (p. 136)
- Floriculture, career certificate (p. 136)

- Landscape Design, career certificate (p. 136)
- Nursery and Landscape Management, career certificate (p. 137)
- Plant Production and Propagation, career certificate (p. 137)
- Small Market Farming, career certificate (p. 137)

Culinary Arts and Management Degree Options

The Culinary Arts and Management program offers two associate degree options that prepare students for a variety of careers in food service.

1. Baking and Pastry (97.5 - 103.5 credit hrs.)
Prepares students for a career as a professional baker or pastry chef.
2. Culinary Arts (97.0 - 101.5 credit hrs.)
Prepares students for a career as a chef, sous chef, or culinarian. *The Baking and Pastry and the Culinary Arts options are accredited by the American Culinary Federation Education Foundation Accrediting Commission.*

Call 531-622-2510 to schedule an appointment to discuss career and educational goals.

Degree: Associate in applied science

- Culinary Arts and Management - Culinary Arts (p. 121)
- Culinary Arts and Management - Baking and Pastry (p. 123)

Certificate of Achievement

- Culinary Arts and Management - Baking and Pastry
- Culinary Arts and Management

Career Certificate

- Culinary Arts Foundations

Culinary Arts and Management - Culinary Arts (CACA1)

Award: Associate in applied science degree

Program location: Fort Omaha Campus

This degree option prepares students for a career as a chef, sous chef, or culinarian.

Graduation Requirements

General education	27.0
Major requirements	38.5
Option requirements	31.5-36.0
Total credit hours required	97.0-101.5

General education requirements (27.0 credit hrs.)

Communications

English level I	4.5
English level II	4.5

See Communications course options (p. 42)

ENGL 1220 CA Technical Writing and ENGL 1240 CA Oral and Written Reports are recommended, as they are specific to culinary students.

Transfer students should select ENGL 1010 and ENGL 1020.

Humanities/social sciences

Humanities/social sciences	4.5
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See Humanities/social sciences course options (p. 42)

Quantitative/numeracy skills

MATH 1242 Applied Math for the Hospitality Industry	4.5
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Students planning to transfer should also take MATH 1310 and have that class count toward electives under any of the option requirements.

Additional

HMRL 1010 Human Relations Skills ☞ ☹	4.5
INFO 1001 Information Systems and Literacy ☞ ☹	4.5

Major requirements for Culinary Arts and Management (38.5 credit hrs.)

CHRM 1000 CHRM Orientation ☞	1.5
CHRM 1020 Sanitation ☞	2.0
CHRM 1030 Introduction to Professional Cooking	4.0
CHRM 1120 Soup and Sauce Basics	3.0
CHRM 1210 Baking Basics	4.0
CHRM 1550 Customer Service	3.0
CHRM 2350 Nutrition	4.5
CHRM 2460 Cost Management ☞	4.5
CHRM 2470 Hospitality Supervision ☞	4.5
CHRM 2480 Purchasing	4.5
CHRM 2981 Internship	3.0

Critical advising note: Students entering the culinary arts programs who have been assessed at college-level in all areas and/or completed any recommended developmental courses should register for CHRM 1000, CHRM 1020, CHRM 1030, and MATH 1242 in their first quarter of study. Approved uniforms, supplies, and text are required by the first day of CHRM 1030.

Option requirements for Culinary Arts and Management - Culinary Arts (31.5-36.0 credit hrs.)

CHRM 1035 American Cuisine	4.0
CHRM 1130 Protein Fabrication	2.0
CHRM 1150 World Cuisine	3.0
CHRM 1999 Practical Cooking Exam 1	0.5
CHRM 2120 Garde Manger	4.0

CHRM 2125 Casual Dining	3.0
CHRM 2130 Fine Dining	4.0
CHRM 2550 Table Service	3.0
CHRM 2980 Student Manager	3.0
CHRM 2999 Practical Cooking Exam 2	0.5

Electives - select a total of 4.5 to 9.0 credit hours from the following:

CHRM Course of choice	
HLSM Course of choice	
MATH 1310 Intermediate Algebra ☞	4.5

Culinary Arts and Management - Culinary Arts Curriculum Plan

Below is a suggested guide for students planning careers in culinary arts after two years of full-time study.

First Year

First quarter

CHRM 1000 CHRM Orientation ☞	1.5
CHRM 1020 Sanitation ☞	2.0
CHRM 1030 Introduction to Professional Cooking	4.0
MATH 1242 Applied Math for the Hospitality Industry	4.5

Second quarter

CHRM 1035 American Cuisine	4.0
CHRM 1210 Baking Basics	4.0
CHRM 2350 Nutrition	4.5

Third quarter

CHRM 1120 Soup and Sauce Basics	3.0
CHRM 1130 Protein Fabrication	2.0
CHRM 1550 Customer Service	3.0
HMRL 1010 Human Relations Skills ☞ ☹	4.5

Fourth quarter

CHRM 1150 World Cuisine	3.0
CHRM 1999 Practical Cooking Exam 1	0.5
CHRM 2460 Cost Management ☞	4.5
INFO 1001 Information Systems and Literacy ☞ ☹	4.5

Second Year

Fifth quarter

CHRM 2125 Casual Dining	3.0
CHRM 2470 Hospitality Supervision ☞	4.5
CHRM 2550 Table Service	3.0
Humanities	4.5

Sixth quarter

CHRM 2120 Garde Manger	4.0
CHRM 2480 Purchasing	4.5
ENGL 1220 Technical Writing ☞	4.5

Seventh quarter

CHRM 2130 Fine Dining	4.0
CHRM Elective	3.0-4.5
ENGL 1240 Oral and Written Reports ☞	4.5

Eighth quarter

CHRM 2980	Student Manager	3.0
CHRM 2981	Internship	3.0
CHRM 2999	Practical Cooking Exam 2	0.5
CHRM	Elective	0.0-4.5

CHRM 2470	Hospitality Supervision ☞	4.5
CHRM 2480	Purchasing	4.5
CHRM 2981	Internship	3.0

Critical advising note: Students entering the culinary arts programs who have been assessed at college-level in all areas and/or completed any recommended developmental courses should register for CHRM 1000, CHRM 1020, CHRM 1030, and MATH 1242 in their first quarter of study. Approved uniforms, supplies, and text are required by the first day of CHRM 1030.

Culinary Arts and Management - Baking and Pastry (CABA2)

Award: Associate in applied science degree

Program location: Fort Omaha Campus

This degree option prepares students for a career as a professional baker or pastry chef.

Graduation Requirements

General education	27.0
Major requirements	38.5
Option requirements	32.0-38.0
Total credit hours required	97.5-103.5

General education requirements (27.0 credit hrs.)

Communications

English level I	4.5
English level II	4.5

See Communications course options (p. 42)

ENGL 1220 CA Technical Writing and ENGL 1240 CA Oral and Written Reports are recommended, as they are specific to culinary students.

Transfer students should select ENGL 1010 and ENGL 1020.

Humanities/social sciences

Humanities/social sciences	4.5
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See Humanities/social sciences course options (p. 42)

Quantitative/numeracy skills

MATH 1242	Applied Math for the Hospitality Industry	4.5
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Students planning to transfer should also take MATH 1310 and have that class count toward electives under any of the option requirements.

Additional

HMRL 1010	Human Relations Skills ☞ ☹	4.5
INFO 1001	Information Systems and Literacy ☞ ☹	4.5

Major requirements for Culinary Arts and Management (38.5 credit hrs.)

CHRM 1000	CHRM Orientation ☞	1.5
CHRM 1020	Sanitation ☞	2.0
CHRM 1030	Introduction to Professional Cooking	4.0
CHRM 1120	Soup and Sauce Basics	3.0
CHRM 1210	Baking Basics	4.0
CHRM 1550	Customer Service	3.0
CHRM 2350	Nutrition	4.5
CHRM 2460	Cost Management ☞	4.5

Option requirements for Culinary Arts and Management - Baking and Pastry (32.0-38.0 credit hrs.)

CHRM 1220	Pastries	3.0
CHRM 1250	Artisan Bread	4.0
CHRM 1260	Cakes	4.0
CHRM 1990	Practical Baking Exam 1	0.5
CHRM 2230	Baking Production	4.0
CHRM 2250	International Breads	3.0
CHRM 2270	Chocolate, Sugar, and Decorations	3.0
CHRM 2280	Plated Desserts	4.0
CHRM 2982	Bakery Student Manager	3.0
CHRM 2990	Practical Baking Exam 2	0.5

Electives – select a total of 3.0 to 9.0 credit hours from the following:

CHRM	Course of choice	
HLSM	Course of choice	
MATH 1310	Intermediate Algebra ☞	4.5

Culinary Arts and Management - Baking and Pastry Curriculum Plan

Below is a suggested guide for students planning careers in baking and pastry after two years of full-time study.

First Year

First quarter

CHRM 1000	CHRM Orientation ☞	1.5
CHRM 1020	Sanitation ☞	2.0
CHRM 1030	Introduction to Professional Cooking	4.0
MATH 1242	Applied Math for the Hospitality Industry	4.5

Second quarter

CHRM 1120	Soup and Sauce Basics	3.0
CHRM 1210	Baking Basics	4.0
CHRM 1550	Customer Service	3.0
CHRM 2350	Nutrition	4.5

Third quarter

CHRM 1220	Pastries	3.0
CHRM 1250	Artisan Bread	4.0
	OR	
CHRM 1260	Cakes	4.0
HMRL 1010	Human Relations Skills ☞ ☹	4.5

Fourth quarter

CHRM 1250	Artisan Bread OR	4.0
CHRM 1260	Cakes	4.0
CHRM 1990	Practical Baking Exam 1	0.5
CHRM 2460	Cost Management ☞	4.5
INFO 1001	Information Systems and Literacy ☞ ☹	4.5

Second Year

Fifth quarter

CHRM 2230	Baking Production	4.0
CHRM 2250	International Breads OR	3.0
CHRM 2270	Chocolate, Sugar, and Decorations	3.0
CHRM 2480	Purchasing	4.5

Sixth quarter

CHRM 2280	Plated Desserts	4.0
CHRM 2250	International Breads OR	3.0
CHRM 2270	Chocolate, Sugar, and Decorations	3.0
ENGL 1220	Technical Writing ☞	4.5

Seventh quarter

CHRM 2470	Hospitality Supervision ☞	4.5
CHRM 2982	Bakery Student Manager	3.0
CHRM	Elective	0.0-4.5
ENGL 1240	Oral and Written Reports ☞	4.5

Eighth quarter

CHRM 2981	Internship	3.0
CHRM 2990	Practical Baking Exam 2	0.5
CHRM	Elective	3.0-4.5
	Humanities	4.5

Baking and Pastry (CBPCE)

Award: Certificate of achievement

Pathway to associate degree: Culinary Arts and Management - Baking and Pastry (CABA2)

Program location: Fort Omaha Campus

This certificate of achievement prepares students for entry-level skilled positions in the food industry. This first-year baking certificate provides an opportunity for students to move quickly into the industry and begin working.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Culinary-Arts-Hospitality-and-Horticulture/Culinary-Arts-and-Management.aspx.

Graduation Requirements

General education	13.5
Major requirements	35.0
Total credit hours required	48.5

General education requirements (13.5 credit hrs.)

Communications

English level I	4.5
See Communications course options (p. 42)	
ENGL 1220 CA is recommended.	

Quantitative/numeracy skills

MATH 1242	Applied Math for the Hospitality Industry	4.5
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Humanities/social sciences

Humanities/social sciences	4.5
See Humanities/social sciences course options (p. 42)	

Major requirements for Baking and Pastry Certificate (35.0 credit hrs.)

CHRM 1000	CHRM Orientation ☞	1.5
CHRM 1020	Sanitation ☞	2.0
CHRM 1030	Introduction to Professional Cooking	4.0
CHRM 1210	Baking Basics	4.0
CHRM 1220	Pastries	3.0
CHRM 1250	Artisan Bread	4.0
CHRM 1260	Cakes	4.0
CHRM 1550	Customer Service	3.0
CHRM 1990	Practical Baking Exam 1	0.5
CHRM 2350	Nutrition	4.5
CHRM 2460	Cost Management ☞	4.5

Culinary Arts and Management (CAMCE)

Award: Certificate of achievement

Pathway to associate degree: Culinary Arts and Management - Culinary Arts (CACA1)

Program location: Fort Omaha Campus

This certificate of achievement prepares students for entry-level skilled positions in the food industry. It provides basic skills for a variety of opportunities within the industry. This first-year culinary certificate provides an opportunity for students to move quickly into the industry and begin working.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Culinary-Arts-Hospitality-and-Horticulture/Culinary-Arts-and-Management.aspx.

Graduation Requirements

General education	13.5
Major requirements	36.0
Total credit hours required	49.5

General education requirements (13.5 credit hrs.)

Communications

English level I	4.5
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See Communications course options (p. 42)

ENGL 1220 CA is recommended.

Quantitative/numeracy skills

MATH 1242 Applied Math for the Hospitality Industry	4.5
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Humanities/social sciences

Humanities/social sciences	4.5
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See Humanities/social sciences course options (p. 42)

Major requirements for Culinary Arts and Management (36.0 credit hrs.)

CHRM 1000 CHRM Orientation ☞	1.5
CHRM 1020 Sanitation ☞	2.0
CHRM 1030 Introduction to Professional Cooking	4.0
CHRM 1035 American Cuisine	4.0
CHRM 1120 Soup and Sauce Basics	3.0
CHRM 1130 Protein Fabrication	2.0
CHRM 1150 World Cuisine	3.0
CHRM 1210 Baking Basics	4.0
CHRM 1550 Customer Service	3.0
CHRM 1999 Practical Cooking Exam 1	0.5
CHRM 2350 Nutrition	4.5
CHRM 2460 Cost Management ☞	4.5

Culinary Arts Foundations (CAFSD)

Award: Career certificate

Pathway to associate degree: Culinary Arts Management - Culinary Arts (CACA1)

Program location: Fort Omaha Campus

This career certificate demonstrates students' completion of foundational skills in culinary arts and baking. Course prerequisites may be required to begin the specialization.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mcneb.edu/Academics/Programs-of-Study/Culinary-Arts-Hospitality-and-Horticulture/Culinary-Arts-and-Management.aspx.

Requirements for Culinary Arts Foundations career certificate (29.0 credit hrs.)

CHRM 1000 CHRM Orientation ☞	1.5
CHRM 1020 Sanitation ☞	2.0

CHRM 1030 Introduction to Professional Cooking	4.0	
CHRM 1035 American Cuisine	4.0	
CHRM 1210 Baking Basics	4.0	
CHRM 2350 Nutrition	4.5	
	Humanities elective	4.5
MATH 1242 Applied Math for the Hospitality Industry	4.5	

Hospitality and Restaurant Leadership Degree Options

Hospitality and Restaurant Leadership

The Hospitality and Restaurant Leadership program offers two associate degree options that prepare students for a variety of leadership roles in the hospitality industry.

1. Food and Event Management (97.0 – 103.0 credit hrs.)
This option is designed to prepare students to become leaders in the careers of restaurant manager, event coordinator, food service manager, beverage manager, or many other varied careers.

2. Hospitality Entrepreneurship (96.0-102.0 credit hrs.)
This option provides the entrepreneurial education for students wanting to own and operate a business in the hospitality industry.

Call 531-622-2510 to schedule an appointment to discuss career and educational goals.

Degree: Associate in applied science

Hospitality and Restaurant Leadership - Food and Event Management (p. 125)

Hospitality and Restaurant Leadership - Hospitality Entrepreneurship (p. 127)

Career Certificate

ManageFirst

Hospitality and Restaurant Leadership - Food and Event Management (CHFA1)

Award: Associate in applied science degree

Program location: Fort Omaha Campus

This degree option prepares students to become leaders in the careers of restaurant manager, event coordinator, hospitality consultant, beverage director, or many other varied careers.

Graduation Requirements

General education	27.0
Major requirements	48.0
Option requirements	22.0–28.0
Total credit hours required	97.0–103.0

General education requirements (27.0 credit hrs.)**Communications**

English level I	4.5
English level II	4.5

See Communications course options (p. 42)

ENGL 1220 CA Technical Writing and ENGL 1240 CA Oral and Written Report for Culinaricians are recommended. Transfer students should select ENGL 1010 and ENGL 1020.

Humanities/social sciences

Humanities/social sciences	4.5
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See Humanities/social sciences course options (p. 42)

Quantitative/numeracy skills

MATH 1242 Applied Math for the Hospitality Industry	4.5
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Students planning to transfer should also take MATH 1310 and have that class count toward electives under any of the option requirements.

Additional

HMRL 1010 Human Relations Skills	4.5
INFO 1001 Information Systems and Literacy	4.5

Major requirements for Hospitality and Restaurant Leadership (48.0 credit hrs.)

CHRM 1000 CHRM Orientation	1.5
CHRM 1020 Sanitation	2.0
CHRM 1030 Introduction to Professional Cooking	4.0
CHRM 1550 Customer Service	3.0
CHRM 2410 Marketing and Industry Perspectives	3.0
CHRM 2460 Cost Management	4.5
CHRM 2465 Food Service Financial Management	4.5
CHRM 2470 Hospitality Supervision	4.5
CHRM 2475 Leadership Principles	4.5
CHRM 2480 Purchasing	4.5
CHRM 2550 Table Service	3.0
CHRM 2560 Beverage Management	3.0
CHRM 2980 Student Manager	3.0
CHRM 2989 Hospitality Management Internship	3.0

Critical advising note: Students entering the hospitality program who have been assessed at college-level in all areas and/or completed developmental courses should register for CHRM 1000, CHRM 1020, CHRM 1030 and MATH 1242 in their first quarter. Approved uniform, supplies, and text are required by the first day of CHRM 1030.

Option requirements for Hospitality and Restaurant Leadership - Food and Event Management (22.0-28.0 credit hrs.)

BSAD 1100 Business Law I	4.5
CHRM 1035 American Cuisine	4.0
OR	
CHRM 1210 Baking Basics	4.0
CHRM 2350 Nutrition	4.5
CHRM 2610 Event Planning	3.0
CHRM 2650 Banquet Service	3.0

Electives - select a total of 3.0 to 9.0 credit hours from the following:

BSAD Course of choice	
CHRM Course of choice	
ENTR Course of choice	
HLSM Course of choice	
MATH 1310 Intermediate Algebra	4.5

NOTE: Taking over the maximum number of elective hours for your degree option may have financial aid ramifications. Please see your academic advisor for direction.

Hospitality and Restaurant Leadership - Food and Event Management Curriculum Plan

Below is a suggested guide for students planning careers in food and event management after two years of full-time study.

First Year**First quarter**

CHRM 1000 CHRM Orientation	1.5
CHRM 1020 Sanitation	2.0
CHRM 1030 Introduction to Professional Cooking	4.0
MATH 1242 Applied Math for the Hospitality Industry	4.5

Second quarter

CHRM 1035 American Cuisine	4.0
OR	
CHRM 1210 Baking Basics	4.0
ENGL 1010 English Composition I	4.5
INFO 1001 Information Systems and Literacy	4.5

Third quarter

CHRM 1550 Customer Service	3.0
CHRM 2350 Nutrition	4.5
CHRM 2460 Cost Management	4.5

Fourth quarter

CHRM 2480 Purchasing	4.5
ENGL 1020 English Composition II	4.5
HMRL 1010 Human Relations Skills	4.5

Second Year

Fifth quarter

CHRM 2410	Marketing and Industry Perspectives	3.0
CHRM 2470	Hospitality Supervision ☞	4.5
CHRM 2560	Beverage Management Elective	3.0-4.5

Sixth quarter

BSAD 1100	Business Law I ☞	4.5
CHRM 2465	Food Service Financial Management	4.5
CHRM 2610	Event Planning	3.0

Seventh quarter

CHRM 2475	Leadership Principles	4.5
CHRM 2550	Table Service	3.0
CHRM 2650	Banquet Service	3.0

Eighth quarter

CHRM 2980	Student Manager	3.0
CHRM 2989	Hospitality Management Internship Elective	3.0-4.5
	Humanities	4.5

Hospitality and Restaurant Leadership - Hospitality Entrepreneurship (CHBA1)

Award: Associate in applied science degree

Program location: Fort Omaha Campus

This degree option provides the entrepreneurial education for students wanting to own and operate businesses in the hospitality industry.

Graduation Requirements

General education	27.0
Major requirements	48.0
Option requirements	21.0-27.0
Total credit hours required	96.0-102.0

General education requirements (27.0 credit hrs.)

Communications

English level I	4.5
English level II	4.5

See Communications course options (p. 42)

ENGL 1220 CA Technical Writing and ENGL 1240 CA Oral and Written Report for Culinaricians are recommended. Transfer students should select ENGL 1010 and ENGL 1020.

Humanities/social sciences

Humanities/social sciences	4.5
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See Humanities/social sciences course options (p. 42)

Quantitative/numeracy skills

MATH 1242	Applied Math for the Hospitality Industry	4.5
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Students planning to transfer should also take MATH 1310 and have that class count toward electives under any of the option requirements.

Additional

HMRL 1010	Human Relations Skills ☞ ☹	4.5
INFO 1001	Information Systems and Literacy ☞ ☹	4.5

Major requirements for Hospitality and Restaurant Leadership (48.0 credit hrs.)

CHRM 1000	CHRM Orientation ☞	1.5
CHRM 1020	Sanitation ☞	2.0
CHRM 1030	Introduction to Professional Cooking	4.0
CHRM 1550	Customer Service	3.0
CHRM 2410	Marketing and Industry Perspectives	3.0
CHRM 2460	Cost Management ☞	4.5
CHRM 2465	Food Service Financial Management	4.5
CHRM 2470	Hospitality Supervision ☞	4.5
CHRM 2475	Leadership Principles	4.5
CHRM 2480	Purchasing	4.5
CHRM 2550	Table Service	3.0
CHRM 2560	Beverage Management	3.0
CHRM 2980	Student Manager	3.0
CHRM 2989	Hospitality Management Internship	3.0

Critical advising note: Students entering the hospitality program who have been assessed at college-level in all areas and/or completed developmental courses should register for CHRM 1000, CHRM 1020, CHRM 1030 and MATH 1242 in their first quarter. Approved uniform, supplies, and text are required by the first day of CHRM 1030.

Option requirements for Hospitality and Restaurant Leadership - Hospitality Entrepreneurship (21.0-27.0 credit hrs.)

ENTR 1050	Introduction to Entrepreneurship ☞ ☹	4.5
ENTR 2040	Entrepreneurship Feasibility Study ☞	4.5
ENTR 2060	Entrepreneurship Legal Issues ☞	4.5
ENTR 2090	Entrepreneurship Business Plan ☞	4.5

Electives - select a total of 3.0 to 9.0 credit hours from the following:

BSAD	Course of choice	
CHRM	Course of choice	
ENTR	Course of choice	
HLSM	Course of choice	
MATH 1310	Intermediate Algebra	4.5

NOTE: Taking over the maximum number of elective hours for your degree option may have financial aid ramifications. Please see your academic advisor for direction.

Hospitality and Restaurant Leadership - Hospitality Entrepreneurship Curriculum Plan

Below is a suggested guide for students planning careers in hospitality entrepreneurship after two years of full-time study.

First Year

First quarter

CHRM 1000	CHRM Orientation	1.5
CHRM 1020	Sanitation	2.0
CHRM 1030	Introduction to Professional Cooking	4.0
MATH 1242	Applied Math for the Hospitality Industry	4.5

Second quarter

ENTR 1050	Introduction to Entrepreneurship	4.5
ENGL 1010	English Composition I	4.5
INFO 1001	Information Systems and Literacy	4.5

Third quarter

CHRM 1550	Customer Service	3.0
CHRM 2460	Cost Management	4.5
ENTR 2040	Entrepreneurship Feasibility Study	4.5

Fourth quarter

CHRM 2480	Purchasing	4.5
ENGL 1020	English Composition II	4.5
HMRL 1010	Human Relations Skills	4.5

Second Year

Fifth quarter

CHRM 2410	Marketing and Industry Perspectives	3.0
CHRM 2470	Hospitality Supervision	4.5
CHRM 2475	Leadership Principles	4.5

Sixth quarter

CHRM 2465	Food Service Financial Management	4.5
CHRM 2550	Table Service	3.0
ENTR 2060	Entrepreneurship Legal Issues	4.5

Seventh quarter

CHRM 2560	Beverage Management	3.0
ENTR 2090	Entrepreneurship Business Plan	4.5
CHRM	CHRM, BSAD, ENTR, HLSM, or MATH 1310 Elective	3.0-4.5

Eighth quarter

CHRM 2980	Student Manager	3.0
CHRM 2989	Hospitality Management Internship	3.0
CHRM	CHRM, BSAD, ENTR, HLSM, or MATH 1310 Elective	0.0-4.5
	Humanities	4.5

ManageFirst (CHMCC)

Award: Career certificate

Pathway to associate degree: Hospitality and Restaurant Leadership - Food and Event Management (CHFA1)

Program location: Fort Omaha Campus

This career certificate allows hospitality and culinary professionals an opportunity to further their education, enhance their career, improve customer service, and stay competitive in the marketplace. To receive the National Restaurant Association's ManageFirst Credential, students must earn NRAEF certification in the core credential courses plus certification in one additional course listed, log 800 hours of industry work, and complete a separate application process. Call 531-622-2510 for complete details.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Culinary-Arts-Hospitality-and-Horticulture/Hospitality-and-Restaurant-Leadership.aspx.

Requirements for ManageFirst career certificate (32.0 credit hrs.)

CHRM 1020	Sanitation	2.0
CHRM 1550	Customer Service	3.0
CHRM 2460	Cost Management	4.5
CHRM 2465	Food Service Financial Management	4.5
CHRM 2470	Hospitality Supervision	4.5
CHRM 2475	Leadership Principles	4.5
CHRM 2480	Purchasing	4.5
MATH 1242	Applied Math for the Hospitality Industry	4.5

Core credential courses: CHRM 1020, CHRM 2460, CHRM 2470, and CHRM 2475

Horticulture, Land Systems, and Management

This program prepares students for careers in the vast industries of horticulture and land systems. Studies include production, design, handling, sales, harvesting, packaging, shipping, management, and maintenance depending upon the option of study.

Degree: Associate in Applied Science

These programs prepare students for careers in nursery or landscaping businesses by focusing on production, handling, sales, selection, entrepreneurship, and maintenance of materials and products.

Floriculture

This option focuses on the production, handling, sale, and use of greenhouse crops, flower crops, bedding crops, and foliage plants.

Grounds Management

This option focuses on the care, identification, installation, and maintenance of plants and hardscapes.

Horticulture Management

This option focuses on the management of production, handling, sale, and care of plants.

Landscape Design (Pre-Landscape Architecture)

This option focuses on design and the use of technology in relation to the land.

Small Market Farming

This option focuses on the knowledge and skills needed to run a small market farm.

Certificate of Achievement:

Horticulture

This certificate of achievement provides students the opportunity to move quickly into the industry and begin working at an entry level.

Career Certificate:

Arboriculture

Floriculture

Landscape Design

Nursery and Landscape Management

Plant Production and Propagation

Small Market Farming

Horticulture, Land Systems, and Management Degree Options

Award: Associate in applied science degree

Program location: Fort Omaha Campus

This program prepares students for careers in the vast industries of horticulture and land systems. Studies include production, design, handling, sales, harvesting, packaging, shipping, management, and maintenance depending upon the option of study.

Options available under this degree are:

Floriculture (HLMFO) (p. 129)

Grounds Management (HLMGO) (p. 131)

Horticulture Management (HLMHO) (p. 132)

Landscape Design (HLMLO) (p. 133)

Small Market Farming (HLMFO) (p. 134)

Horticulture, Land Systems, and Management - Curriculum Plan

Below is a suggested guide for students planning careers in horticulture after two years of full-time study.

First Year

First quarter

HLSM 1000	Horticulture, Land Systems and Management Orientation	1.0
HLSM 1010	Introduction to Horticulture	6.0
	Elective	4.5
	Elective	4.5

Second quarter

	Elective	4.5
	Elective	4.5

Third quarter

	Elective	4.5
	Elective	4.5

Fourth quarter

HLSM 2910	Internship	3.0
	Elective	4.5
	Elective	4.5

Second Year

Fifth quarter

	Elective	4.5
	Elective	4.5

Sixth quarter

	Elective	4.5
	Elective	4.5

Seventh quarter

	Elective	4.5
	Elective	4.5

Horticulture, Land Systems, and Management - Floriculture (HLMFO)

Award: Associate in applied science degree

Program location: Fort Omaha Campus

This option focuses on the production, handling, sale, and use of greenhouse crops, flower crops, bedding crops, and foliage plants.

Graduation Requirements

General education	27.0
Major requirements	31.0
Option requirements	41.0
Total credit hours required	99.0

General education requirements (27.0 credit hrs.)**Communications**

English level I	4.5
English level II	4.5

See Communications course options (p. 42)

Humanities/social sciences

Humanities/social sciences	4.5
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See Humanities/social sciences course options (p. 42)

Quantitative/numeracy skills

MATH 1240 Applied Mathematics	4.5
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Additional

HMRL 1010 Human Relations Skills	4.5
INFO 1001 Information Systems and Literacy	4.5

Major requirements for Horticulture, Land Systems, and Management (31.0 credit hrs.)

HLSM 1000 Horticulture, Land Systems and Management Orientation	1.0
HLSM 1010 Introduction to Horticulture	6.0
HLSM 1100 Perennials: Culture and Identification	3.0
HLSM 2430 Plant Physiology	4.5
HLSM 2910 Internship	3.0
BSAD 1000 Introduction to Business	4.5
ENTR 1050 Introduction to Entrepreneurship	4.5
SPAN Course of choice	4.5

Option requirements for Horticulture, Land Systems, and Management - Floriculture (41.0 credit hrs.)

HLSM 1030 Introduction to Floral Design	3.0
HLSM 1200 Floral Care and Identification	2.0
HLSM 1210 Floral Design: Specialty Events and Occasions	3.0
HLSM 1220 Floral Design: Tablescales and Hospitality	3.0
HLSM 1230 Floral Design: Sympathy	3.0
HLSM 2200 Floral Design: Weddings	3.0
HLSM 2205 Floral Body Wear I	2.0
HLSM 2215 Floral Body Wear II	2.0
HLSM 2220 Advanced Bouquet	2.0
HLSM 2410 Plant Propagation	3.0
HLSM 2425 Entomology	3.0
HLSM 2610 Floriculture Production	3.0
BSAD 1010 Principles of Marketing	4.5
BSAD 1210 Retailing	4.5

Horticulture, Land Systems, and Management - Floriculture Curriculum Plan

Below is a suggested guide for students planning careers in floriculture after two years of full-time study.

First Year**First quarter**

HLSM 1000 Horticulture, Land Systems and Management Orientation	1.0
HLSM 1010 Introduction to Horticulture	6.0
HLSM 1030 Introduction to Floral Design	3.0
Elective	4.5

Second quarter

HLSM 1220 Floral Design: Tablescales and Hospitality	3.0
HLSM 2205 Floral Body Wear I	2.0
HLSM 2215 Floral Body Wear II	2.0
Elective	4.5
Elective	4.5

Third quarter

HLSM 1210 Floral Design: Specialty Events and Occasions	3.0
HLSM 2200 Floral Design: Weddings	3.0
Elective	4.5
Elective	4.5

Fourth quarter

HLSM 1230 Floral Design: Sympathy	3.0
HLSM 2220 Advanced Bouquet	2.0
HLSM 2910 Internship	3.0
Elective	4.5

Second Year**Fifth quarter**

HLSM 1100 Perennials: Culture and Identification	3.0
HLSM 1200 Floral Care and Identification	2.0
HLSM 2410 Plant Propagation	3.0
Elective	4.5

Sixth quarter

HLSM 2430 Plant Physiology	4.5
HLSM 2610 Floriculture Production	3.0
Elective	4.5
Elective	4.5

Seventh quarter

HLSM 2425 Entomology	3.0
Elective	4.5
Elective	4.5

Horticulture, Land Systems, and Management - Grounds Management (HLMGO)

Award: Associate in applied science degree

Program location: Fort Omaha Campus

This option focuses on the care, identification, installation and maintenance of plants and hardscapes.

Graduation Requirements

General education	27.0
Major requirements	31.0
Option requirements	45.5
Total credit hours required	103.5

General education requirements (27.0 credit hrs.)

Communications

English level I	4.5
English level II	4.5

See Communications course options (p. 42)

Humanities/social sciences





Humanities/social sciences	4.5
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See Humanities/social sciences course options (p. 42)




Quantitative/numeracy skills

MATH 1240 Applied Mathematics	4.5
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Additional

HMRL 1010 Human Relations Skills  	4.5
INFO 1001 Information Systems and Literacy  	4.5

Major requirements for Horticulture, Land Systems, and Management (31.0 credit hrs.)

HLSM 1000 Horticulture, Land Systems and Management Orientation	1.0
HLSM 1010 Introduction to Horticulture	6.0
HLSM 1100 Perennials: Culture and Identification	3.0
HLSM 2430 Plant Physiology	4.5
HLSM 2910 Internship	3.0
BSAD 1000 Introduction to Business 	4.5
ENTR 1050 Introduction to Entrepreneurship  	4.5
SPAN Course of choice	4.5

Option requirements for Horticulture, Land Systems, and Management - Grounds Management (45.5 credit hrs.)

HLSM 1040 Pesticide Applicators' Certification	4.5
HLSM 1050 Introduction to Landscape Design	3.0
HLSM 1110 Turfgrass Management	3.0
HLSM 1120 Pomology: Culture and Identification	3.0
HLSM 1130 Deciduous Trees: Culture and Identification	3.0

HLSM 1140 Coniferous Trees: Culture and Identification	3.0
HLSM 1150 Shrubs: Culture and Identification	3.0
HLSM 1320 Landscape Graphics: 2-D	2.0
HLSM 1340 Construction Documents and Details	3.0
HLSM 1400 Natural Systems and Sustainability	3.0
HLSM 2320 Grounds Construction and Maintenance	3.0
HLSM 2400 Site Systems	3.0
HLSM 2420 Plant Pathology	3.0
HLSM 2425 Entomology	3.0
HLSM 2610 Floriculture Production	3.0

Horticulture, Land Systems, and Management - Grounds Management Curriculum Plan

Below is a suggested guide for students planning careers in grounds management after two years of full-time study.

First Year

First quarter

HLSM 1000 Horticulture, Land Systems and Management Orientation	1.0
HLSM 1010 Introduction to Horticulture	6.0
Elective	4.5
Elective	4.5

Second quarter

HLSM 1040 Pesticide Applicators' Certification	4.5
HLSM 1140 Coniferous Trees: Culture and Identification	3.0
HLSM 1320 Landscape Graphics: 2-D	2.0
HLSM 2610 Floriculture Production	3.0
Elective	4.5

Third quarter

HLSM 1110 Turfgrass Management	3.0
HLSM 1150 Shrubs: Culture and Identification	3.0
HLSM 1400 Natural Systems and Sustainability	3.0
HLSM 2320 Grounds Construction and Maintenance	3.0
Elective	4.5

Fourth quarter

HLSM 2910 Internship	3.0
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Second Year

Fifth quarter

HLSM 1050	Introduction to Landscape Design	3.0
HLSM 1100	Perennials: Culture and Identification	3.0
HLSM 1130	Deciduous Trees: Culture and Identification	3.0
HLSM 2400	Site Systems	3.0
	Elective	4.5

Sixth quarter

HLSM 1340	Construction Documents and Details	3.0
HLSM 2430	Plant Physiology	4.5
	Elective	4.5
	Elective	4.5

Seventh quarter

HLSM 1120	Pomology: Culture and Identification	3.0
HLSM 2420	Plant Pathology	3.0
HLSM 2425	Entomology	3.0
	Elective	4.5
	Elective	4.5

Horticulture, Land Systems, and Management - Horticulture Management (HLMHO)

Award: Associate in applied science degree

Program location: Fort Omaha Campus

This option focuses on the management of production, handling, sale, and use of plants.

Graduation Requirements

General education	27.0
Major requirements	31.0
Option requirements	43.5
Total credit hours required	101.5

General education requirements (27.0 credit hrs.)

Communications

English level I	4.5
English level II	4.5

See Communications course options (p. 42)

Humanities/social sciences





Humanities/social sciences	4.5
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See Humanities/social sciences course options (p. 42)




Quantitative/numeracy skills

MATH 1240	Applied Mathematics	4.5
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Additional

HMRL 1010	Human Relations Skills  	4.5
INFO 1001	Information Systems and Literacy  	4.5

Major requirements for Horticulture, Land Systems, and Management (31.0 credit hrs.)

HLSM 1000	Horticulture, Land Systems and Management Orientation	1.0
HLSM 1010	Introduction to Horticulture	6.0
HLSM 1100	Perennials: Culture and Identification	3.0
HLSM 2430	Plant Physiology	4.5
HLSM 2910	Internship	3.0
BSAD 1000	Introduction to Business 	4.5
ENTR 1050	Introduction to Entrepreneurship  	4.5
SPAN	Course of choice	4.5

Option requirements for Horticulture, Land Systems, and Management - Horticulture Management (43.5 credit hrs.)

HLSM 1040	Pesticide Applicators' Certification	4.5
HLSM 1110	Turfgrass Management	3.0
HLSM 1120	Pomology: Culture and Identification	3.0
HLSM 1130	Deciduous Trees: Culture and Identification	3.0
HLSM 1140	Coniferous Trees: Culture and Identification	3.0
HLSM 1150	Shrubs: Culture and Identification	3.0
HLSM 1400	Natural Systems and Sustainability	3.0
HLSM 2400	Site Systems	3.0
HLSM 2410	Plant Propagation	3.0
HLSM 2420	Plant Pathology	3.0
HLSM 2425	Entomology	3.0
HLSM 2500	Small Market Farming	3.0
HLSM 2510	Olericulture	3.0
HLSM 2610	Floriculture Production	3.0

Horticulture, Land Systems, and Management - Horticulture Management Curriculum Plan

Below is a suggested guide for students planning careers in horticulture management after two years of full-time study.

First Year

First quarter

HLSM 1000	Horticulture, Land Systems and Management Orientation	1.0
HLSM 1010	Introduction to Horticulture	6.0
	Elective	4.5
	Elective	4.5

Second quarter

HLSM 1040	Pesticide Applicators' Certification	4.5
HLSM 1140	Coniferous Trees: Culture and Identification	3.0
HLSM 2410	Plant Propagation	3.0
HLSM 2610	Floriculture Production	3.0
	Elective	4.5

Third quarter

HLSM 1110	Turfgrass Management	3.0
HLSM 1150	Shrubs: Culture and Identification	3.0
HLSM 1400	Natural Systems and Sustainability	3.0
	Elective	4.5
	Elective	4.5

Fourth quarter

HLSM 2910	Internship	3.0
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Second Year

Fifth quarter

HLSM 1100	Perennials: Culture and Identification	3.0
HLSM 1130	Deciduous Trees: Culture and Identification	3.0
HLSM 2400	Site Systems	3.0
	Elective	4.5
	Elective	4.5

Sixth quarter

HLSM 2430	Plant Physiology	4.5
HLSM 2500	Small Market Farming	3.0
HLSM 2510	Olericulture	3.0
	Elective	4.5

Seventh quarter

HLSM 1120	Pomology: Culture and Identification	3.0
HLSM 2420	Plant Pathology	3.0
HLSM 2425	Entomology	3.0
	Elective	4.5

Horticulture, Land Systems, and Management - Landscape Design (HLMLO)

Award: Associate in applied science degree

Program location: Fort Omaha Campus

This option focuses on design and the use of technology in relation to the land.

Graduation Requirements

General education	27.0
Major requirements	31.0
Option requirements	40.0
Total credit hours required	98.0

General education requirements (27.0 credit hrs.)

Communications

English level I	4.5
English level II	4.5

See Communications course options (p. 42)

Humanities/social sciences

Humanities/social sciences	4.5
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See Humanities/social sciences course options (p. 42)

Quantitative/numeracy skills

MATH 1240	Applied Mathematics	4.5
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Additional

HMRL 1010	Human Relations Skills	4.5
INFO 1001	Information Systems and Literacy	4.5

Major requirements for Horticulture, Land Systems, and Management (31.0 credit hrs.)

HLSM 1000	Horticulture, Land Systems and Management Orientation	1.0
HLSM 1010	Introduction to Horticulture	6.0
HLSM 1100	Perennials: Culture and Identification	3.0
HLSM 2430	Plant Physiology	4.5
HLSM 2910	Internship	3.0
BSAD 1000	Introduction to Business	4.5
ENTR 1050	Introduction to Entrepreneurship	4.5
SPAN	Course of choice	4.5

Option requirements for Horticulture, Land Systems, and Management - Landscape Design (40.0 credit hrs.)

HLSM 1050	Introduction to Landscape Design	3.0
HLSM 1110	Turfgrass Management	3.0
HLSM 1130	Deciduous Trees: Culture and Identification	3.0
HLSM 1140	Coniferous Trees: Culture and Identification	3.0
HLSM 1150	Shrubs: Culture and Identification	3.0
HLSM 1320	Landscape Graphics: 2-D	2.0
HLSM 1325	Landscape Graphics - 3-D	2.0
HLSM 1340	Construction Documents and Details	3.0
HLSM 1400	Natural Systems and Sustainability	3.0
HLSM 2300	Landscape Design I	3.0
HLSM 2305	Landscape Design II	3.0
HLSM 2320	Grounds Construction and Maintenance	3.0
HLSM 2340	Introduction to Regional Planning	3.0
HLSM 2400	Site Systems	3.0

Horticulture, Land Systems, and Management - Landscape Design Curriculum Plan

Below is a suggested guide for students planning careers in landscape design after two years of full-time study.

First Year

First quarter

HLSM 1000	Horticulture, Land Systems and Management Orientation	1.0
HLSM 1010	Introduction to Horticulture	6.0
HLSM 1050	Introduction to Landscape Design	3.0
	Elective	4.5

Second quarter

HLSM 1140	Coniferous Trees: Culture and Identification	3.0
HLSM 1320	Landscape Graphics: 2-D	2.0
HLSM 1340	Construction Documents and Details	3.0
HLSM 2300	Landscape Design I	3.0
	Elective	4.5

Third quarter

HLSM 1110	Turfgrass Management	3.0
HLSM 1150	Shrubs: Culture and Identification	3.0
HLSM 1325	Landscape Graphics - 3-D	2.0
HLSM 2320	Grounds Construction and Maintenance	3.0
	Elective	4.5

Fourth quarter

HLSM 2910	Internship	3.0
	Elective	4.5

Second Year

Fifth quarter

HLSM 1100	Perennials: Culture and Identification	3.0
HLSM 1130	Deciduous Trees: Culture and Identification	3.0
HLSM 2400	Site Systems	3.0
	Elective	4.5
	Elective	4.5

Sixth quarter

HLSM 2340	Introduction to Regional Planning	3.0
HLSM 2430	Plant Physiology	4.5
	Elective	4.5

Seventh quarter

HLSM 1400	Natural Systems and Sustainability	3.0
HLSM 2305	Landscape Design II	3.0
	Elective	4.5
	Elective	4.5

Horticulture, Land Systems, and Management - Small Market Farming (HLMFO)

Award: Associate in applied science degree

Program location: Fort Omaha Campus

This option focuses on the management and production, handling, sale, and use of plants.

Graduation Requirements

General education	27.0
Major requirements	31.0
Option requirements	40.5
Total credit hours required	98.5

General education requirements (27.0 credit hrs.)

Communications

English level I	4.5
English level II	4.5

See Communications course options (p. 42)

Humanities/social sciences

Humanities/social sciences	4.5
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See Humanities/social sciences course options (p. 42)

Quantitative/numeracy skills

MATH 1240	Applied Mathematics	4.5
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Additional

HMRL 1010	Human Relations Skills	4.5
INFO 1001	Information Systems and Literacy	4.5

Major requirements for Horticulture, Land Systems, and Management (31.0 credit hrs.)

HLSM 1000	Horticulture, Land Systems and Management Orientation	1.0
HLSM 1010	Introduction to Horticulture	6.0
HLSM 1100	Perennials: Culture and Identification	3.0
HLSM 2430	Plant Physiology	4.5
HLSM 2910	Internship	3.0
BSAD 1000	Introduction to Business	4.5
ENTR 1050	Introduction to Entrepreneurship	4.5
SPAN	Course of choice	4.5

Option requirements for Horticulture, Land Systems, and Management - Small Market Farming (40.5 credit hrs.)

HLSM 1020	Introduction to Aquaponics	3.0
HLSM 1040	Pesticide Applicators' Certification	4.5
HLSM 1120	Pomology: Culture and Identification	3.0
HLSM 1400	Natural Systems and Sustainability	3.0
HLSM 2340	Introduction to Regional Planning	3.0
HLSM 2400	Site Systems	3.0

HLSM 2410	Plant Propagation	3.0
HLSM 2420	Plant Pathology	3.0
HLSM 2425	Entomology	3.0
HLSM 2500	Small Market Farming	3.0
HLSM 2510	Olericulture	3.0
HLSM 2520	Introduction to Small Animal Husbandry	3.0
HLSM 2610	Floriculture Production	3.0

Horticulture, Land Systems, and Management - Small Market Farming Curriculum Plan

Below is a suggested guide for students planning careers in small market farming after two years of full-time study.

First Year

First quarter

HLSM 1000	Horticulture, Land Systems and Management Orientation	1.0
HLSM 1010	Introduction to Horticulture	6.0
	Elective	4.5
	Elective	4.5

Second quarter

HLSM 2340	Introduction to Regional Planning	3.0
HLSM 2410	Plant Propagation	3.0
HLSM 2500	Small Market Farming	3.0
HLSM 2610	Floriculture Production	3.0
	Elective	4.5

Third quarter

HLSM 1040	Pesticide Applicators' Certification	4.5
HLSM 1400	Natural Systems and Sustainability	3.0
HLSM 2420	Plant Pathology	3.0
HLSM 2425	Entomology	3.0

Fourth quarter

HLSM 2910	Internship	3.0
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Second Year

Fifth quarter

HLSM 1020	Introduction to Aquaponics	3.0
HLSM 1100	Perennials: Culture and Identification	3.0
HLSM 2400	Site Systems	3.0
HLSM 2520	Introduction to Small Animal Husbandry	3.0
	Elective	4.5

Sixth quarter

HLSM 2430	Plant Physiology	4.5
HLSM 2510	Olericulture	3.0
	Elective	4.5
	Elective	4.5

Seventh quarter

HLSM 1120	Pomology: Culture and Identification	3.0
	Elective	4.5
	Elective	4.5
	Elective	4.5

Horticulture, Land Systems, and Management - Horticulture (HLHCE)

Award: Certificate of achievement

Pathway to associate degree: Horticulture, Land Systems, and Management - Horticulture Management (HLMHO)

Program location: Fort Omaha Campus

This option is a certificate of achievement that provides students the opportunity to move quickly into the industry and begin working at an entry level.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Culinary-Arts-Hospitality-and-Horticulture/Horticulture-Land-Systems-and-Management.aspx

Graduation Requirements

General education	13.5
Major requirements	37.0
Total credit hours required	50.5

General education requirements (13.5 credit hrs.)

Communications

English level I	4.5
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See Communications course options (p. 42)

Quantitative/numeracy skills

MATH 1240	Applied Mathematics	4.5
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Natural sciences

HLSM 2430	Plant Physiology	4.5
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Major requirements for Horticulture (37.0 credit hrs.)

HLSM 1000	Horticulture, Land Systems and Management Orientation	1.0
HLSM 1010	Introduction to Horticulture	6.0
HLSM 1100	Perennials: Culture and Identification	3.0
HLSM 1110	Turfgrass Management	3.0
HLSM 1130	Deciduous Trees: Culture and Identification	3.0
HLSM 1400	Natural Systems and Sustainability	3.0
HLSM 2410	Plant Propagation	3.0
HLSM 2420	Plant Pathology	3.0
HLSM 2425	Entomology	3.0
HLSM 2510	Olericulture	3.0
HLSM 2610	Floriculture Production	3.0
HLSM 2910	Internship	3.0

Arboriculture (HLACC)**Award:** Career certificate**Pathway to associate degree:** Horticulture, Land Systems, and Management - Horticulture Management (HLMHO)**Program location:** Fort Omaha Campus

This career certificate prepares students to enter into a tree care and landscape maintenance career field.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Culinary-Arts-Hospitality-and-Horticulture/Horticulture-Land-Systems-and-Management.aspx.**Requirements for Arboriculture career certificate (29.5 credit hrs.)**

HLSM 1000	Horticulture, Land Systems and Management Orientation	1.0
HLSM 1010	Introduction to Horticulture	6.0
HLSM 1040	Pesticide Applicators' Certification	4.5
HLSM 1120	Pomology: Culture and Identification	3.0
HLSM 1130	Deciduous Trees: Culture and Identification	3.0
HLSM 1140	Coniferous Trees: Culture and Identification	3.0
HLSM 2410	Plant Propagation	3.0
HLSM 2420	Plant Pathology	3.0
HLSM 2425	Entomology	3.0

Floriculture (HLFCC)**Award:** Career certificate**Pathway to associate degree:** Horticulture, Land Systems, and Management - Floriculture (HLMFO)**Program location:** Fort Omaha Campus

This career certificate prepares students to enter into the florist industry or floral design field.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Culinary-Arts-Hospitality-and-Horticulture/Horticulture-Land-Systems-and-Management.aspx.**Requirements for Floriculture career certificate (28.0 credit hrs.)**

HLSM 1000	Horticulture, Land Systems and Management Orientation	1.0
HLSM 1010	Introduction to Horticulture	6.0
HLSM 1030	Introduction to Floral Design	3.0
HLSM 1200	Floral Care and Identification	2.0
HLSM 1210	Floral Design: Specialty Events and Occasions	3.0
HLSM 1220	Floral Design: Tablescape and Hospitality	3.0
HLSM 1230	Floral Design: Sympathy	3.0
HLSM 2205	Floral Body Wear I	2.0
HLSM 2200	Floral Design: Weddings	3.0
HLSM 2220	Advanced Bouquet	2.0

Landscape Design (HLLCC)**Award:** Career certificate**Pathway to associate degree:** Horticulture, Land Systems, and Management - Landscape Design (HLMLO)**Program location:** Fort Omaha Campus

This career certificate prepares students to enter into the landscape maintenance and entry-level design career field.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Culinary-Arts-Hospitality-and-Horticulture/Horticulture-Land-Systems-and-Management.aspx.**Requirements for Landscape Design career certificate (32.0 credit hrs.)**

HLSM 1000	Horticulture, Land Systems and Management Orientation	1.0
HLSM 1010	Introduction to Horticulture	6.0
HLSM 1100	Perennials: Culture and Identification	3.0
HLSM 1130	Deciduous Trees: Culture and Identification	3.0
HLSM 1150	Shrubs: Culture and Identification	3.0
HLSM 1320	Landscape Graphics: 2-D	2.0
HLSM 1325	Landscape Graphics - 3-D	2.0
HLSM 1340	Construction Documents and Details	3.0
HLSM 2300	Landscape Design I	3.0
HLSM 2305	Landscape Design II	3.0

Nursery and Landscape Management (HLNCC)

Award: Career certificate

Pathway to associate degree: Horticulture, Land Systems, and Management - Grounds Management (HLMGO)

Program location: Fort Omaha Campus

This career certificate prepares students to enter into greenhouse, landscape maintenance, and nursery management fields.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Culinary-Arts-Hospitality-and-Horticulture/Horticulture-Land-Systems-and-Management.aspx.

Requirements for Nursery and Landscape Management career certificate (29.5 credit hrs.)

HLSM 1000	Horticulture, Land Systems and Management Orientation	1.0
HLSM 1010	Introduction to Horticulture	6.0
HLSM 1040	Pesticide Applicators' Certification	4.5
HLSM 1110	Turfgrass Management	3.0
HLSM 1120	Pomology: Culture and Identification	3.0
HLSM 1130	Deciduous Trees: Culture and Identification	3.0
HLSM 1140	Coniferous Trees: Culture and Identification	3.0
HLSM 1150	Shrubs: Culture and Identification	3.0
HLSM 2610	Floriculture Production	3.0

Plant Production and Propagation (HLPCC)

Award: Career certificate

Pathway to associate degree: Horticulture, Land Systems, and Management - Horticulture Management (HLMHO)

Program location: Fort Omaha Campus

This career certificate prepares students to enter into greenhouse production and management and nursery production and management career fields.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at www.mccneb.edu/Academics/Programs-of-Study/Culinary-Arts-Hospitality-and-Horticulture/Horticulture-Land-Systems-and-Management.aspx.

Requirements for Plant Production and Propagation career certificate (26.5 credit hrs.)

HLSM 1000	Horticulture, Land Systems and Management Orientation	1.0
HLSM 1010	Introduction to Horticulture	6.0
HLSM 1040	Pesticide Applicators' Certification	4.5
HLSM 1120	Pomology: Culture and Identification	3.0
HLSM 2410	Plant Propagation	3.0
HLSM 2420	Plant Pathology	3.0
HLSM 2425	Entomology	3.0
HLSM 2610	Floriculture Production	3.0

Small Market Farming (HLSCC)

Award: Career certificate

Pathway to associate degree: Horticulture, Land Systems, and Management - Small Market Farming (HLMFO)

Program location: Fort Omaha Campus

This career certificate prepares students to pursue entrepreneurial growing operations or enter into an existing small market business.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Culinary-Arts-Hospitality-and-Horticulture/Horticulture-Land-Systems-and-Management.aspx.

Requirements for Small Market Farming career certificate (29.5 credit hrs.)

HLSM 1000	Horticulture, Land Systems and Management Orientation	1.0
HLSM 1010	Introduction to Horticulture	6.0
HLSM 1020	Introduction to Aquaponics	3.0
HLSM 1040	Pesticide Applicators' Certification	4.5
HLSM 1120	Pomology: Culture and Identification	3.0
HLSM 2410	Plant Propagation	3.0
HLSM 2500	Small Market Farming	3.0
HLSM 2510	Olericulture	3.0
HLSM 2520	Introduction to Small Animal Husbandry	3.0

HEALTH SCIENCES & HEALTH INFORMATION TECHNOLOGY

Health

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- Dental Assisting, certificate of achievement (p. 140)
- Medical Assisting, certificate of achievement (p. 141)
- Paramedicine, certificate of achievement (p. 142)
- Public Health, certificate of achievement (p. 142)
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Health Data and Information Management

- Health Data and Information Management, associate in applied science degree (p. 145)

Health Information Management Systems

- Health Data and Information Management (p. 145)
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Health Information Technology Professional

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Nursing

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Professional Health Studies

- Professional Health Studies, associate in applied science degree with areas of interest in: (p. 153)
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Health

The area of health careers at MCC offers an array of programs from associate degrees in Nursing, Professional Health Studies and Respiratory Therapy to certificates of achievement in Dental Assisting, Medical Assisting, Practical Nursing, and Paramedicine. Students participate in a variety of healthcare settings throughout the community during their education program, which prepares them for the professional setting after graduation. All of the health careers programs lead to eligibility to

write for licensure in the chosen profession, a necessary component to becoming a member of a healthcare team.

Degree: Associate in Applied Science

- Respiratory Care Technology

Certificate of Achievement:

- Dental Assisting
- Medical Assisting
- Paramedicine
- Public Health

Career Certificate:

- Spanish for Healthcare

Respiratory Care Technology (RTAAS)

Award: Associate in applied science degree

Program location: South Omaha Campus

Utilizing sophisticated biomedical equipment, respiratory therapists provide diagnostic testing, treatment, and preventive care to patients with cardiopulmonary disorders under the direct or indirect supervision of a physician. Upon completion of this degree, students are eligible to take the registry examination in respiratory care administered by the National Board for Respiratory Care.

This program is accredited by the Commission on Accreditation for Respiratory Care, 1248 Harwood Rd., Bedford, TX 76021.

Graduation Requirements

General education	33.0
Major requirements	76.5
Other requirements	21.5–22.5
Total credit hours required	131.0–132.0

This program has special admission requirements. Contact Student Services or the Respiratory Care program director for more information and to obtain a current admission information packet, or visit www.mccneb.edu/healthcareers.

General education requirements (33.0 credit hrs.)

The general education requirements for this degree program exceed the minimum standard number of hours. For more information, contact Student Services.

Communications

ENGL 1010	English Composition I	☞ ☹	4.5
ENGL 1020	English Composition II	☞ ☹	4.5

Social sciences

PSYC 1010	Introduction to Psychology	☞ ☹	4.5
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Quantitative/numeracy skills

MATH 1310	Intermediate Algebra	☞	4.5
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Natural sciences

BIOS 2150	Microbiology		6.0
BIOS 2150L	Microbiology Lab		0.0

BIOS 2150: Additional prerequisite(s) may be required.

Additional

HMRL 1010	Human Relations Skills	4.5
INFO 1001	Information Systems and Literacy	4.5

Major requirements for Respiratory Care Technology (76.5 credit hrs.)

RESP 1000	Orientation to Respiratory Care	3.0
RESP 1010	Introduction to Respiratory Care	4.5
RESP 1020	Cardiopulmonary Anatomy and Physiology	4.5
RESP 1030	Respiratory Care Procedures I	4.5
RESP 1031	Current Concepts I	2.0
RESP 1040	Respiratory Care Procedures II	4.5
RESP 1041	Current Concepts II	2.0
RESP 1042	Pharmacology for Respiratory Care	3.0
RESP 1991	Clinical Practicum I	5.5
RESP 1992	Clinical Practicum II	5.5
RESP 1993	Clinical Practicum III	5.5
RESP 2100	Advanced Respiratory Care	4.5
RESP 2101	Current Concepts III	2.0
RESP 2120	Cardiology and Hemodynamics	3.0
RESP 2121	Current Concepts IV	2.0
RESP 2122	Pediatric and Neonatal Respiratory Care	3.0
RESP 2131	Current Concepts V	2.0
RESP 2132	Respiratory Care Seminar	4.5
RESP 2994	Clinical Practicum IV	5.5
RESP 2995	Clinical Practicum V	5.5

Other requirements for Respiratory Care Technology (21.5-22.5 credit hrs.)

BIOS 1010	General Biology	6.0
BIOS 1010L	General Biology Lab	0.0
BIOS 2310	Human Anatomy and Physiology I	6.0
BIOS 2310L	Human Anatomy and Physiology I Lab	0.0
BIOS 1310	Survey of Human Anatomy and Physiology	5.0
BIOS 1310L	Survey of Human Anatomy and Physiology Lab	0.0
BIOS 2320	Human Anatomy and Physiology II	6.0
BIOS 2320L	Human Anatomy and Physiology II Lab	0.0
CHEM 1010	College Chemistry	6.0
CHEM 1010L	College Chemistry Lab	0.0
PHYS 1010	Applied Physics	4.5
PHYS 1010L	Applied Physics Lab	0.0

Respiratory Care Technology Curriculum Plan

Below is a suggested guide for students planning careers as respiratory therapists after two years of full-time study.

First Year**First quarter (Summer)**

BIOS 1010	General Biology	6.0
	and	
BIOS 1010L	General Biology Lab	0.0
	OR	
BIOS 2310	Human Anatomy and Physiology I	6.0
	and	
BIOS 2310L	Human Anatomy and Physiology I Lab	0.0
CHEM 1010	College Chemistry	6.0
CHEM 1010L	College Chemistry Lab	0.0
MATH 1310	Intermediate Algebra	4.5

Second quarter (Fall)

BIOS 1310	Survey of Human Anatomy and Physiology	5.0
	and	
BIOS 1310L	Survey of Human Anatomy and Physiology Lab	0.0
	OR	
BIOS 2320	Human Anatomy and Physiology II	6.0
	and	
BIOS 2320L	Human Anatomy and Physiology II Lab	0.0
ENGL 1010	English Composition I	4.5
PHYS 1010	Applied Physics	4.5
PHYS 1010L	Applied Physics Lab	0.0
RESP 1000	Orientation to Respiratory Care	3.0

Third quarter (Winter)

INFO 1001	Information Systems and Literacy	4.5
PSYC 1010	Introduction to Psychology	4.5
RESP 1010	Introduction to Respiratory Care	4.5
RESP 1020	Cardiopulmonary Anatomy and Physiology	4.5

Fourth quarter (Spring)

BIOS 2150	Microbiology	6.0
BIOS 2150L	Microbiology Lab	0.0
RESP 1030	Respiratory Care Procedures I	4.5
RESP 1031	Current Concepts I	2.0
RESP 1991	Clinical Practicum I	5.5

Second Year**Fifth quarter (Summer)**

RESP 1040	Respiratory Care Procedures II	4.5
RESP 1041	Current Concepts II	2.0
RESP 1042	Pharmacology for Respiratory Care	3.0
RESP 1992	Clinical Practicum II	5.5

Sixth quarter (Fall)

HMRL 1010	Human Relations Skills	4.5
RESP 1993	Clinical Practicum III	5.5
RESP 2100	Advanced Respiratory Care	4.5
RESP 2101	Current Concepts III	2.0

Seventh quarter (Winter)

RESP 2120	Cardiology and Hemodynamics	3.0
RESP 2121	Current Concepts IV	2.0
RESP 2122	Pediatric and Neonatal Respiratory Care	3.0
RESP 2994	Clinical Practicum IV	5.5

Eighth quarter (Spring)

ENGL 1020	English Composition II	4.5
RESP 2131	Current Concepts V	2.0
RESP 2132	Respiratory Care Seminar	4.5
RESP 2995	Clinical Practicum V	5.5

Dental Assisting (DEACE)

Award: Certificate of achievement

Pathway to associate degree: Professional Health Studies - Dental Assisting (PHSDO)

Program location: South Omaha Campus

This certificate teaches basic knowledge of all facets of dental assisting and develops a strong background in the care and restoration of the oral cavity and a working knowledge of all chairside and laboratory equipment and its care.

This program has special admission requirements. Contact Student Services for more information and to obtain a current admission information packet.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Health-and-Public-Services/Dental-Assistant.aspx.

Graduation Requirements

General education	13.5
Major requirements	68.0
Total credit hours required	81.5

General education requirements (13.5 credit hrs.)

Communications

ENGL 1210	Applied Communications	4.5
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Social sciences

Select one course from the following:

PSYC 1000	Psychology for Everyday Living	4.5
PSYC 1010	Introduction to Psychology	4.5

Quantitative/numeracy skills

Select one course from the following:

	Any 1000-level of Mathematics	4.5
MATH 1240	Applied Mathematics	4.5
MATH 1310	Intermediate Algebra	4.5

MATH 1310 or higher should be taken by students seeking the Professional Health Studies option or by students who want a transfer math course.

Major requirements for Dental Assisting (68.0 credit hrs.)

DENT 1000	Introduction to Dental Assisting	2.0
DENT 1020	Dental Office Procedures	3.0
DENT 1100	Dental Anatomy	4.0
DENT 1120	Related Anatomy	2.5
DENT 1140	Dental Pathology and Microbiology	2.5
DENT 1160	Dental Pharmacology	2.0
DENT 1180	Nutrition and Preventive Dentistry	3.0
DENT 1200	Dental Materials	5.5
DENT 1230	Dental Specialties I	4.0
DENT 1240	Dental Specialties II	2.0
DENT 1260	Infection Control	3.0
DENT 1280	Dental Office Emergencies	2.5
DENT 1310	Dental Radiology I	2.5
DENT 1320	Dental Radiology II	4.0
DENT 1350	Chairside Assisting I	4.0
DENT 1360	Chairside Assisting II	4.0
DENT 1370	Chairside Assisting III	4.0
DENT 1991	Clinical Experience I	2.5
DENT 1992	Clinical Experience II	8.0
DENT 1993	Clinical Seminar	2.0
EMSP 1000	Cardiopulmonary Resuscitation for Healthcare Providers	1.0

The dental assisting curriculum is accredited by the Commission on Dental Accreditation for the American Dental Association.

Students who successfully complete the Dental Assisting program can earn the Professional Health Studies degree by fulfilling the additional 24.0 credit hours in general education requirements.

Dental Assisting Curriculum Plan

Below is the required sequence of courses for students planning careers in dental assisting, a one year program of full-time study. Students must pass all courses in the quarter with at least a C or the student is not allowed to continue in the program.

First Year

First quarter (Fall)

DENT 1000	Introduction to Dental Assisting	2.0
DENT 1100	Dental Anatomy	4.0
DENT 1120	Related Anatomy	2.5
DENT 1140	Dental Pathology and Microbiology	2.5
DENT 1260	Infection Control	3.0
DENT 1280	Dental Office Emergencies	2.5
DENT 1350	Chairside Assisting I	4.0
EMSP 1000	Cardiopulmonary Resuscitation for Healthcare Providers	1.0

Second quarter (Winter)

DENT 1180	Nutrition and Preventive Dentistry	3.0
DENT 1200	Dental Materials	5.5
DENT 1230	Dental Specialties I	4.0
DENT 1310	Dental Radiology I	2.5
DENT 1360	Chairside Assisting II	4.0

Third quarter (Spring)

DENT 1160	Dental Pharmacology	2.0
DENT 1240	Dental Specialties II	2.0
DENT 1320	Dental Radiology II	4.0
DENT 1370	Chairside Assisting III	4.0
DENT 1991	Clinical Experience I	2.5
ENGL 1210	Applied Communications Mathematics	4.5

Fourth quarter (Summer)

DENT 1020	Dental Office Procedures	3.0
DENT 1992	Clinical Experience II	8.0
DENT 1993	Clinical Seminar	2.0
	Social sciences	4.5

Medical Assisting (MDACE)

Award: Certificate of achievement

Pathway to associate degree: Professional Health Studies - Medical Assisting (PHSMO)

Program location: South Omaha Campus

One of the fastest growing healthcare occupations today is the medical assistant. Medical Assisting is a one-year certificate of achievement designed to give students the knowledge and skills to provide administrative and clinical support to healthcare employers, including hospitals, nursing and residential care facilities, and physicians' offices.

This program has special admission requirements. Contact Student Services for more information and to obtain a current admission information packet.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Health-and-Public-Services/Medical-Assisting.aspx.

Graduation Requirements

General education	13.5
Additional requirements	6.0
Major requirements	70.0
Total credit hours required	89.5

General education requirements (13.5 credit hrs.)

Communication

Select one course from the following:

ENGL 1010	English Composition I	4.5
ENGL 1210	Applied Communications	4.5

ENGL 1010 should be taken by students seeking the Professional Health Studies option.

Social sciences/natural science

PSYC 1120	Human Growth and Development	4.5
	Natural science elective	6.0

See natural sciences course options. (p. 43)

Quantitative/numeracy skills

Select one course from the following:

MATH 1240	Applied Mathematics	4.5
MATH 1310	Intermediate Algebra	4.5

MATH 1240 does not count toward nursing admission or Professional Health Studies degree.

Those students should take MATH 1310 or higher level MATH course.

Additional requirements (6.0 credit hrs.)

BIOS 1310	Survey of Human Anatomy and Physiology	5.0
BIOS 1310L	Survey of Human Anatomy and Physiology Lab	0.0
EMSP 1000	Cardiopulmonary Resuscitation for Healthcare Providers	1.0

Major requirements for Medical Assisting (70.0 credit hrs.)

HIMS 1150	Introduction to Medical Law and Ethics	4.5
MDST 1010	Clinical Procedures I	6.0
MDST 1020	Administrative Procedures I	4.5
MDST 1030	Medical Disorders	3.5
MDST 1040	Clinical Terminology I	4.5
MDST 1050	Clinical Terminology II	4.5
MDST 2010	Clinical Procedures II	6.0
MDST 2020	Administrative Procedures II	4.5
MDST 2030	Laboratory Techniques	3.5
MDST 2110	Pharmacology for Medical Assistants and Allied Health Professionals I	4.5
MDST 2120	Pharmacology for Medical Assistants and Allied Health Professionals II	4.5
MDST 2980	MDST Externship	18.5
WORK 1402	Employability Skills Fundamentals	1.0

The Medical Assisting Program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Medical Assisting Education Review Board (MAERB), Commission on Accreditation of Allied Health Education Programs, 25400 US Hwy 19N, Ste 158, Clearwater, FL 33763, 727-210-2350.

Students who successfully complete the Medical Assisting program can earn the Professional Health Studies degree by fulfilling the additional 19.5 credit hours in general education requirements.

Paramedicine (PMPMC)

Award: Certificate of achievement

Pathway to associate degree: Professional Health Studies - Paramedicine (PHPMO)

Program Location: Fort Omaha Campus, South Omaha Campus

This certificate of achievement allows students after successful completion to sit for the National Registry exam. Once certified, students can apply for state licensure. Upon becoming licensed, students can function as advanced providers in a fire department, with a transport service, or in a hospital emergency room. For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mcneb.edu/Academics/Programs-of-Study/Health-and-Public-Services/Emergency-Medical-Services.aspx.

Graduation Requirements

General education	13.5
Major requirements	71.5
Total credit hours required	85.0

General education requirements (13.5 credit hrs.)

Communications

ENGL 1010	English Composition I	4.5
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Humanities/social sciences

	Humanities/social sciences	4.5
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See Humanities/social sciences course options (p. 42)

Quantitative/numeracy skills

MATH 1310	Intermediate Algebra	4.5
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Major requirements for Paramedicine (71.5 credit hrs.)

EMSP 1000	Cardiopulmonary Resuscitation for Healthcare Providers	1.0
EMSP 1100	Emergency Medical Technician	12.0
EMSP 1120	Paramedic Part 1 of 4	12.0
EMSP 1122	Paramedic Part 2 of 4	12.0
EMSP 1123	Paramedic Clinical/Field Component Part 1 of 3	3.5
EMSP 1124	Paramedic Part 3 of 4	12.0
EMSP 1125	Paramedic Clinical/Field Part 2 of 3	3.5
EMSP 1126	Paramedic Part 4 of 4	12.0
EMSP 1127	Paramedic Clinical/Field Part 3 of 3	3.5

Students who successfully complete the Paramedicine program can earn the Professional Health Studies degree by fulfilling the additional 19.5 credit hours in general education requirements.

Public Health (PBHCE)

Award: Certificate of achievement

Pathway to associate degree: Professional Health Studies - General (PHSGO)

Program location: Fort Omaha Campus, South Omaha Campus, Online

The certificate in public health is to educate front-line health workers with expertise and experience in assisting individuals and communities to navigate the U.S. community health, health care, and the entire healthcare paradigm systems; improve the quality and cultural competence of service delivery; and accomplish personal prevention and health care goals. Students will have coursework in prevention and community health, emotional health care, parenting and family problem solving, and school coursework. Basic written and oral communication skills as well as fundamental quantitative skills are essential for success and are integrated throughout the curriculum. Concepts of determinants include client-centered care and decision making, accessing resources for diverse families, cultural competence, and disease self-management. The curriculum is designed to be flexible enough to accommodate differing state regulations and differing local job markets.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mcneb.edu/Academics/Programs-of-Study/Health-and-Public-Services/Public-Health.aspx.

Graduation Requirements

General education	13.5
Major requirements	34.5
Total credit hours required	48.0

General education requirements (13.5 credit hrs.)

Communications

ENGL 1225	Applied Communications I	4.5
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Humanities/social sciences

PSYC 1120	Human Growth and Development	4.5
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Quantitative/numeracy skills

	Any 1000-level of Mathematics	4.5
	OR	
FINA 1000	Financial Literacy	4.5

Major requirements for Public Health (34.5 credit hrs.)

ECED 1230	School-Age Child Development and Programming	3.0
ECED 1260	Children's Health and Nutrition	4.5
HLTH 1510	Foundations of Public Health	4.5
HLTH 1520	Prevention in Community Health	4.5
HLTH 2900	Selected Topics	5.5

HLTH 2960	Internship	6.0
PSYC 1110	Parenting and Family Problem Solving ✓	4.5
WORK 1402	Employability Skills Fundamentals	1.0
EMSP 1000	Cardiopulmonary Resuscitation for Healthcare Providers	1.0

EMSP 1000 is required for those who do not currently hold a valid CPR/first aid card.

Spanish for Healthcare (SMPS1)

Award: Career certificate

Pathway to associate degree: General Studies (GSAAS)

Program location: Elkhorn Valley Campus, Fort Omaha Campus, South Omaha Campus

Students who wish to study Spanish to better communicate with medical patients or clients can earn the Spanish for Healthcare career certificate by completing the following courses. It provides the basic knowledge to hold beginning to intermediate conversations with Spanish-speaking individuals.

Requirements for Spanish for Healthcare career certificate (24.0 credit hrs.)

SPAN 1060	Spanish for Healthcare I ✓	4.5
SPAN 1061	Spanish for Healthcare II ✓	4.5
SPAN 2060	Intermediate Spanish for Healthcare I ✓	4.5
SPAN 2061	Intermediate Spanish for Healthcare II ✓	4.5
SPAN 2982	Spanish for Healthcare Internship	Variable

Health Technology

Health Data and Information Management (HDIM)

Graduates of the Health Data and Information Management program are prepared to work in health information management in organizations that create, manage, and utilize health information. Their roles include clinical coder, clinical informatics specialist, data analyst, cancer registrar, and electronic health record specialist (see chart below for additional information). This program leads to completion of the associate in applied science degree. The program combines online instruction, online practical activities, and an in-person practicum experience to prepare students for entry-level employment in the health information management profession.

Accreditation

The HDIM program is the only nationally accredited program in health information management at MCC. The HDIM associate degree program is accredited by the Commission on accreditation for Health Informatics and Information Management Education (CAHIIM). Graduates of the program are eligible to apply to write for the certification examination of the American Health Information Management Association for the designation RHIT (Registered Health Information Technician).

Degree: Associate in Applied Science

Health Data and Information Management

Health Information Management Systems (HIMS)

Medical billing and coding students learn the fundamentals of medical coding and dissect real world medical cases and charts to extract the most relevant health information needed for reimbursement, research, and data used by the Centers of Disease Control (CDC).

Medical office management students learn a variety of skills needed in the medical office arena to include: insurance plans, healthcare business processes, workflow, reform, fraud and abuse, corporate compliance, and quality in healthcare.

Graduates who complete a degree in the health information management arena are prepared to enter a field of increasing opportunities for career growth and earning potential.

Degree: Associate in Applied Science

Health Information Management Systems:

- Health Information Management Systems – Medical Coding and Billing
- Health Information Management Systems – Medical Office Management

Certificate of Achievement:

- Health Information Management Systems – Medical Office Assistant

Health Information Technology Professional (HITP)

The implementation, configuration, and support of health information systems is vital in today's healthcare industry. This program instructs students on the management of health IT systems, quality improvement through meaningful use of health information technology, security and exchange of protected health information, and the creation of administrative efficiencies through these systems. Students completing this degree are prepared to work as health IT specialists in a clinical or acute care setting.

Degree: Associate in Applied Science

Health Information Technology Professional

Career Certificate:

Health Information Technology

Program Differences

	Health Data and Information Management (HDIM)	Health Information Management Systems (HIMS)	Health Information Technology Professional (HITP)
Focus	Management and use of health information in organizations across the continuum of health care, from preventive to chronic long term	Manage staff and/or systems used to collect, store, retrieve, and communicate healthcare data that is used for the planning, delivery, reimbursement, protection and evaluation of patient care in the healthcare arena.	Implementation, configuration, and support of health IT systems; quality improvement through meaningful use of health information technology; security and exchange of protected health information
Potential Credential	Registered Health Information Technician (RHIT) Certified Coding Specialist (CCS) Certified Professional Coder (CPC) Certified Tumor Registrar (CTR) Certified Health Data Analyst (CHDA) Certified Document Improvement Practitioner (CDIP)	Certified Professional Coder (CPC) Certified Professional Coder - Payer (CPC-P) Certified Outpatient Coder/ER Coder (COC) Certified Physician Practice Manager (CPPM) Certified Professional Medical Auditor (CPMA)	Certified Professional in Health Information Technology (CPHIT) Certified Professional in Health Information Exchange (CPHIE) Certified Professional in Electronic Health Records (CPEHR) Health Information Technology Professional (HIT Pro) CompTIA Healthcare IT
Title Samples	Health data analyst Clinical coder Clinical documentation specialist Clinical informatics specialist Document improvement specialist Cancer registrar Reimbursement specialist Release of information specialist Compliance specialist EHR super user Revenue cycle coordinator Performance improvement analyst	Coder and biller Outpatient coder Reimbursement specialist Medical office manager Medical office supervisor Medical auditor Medical office assistant	Health IT specialist Implementation manager Implementation support specialist Workflow redesign specialist Technical/software support specialist Software trainer Network security analyst Database technician Meaningful use specialist
Employers	Hospitals, physician practices, outpatient clinics, health insurers, long term care facilities, release of information companies, EHR vendors	Hospitals, physician practice, ambulatory surgery center, clinics, insurance companies, pharmacy billing companies, outpatient facilities, emergency rooms, independent contractor, third-party billers, physical therapy clinics, durable medical companies	Hospitals, physician practices, outpatient clinics, regional extension centers, health insurers, long-term care facilities, EHR vendors, government agencies, independent consultant

Health Data and Information Management

Degree: Associate in Applied Science

Health Data and Information Management (p. 145)

Health Data and Information Management (HDIAS)

Award: Associate in applied science degree

Program location: Online

Graduates of the Health Data and Information Management (HDIM) program are prepared to work in health information management (HIM) in organizations that create, manage, and utilize health information. Their roles range from clinical coder, data analyst, and cancer registrar to electronic health record specialist. The program combines online instruction, online practical activities, and an in-person practicum experience to prepare students for entry-level employment in the health information management field. Graduates are prepared to pursue a bachelor's degree at an accredited health information management college or university.

The HDIM program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM). Graduates are eligible to take the national Registered Health Information Technician (RHIT) exam.

Graduation Requirements

General education	27.0
Major Requirements	60.5
Other Requirements	21.0-21.5

Total credit hours required **108.5-109.0**

General education requirements (27.0 credit hrs.)

Prior to acceptance into the program, students must complete English Level I, English Level II, Humanities and Social Sciences, and HMRL 1010 or RDLS 1200 general education requirements.

Communications

English level I	4.5
English level II	4.5

Humanities/social sciences

Humanities/social sciences	4.5
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See Humanities/social sciences course options (p. 42)

Quantitative/numeracy skills

MATH 1310 Intermediate Algebra	4.5
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or higher level MATH course

Additional

INFO 1001 Information Systems and Literacy	4.5
HMRL 1010 Human Relations Skills	4.5
OR	
RDLS 1200 College Success Strategies	4.5

Major Requirements for Health Data and Information Management (60.5 credit hrs.)

Students must be accepted into the HDIM Program to be enrolled in the program major requirements. If unable to start the HDIM program right away, students can start working on the other program requirements. All courses that do not have an HDIM or HITP prefix, with the exception of HDIM 1001, can be taken before acceptance into the HDIM program. Prerequisites and the application process can be found at <https://www.mccneb.edu/Academic-Programs/Programs-of-Study/Information-Technology-and-E-Learning/Healthcare-Information-and-Administration.aspx>.

HDIM 1010	Healthcare Delivery Systems	4.5
HDIM 1020	Health Data and Electronic Health Records	4.5
HDIM 1030	Healthcare Data Management and Use	4.5
HDIM 2010	Healthcare Statistics	4.5
HDIM 2020	Health Law, Privacy, and Ethics	4.5
HDIM 2030	Performance Improvement	4.5
HDIM 2050	Reimbursement in Healthcare	4.5
HDIM 2060	Supervision in Healthcare	4.5
HDIM 2421	Clinical Coding I	4.5
HDIM 2431	Clinical Coding II	4.5
HDIM 2432	Clinical Coding III	4.5
HDIM 2982	HDIM Capstone	4.5
HDIM 2983	HDIM Practicum	2.0
HITP 2040	Info Systems in Healthcare	4.5

Other Program Requirements (21.0-21.5 credit hrs.)

HDIM 1001	Medical Terminology	4.5
HIMS 1180	Disease Processes	4.5
HIMS 1410	Introduction to Insurance	3.0
HIMS 2155	Fundamentals of Pharmacology	4.5
Select one of the following:		
BIOS 1310	Survey of Human Anatomy and Physiology	5.0
BIOS 1310L	Survey of Human Anatomy and Physiology Lab	0.0
	OR	
HIMS 1310	Introduction to Anatomy and Physiology	4.5

The HDIM program has special admission requirements. Visit the HDIM web page at <https://www.mccneb.edu/Academic-Programs/Programs-of-Study/Information-Technology-and-E-Learning/Healthcare-Information-and-Administration.aspx> for the application packet and information. Direct questions to the director of the HDIM Program at HDIM@mccneb.edu.

Curriculum Plan Health Data and Information Management

Full Time

Below is a suggested guide for students planning careers in health data and information management after two years of full-time study.

The individual sequence for students who need to complete MATH 1310 (or higher) and INFO 1001 are designed to include those requirements.

First Year

Fall quarter

HDIM 1001	Medical Terminology	4.5
HDIM 1010	Healthcare Delivery Systems	4.5
HDIM 1020	Health Data and Electronic Health Records	4.5

Winter quarter

HDIM 1030	Healthcare Data Management and Use	4.5
HIMS 1310	Introduction to Anatomy and Physiology	4.5
HITP 2040	Info Systems in Healthcare	4.5

Spring quarter

HDIM 2020	Health Law, Privacy, and Ethics	4.5
HDIM 2421	Clinical Coding I	4.5
HIMS 1180	Disease Processes	4.5

Summer quarter

HDIM 2010	Healthcare Statistics	4.5
HDIM 2431	Clinical Coding II	4.5
HIMS 1410	Introduction to Insurance	3.0
HIMS 2155	Fundamentals of Pharmacology	4.5

Second Year

Fall quarter

HDIM 2030	Performance Improvement	4.5
HDIM 2050	Reimbursement in Healthcare	4.5
HDIM 2432	Clinical Coding III	4.5

Winter quarter

HDIM 2060	Supervision in Healthcare	4.5
HDIM 2982	HDIM Capstone	4.5
HDIM 2983	HDIM Practicum	2.0

Part Time

Below is a suggested guide for students planning careers in health data and information management after three years of part-time study.

The individual sequence for students who need to complete MATH 1310 (or higher) and INFO 1001 are designed to include those requirements.

First Year

Fall quarter

HDIM 1001	Medical Terminology	4.5
HIMS 1310	Introduction to Anatomy and Physiology	4.5

Winter quarter

HDIM 2060	Supervision in Healthcare	4.5
HIMS 1180	Disease Processes	4.5

Spring quarter

HIMS 1410	Introduction to Insurance	3.0
HIMS 2155	Fundamentals of Pharmacology	4.5

Second Year

Fall quarter

HDIM 1010	Healthcare Delivery Systems	4.5
HDIM 1020	Health Data and Electronic Health Records	4.5

Winter quarter

HDIM 1030	Healthcare Data Management and Use	4.5
HITP 2040	Info Systems in Healthcare	4.5

Spring quarter

HDIM 2020	Health Law, Privacy, and Ethics	4.5
HDIM 2421	Clinical Coding I	4.5

Summer quarter

HDIM 2010	Healthcare Statistics	4.5
HDIM 2431	Clinical Coding II	4.5

Third Year

Fall quarter

HDIM 2030	Performance Improvement	4.5
HDIM 2050	Reimbursement in Healthcare	4.5
HDIM 2432	Clinical Coding III	4.5

Winter quarter

HDIM 2982	HDIM Capstone	4.5
HDIM 2983	HDIM Practicum	2.0

Health Information Management Systems

Award: Associate in applied science degree

Program location: Elkhorn Valley Campus, Fort Omaha Campus, Sarpy Center, South Omaha Campus, Online

These degrees meet the growing need of healthcare professionals in the medical office management and medical billing and coding areas. As the healthcare environment becomes more dependent on technology, graduates who complete a degree in Health Information Management are prepared to enter a field with increasing opportunities for career growth and earning potential.

Options available under this degree are:

Medical Coding and Billing (HIMC1) (p. 146)

Medical Office Management (HIMO1) (p. 146)

Health Information Management Systems - Medical Coding and Billing (HIMC1)

Award: Associate in applied science degree

Program location: Elkhorn Valley Campus, Fort Omaha Campus, South Omaha Campus

Using their acquired knowledge and skills, this degree prepares students for entry-level employment in a healthcare facility as a successful coding specialist.

Graduation Requirements

General education	27.0
Major requirements	49.0
Option requirements	29.0
Total credit hours required	105.0

General education requirements (27.0 credit hrs.)

Communications

English level I	4.5
English level II	4.5

See Communications course options (p. 42)

ENGL 1220 and ENGL 1240 are suggested.

Social sciences

Select one course from the following:

ECON 1000	Macroeconomics	4.5
PSYC 1010	Introduction to Psychology	4.5
SOCI 1010	Introduction to Sociology	4.5

Quantitative/numeracy skills

MATH 1220	Business Mathematics	4.5
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or higher level MATH course

Additional

INFO 1001	Information Systems and Literacy	4.5
HMRL 1010	Human Relations Skills	4.5
	OR	
RCLS 1200	College Success Strategies	4.5

Major requirements for Health Information Management Systems (49.0 credit hrs.)

HIMS 1111	Healthcare Careers	4.5
HIMS 1120	Medical Terminology I	4.5
HIMS 1130	Medical Terminology II	4.5
HIMS 1150	Introduction to Medical Law and Ethics	4.5
HIMS 1212	Microsoft Word for Medical Office	4.5
HIMS 1310	Introduction to Anatomy and Physiology	4.5
HIMS 2110	Principles of Management in Healthcare	4.5
HIMS 2400	Introduction to Coding and Billing	4.5
HIMS 2980	Medical Office Applications	4.5
HIMS 2981	Internship	4.0
HITP 1115	Electronic Health Records (EHR) Lab Experience	4.5

Option Requirements for Health Information Management Systems – Medical Coding and Billing (29.0 credit hrs.)

HIMS 1180	Disease Processes	4.5
HIMS 1410	Introduction to Insurance	3.0
HIMS 2155	Fundamentals of Pharmacology	4.5
HIMS 2420	Coding and Billing I	4.5
HIMS 2430	Coding and Billing II	4.5
HIMS 2910	CPC Exam Preparation	8.0

The degree option is an area of interest within a program. Although students may complete single or multiple options within this program, only the major degree is awarded.

Medical Coding and Billing Curriculum Plan

Below is a suggested guide for students planning careers in a medical office after two years of full-time study.

It is strongly recommended that INFO 1001 be taken during the first quarter of the degree program.

First Year

First quarter

	English level I	4.5
HIMS 1111	Healthcare Careers	4.5
INFO 1001	Information Systems and Literacy	4.5

Second quarter

	English level II	4.5
HIMS 1120	Medical Terminology I	4.5
HIMS 1150	Introduction to Medical Law and Ethics	4.5

Third quarter

HIMS 1130	Medical Terminology II	4.5
HIMS 1212	Microsoft Word for Medical Office	4.5
HITP 1115	Electronic Health Records (EHR) Lab Experience	4.5

Fourth quarter

HIMS 1180	Disease Processes	4.5
MATH 1220	Business Mathematics	4.5
HIMS 1410	Introduction to Insurance	3.0

Second Year

Fifth quarter

HIMS 1310	Introduction to Anatomy and Physiology	4.5
HIMS 2110	Principles of Management in Healthcare	4.5
HIMS 2400	Introduction to Coding and Billing	4.5

Sixth quarter

HIMS 2155	Fundamentals of Pharmacology	4.5
HIMS 2420	Coding and Billing I	4.5
HMRL 1010	Human Relations Skills	4.5

Seventh quarter

HIMS 2430	Coding and Billing II	4.5
	Social sciences elective	4.5

Eighth quarter

HIMS 2910	CPC Exam Preparation	8.0
HIMS 2980	Medical Office Applications	4.5
HIMS 2981	Internship	4.0

Health Information Management Systems - Medical Office Management (HIM O1)

Award: Associate in applied science degree

Program location: Elkhorn Valley Campus, Fort Omaha Campus, Sarpy Center, Online

This degree provides students with the knowledge and skills needed to effectively perform the duties needed in the supervision of medical office staff.

Graduation Requirements

General education	27.0
Major requirements	49.0
Option requirements	21.0
Total credit hours required	97.0

General education requirements (27.0 credit hrs.)

Communications

English level I	4.5
English level II	4.5

See Communications course options (p. 42)

ENGL 1220 and ENGL 1240 are suggested.

Social sciences

Select one course from the following:

ECON 1000	Macroeconomics	4.5
PSYC 1010	Introduction to Psychology	4.5
SOCI 1010	Introduction to Sociology	4.5

Quantitative/numeracy skills

MATH 1220	Business Mathematics	4.5
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or higher level MATH course

Additional

INFO 1001	Information Systems and Literacy	4.5
HMRL 1010	Human Relations Skills	4.5
	OR	
RDLS 1200	College Success Strategies	4.5

Major requirements for Health Information Management Systems (49.0 credit hrs.)

HIMS 1111	Healthcare Careers	4.5
HIMS 1120	Medical Terminology I	4.5
HIMS 1130	Medical Terminology II	4.5
HIMS 1150	Introduction to Medical Law and Ethics	4.5
HIMS 1212	Microsoft Word for Medical Office	4.5

HIMS 1310	Introduction to Anatomy and Physiology	4.5
HIMS 2110	Principles of Management in Healthcare	4.5
HIMS 2400	Introduction to Coding and Billing	4.5
HIMS 2980	Medical Office Applications	4.5
HIMS 2981	Internship	4.0
HITP 1115	Electronic Health Records (EHR) Lab Experience	4.5

Option Requirements for Health Information Management Systems – Medical Office Management (21.0 credit hrs.)

HIMS 1210	Medical Office Communications	4.5
HIMS 1410	Introduction to Insurance	3.0
HIMS 2220	Healthcare Documentation	4.5
HITP 1005	Introduction to Electronic Health Records	4.5
INFO 1213	Database Fundamentals	4.5

The degree option is an area of interest within a program. Although students may complete single or multiple options within this program, only the major degree is awarded.

Medical Office Management Curriculum Plan

Below is a suggested guide for students planning careers in health information management systems after two years of full-time study.

It is strongly recommended that INFO 1001 be taken during the first quarter of the degree program.

First Year

First quarter

	English level I	4.5
HIMS 1111	Healthcare Careers	4.5
INFO 1001	Information Systems and Literacy	4.5

Second quarter

	English level II	4.5
HIMS 1120	Medical Terminology I	4.5
HIMS 1150	Introduction to Medical Law and Ethics	4.5

Third quarter

HIMS 1130	Medical Terminology II	4.5
HIMS 1212	Microsoft Word for Medical Office	4.5
HITP 1005	Introduction to Electronic Health Records	4.5

Fourth quarter

HIMS 1210	Medical Office Communications	4.5
HIMS 1410	Introduction to Insurance	3.0
HITP 1115	Electronic Health Records (EHR) Lab Experience	4.5

Second Year**Fifth quarter**

HIMS 1310	Introduction to Anatomy and Physiology	4.5
HIMS 2110	Principles of Management in Healthcare	4.5
HIMS 2400	Introduction to Coding and Billing	4.5

Sixth quarter

HIMS 2220	Healthcare Documentation	4.5
HMRL 1010	Human Relations Skills	4.5
MATH 1220	Business Mathematics	4.5

Seventh quarter

INFO 1213	Database Fundamentals	4.5
	Social sciences elective	4.5

Eighth quarter

HIMS 2981	Internship	4.0
HIMS 2980	Medical Office Applications	4.5

Health Information Management Systems - Medical Office Assistant (HIACE)

Award: Certificate of achievement

Pathway to associate degree: Health Information Management Systems - Medical Office Management (HIMO1)

Program location: Elkhorn Valley Campus, Fort Omaha Campus, Sarpy Center, Online

This certificate of achievement provides the basic foundation necessary to work in healthcare facilities in an entry-level medical secretary/receptionist position.

Gainful employment data for this program (such as costs and jobs related to the program) can be found at www.mccneb.edu/Current-Students/Resources/Student-Services-SOS/Student-Right-to-Know.aspx.

Graduation Requirements

General education	18.0
Major requirements	13.5
Option requirements	22.5
Total credit hours required	54.0

General education requirements (18.0 credit hrs.)**Communications**

English level I	4.5
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See Communications course options (p. 42)

Humanities/social sciences

Humanities/social sciences	4.5
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See Humanities/social sciences course options (p. 42)

Quantitative/numeracy skills

MATH 1220	Business Mathematics	4.5
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or higher level MATH course

Additional

INFO 1001	Information Systems and Literacy	4.5
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Major requirements for Medical Office (13.5 credit hrs.)

HIMS 1120	Medical Terminology I	4.5
HIMS 1130	Medical Terminology II	4.5
HIMS 1150	Introduction to Medical Law and Ethics	4.5

Option requirements for Medical Office – Medical Office Assistant (22.5 credit hrs.)

HIMS 1210	Medical Office Communications	4.5
HIMS 1212	Microsoft Word for Medical Office	4.5
HIMS 2220	Healthcare Documentation	4.5
HIMS 2400	Introduction to Coding and Billing	4.5
HITP 1005	Introduction to Electronic Health Records	4.5

The certificate option is an area of interest within a program. Although students may complete single or multiple options within this program, only the major certificate is awarded.

Medical Office Assistant Curriculum Plan

Below is a suggested guide for students planning careers as medical office assistants after one year of full-time study.

It is strongly recommended that INFO 1001 be taken during the first quarter of the degree program.

First Year**First quarter**

HIMS 1120	Medical Terminology I	4.5
HIMS 1150	Introduction to Medical Law and Ethics	4.5
INFO 1001	Information Systems and Literacy	4.5

Second quarter

	ENGL level I	4.5
HIMS 1130	Medical Terminology II	4.5
HIMS 1210	Medical Office Communications	4.5

Third quarter

HIMS 1212	Microsoft Word for Medical Office	4.5
HITP 1005	Introduction to Electronic Health Records	4.5
	Humanities/social sciences	4.5

Fourth quarter

HIMS 2220	Healthcare Documentation	4.5
HIMS 2400	Introduction to Coding and Billing	4.5
MATH 1220	Business Mathematics	4.5

Health Information Technology Professional

Degree: Associate in Applied Science

Health Information Technology Professional (p. 150)

Career Certificate:

Health Information Technology (p. 150)

Health Information Technology Professional (HITAS)

Award: Associate in applied science degree

Program location: Online

The implementation, configuration, and support of health information systems is vital in today's healthcare industry. This program instructs students on the management of health IT systems, quality improvement through meaningful use of health information technology, security and exchange of protected health information, and the creation of administrative efficiencies through these systems. Students completing this degree are prepared to work as health IT specialists in a clinical or acute care setting.

Graduation Requirements

General education	27.0
Major requirements	76.5
Total credit hours required	103.5

General education requirements (27.0 credit hrs.)

Communications

English level I	4.5
English level II	4.5

See Communications course options (p. 42)

Social sciences

Social sciences	4.5
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See Social sciences options (p. 42)

Quantitative/numeracy skills

MATH 1220 Business Mathematics	4.5
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Additional

INFO 1001 Information Systems and Literacy	4.5
HMRL 1010 Human Relations Skills	4.5
OR	
RDLS 1200 College Success Strategies	4.5

Major requirements for Health Information Technology Professional (76.5 credit hrs.)

HIMS 1150 Introduction to Medical Law and Ethics	4.5
HITP 1010 Introduction to Health Information Technology	4.5
HITP 1115 Electronic Health Records (EHR) Lab Experience	4.5
HITP 1145 Healthcare Applications	4.5

HITP 1310 Principles of Healthcare Management	4.5
HITP 1415 Workflow Redesign	4.5
HITP 1510 Working with EHR Systems	4.5
HITP 1512 Usability and Health Information Systems	4.5
HITP 1616 Health Information Exchange	4.5
INFO 1023 Networking Essentials	4.5
INFO 1110 Windows Operating Systems I	4.5
INFO 1111 Linux Operating Systems I	4.5
INFO 1805 A+ Certified Professional	4.5
INFO 2135 Network Infrastructure	4.5
INFO 2805 Network and Information Security Basics	4.5
INFO 2808 Boundary Protection	4.5
HITP 2940 Health IT Capstone	4.5
OR	
HITP 2981 Health IT Internship	4.5

HITP 2940 or HITP 2981 is the final course for the program. Students should take one of these options only after completion of all other HITP requirements.

Health Information Technology (HITSD)

Award: Career certificate

Pathway to associate degree: Health Information Technology Professional (HITAS)

Program location: Online

This career certificate prepares students with a background in healthcare or information technology to participate in the conversion to an electronic health records system. Students gain skills in EHR installation, configuration, and maintenance.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Information-Technology-and-E-Learning/Health-Information-Technology.aspx.

Requirements for Health Information Technology career certificate (27.0 credit hrs.)

HITP 1010 Introduction to Health Information Technology	4.5
HITP 1310 Principles of Healthcare Management	4.5
HITP 1415 Workflow Redesign	4.5
Select three courses from the following:	
HITP 1115 Electronic Health Records (EHR) Lab Experience	4.5
HITP 1145 Healthcare Applications	4.5
HITP 1510 Working with EHR Systems	4.5
HITP 1512 Usability and Health Information Systems	4.5
HITP 1616 Health Information Exchange	4.5

Nursing

Employment in a nursing healthcare career is a caring and compassionate opportunity to serve in a variety of settings throughout our community. We offer various options to fit your goals.

Degree: Associate in Science

Nursing

Certificate of Achievement

Nursing - Practical

Nursing – Associate Degree (ASNAS)

Award: Associate in science in nursing

Program location: South Omaha Campus

The associate degree nurse has both dependent and independent functions within a variety of healthcare environments throughout the community. This member of the healthcare team selects from a variety of therapeutic nursing interventions to provide care for clients. Graduates of this program are eligible to write the National Licensure Examination (NCLEX-RN) for licensure as a registered nurse.

The Associate Degree Nursing Program is approved by the Nebraska Board of Nursing and is accredited by the Accreditation Commission for Education in Nursing, Inc., 3343 Peachtree Road NE, Suite 850, Atlanta, GA 30326, 404-975-5000.

Graduation Requirements

General education	51.0
1st year (LPN) major requirements	35.0
2nd year (RN) major requirements	22.0
Total credit hours required	108.0

MCC's nursing programs have special admissions requirements. Contact Student Services for more information and to obtain a current healthcare admission information packet.

General education requirements (51.0 credit hrs.)

The general education requirements for this degree program exceed the minimum standard number of hours. For more information, contact Student Services.

Communications

ENGL 1010	English Composition I	4.5
ENGL 1020	English Composition II	4.5

Social sciences

PSYC 1120	Human Growth and Development	4.5
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Quantitative/numeracy skills

MATH 1310	Intermediate Algebra	4.5
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Natural sciences

BIOS 2150	Microbiology	6.0
BIOS 2150L	Microbiology Lab	0.0
BIOS 2310	Human Anatomy and Physiology I	6.0
BIOS 2310L	Human Anatomy and Physiology I Lab	0.0
BIOS 2320	Human Anatomy and Physiology II	6.0
BIOS 2320L	Human Anatomy and Physiology II Lab	0.0

CHEM 1010	College Chemistry	6.0
CHEM 1010L	College Chemistry Lab	0.0

BIOS 2150, BIOS 2310: Additional prerequisite(s) may be required.

Additional

HMRL 1010	Human Relations Skills	4.5
INFO 1001	Information Systems and Literacy	4.5

Major requirements for Nursing – Associate Degree (57.0 credit hrs.)

(35.0 credit hours are earned during first-year LPN.)

NURS 2140	Adult Nursing IV	5.0
NURS 2150	Adult Nursing V	5.0
NURS 2210	Professional Role of the Nurse II	1.0
NURS 2310	Mental Health Nursing II	5.0
NURS 2410	Family Nursing II	5.0
NURS 2520	Concepts of Health Assessment and Therapeutic Interventions II	1.0

Nursing – Practical (LPNCE)

Award: Certificate of achievement

Program location: South Omaha Campus

The licensed practical nurse (LPN) participates with other healthcare team members in the planning, implementation, and evaluation of nursing care in a variety of settings. The practical nurse functions under the supervision of a registered nurse or licensed practitioner. Graduates of this program are eligible to write the National Council Licensure Examination (NCLEX-PN) for licensure as a practical nurse. This program is approved by the Nebraska Board of Nursing.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mcneb.edu/Academics/Programs-of-Study/Health-and-Public-Services/Nursing-Healthcare-Careers.aspx.

Graduation Requirements

General education	19.5
Additional requirements	12.0
Major requirements	35.0
Total credit hours required	66.5

MCC's nursing programs have special admission requirements. Contact Student Services for more information and to obtain a current healthcare admission information packet.

General education requirements (19.5 credit hrs.)

Communications

ENGL 1010 English Composition I ☞ ☹ 4.5

Quantitative/numeracy skills

MATH 1310 Intermediate Algebra ☞ 4.5

Social sciences

PSYC 1120 Human Growth and Development ☞ 4.5

Natural sciences

CHEM 1010 College Chemistry ☞ 6.0

CHEM 1010L College Chemistry Lab 0.0

Additional requirements (12.0 credit hrs.)

BIOS 2310 Human Anatomy and Physiology I 6.0

BIOS 2310L Human Anatomy and Physiology I Lab 0.0

BIOS 2320 Human Anatomy and Physiology II 6.0

BIOS 2320L Human Anatomy and Physiology II Lab 0.0

BIOS 2310: Additional prerequisite(s) may be required.

Major requirements for Nursing – Practical (35.0 credit hrs.)

NURS 1110 Adult Nursing I 6.0

NURS 1120 Adult Nursing II 8.0

NURS 1130 Adult Nursing III 8.5

NURS 1200 Professional Role of the Nurse I 1.0

NURS 1300 Mental Health Nursing I 1.0

NURS 1400 Family Nursing I 3.0

NURS 1510 Concepts of Health Assessment and Therapeutic Interventions I 3.5

NURS 1950 Pharmacology 4.0

Nursing Suggested Curriculum Plan

Practical Nursing Program

First year

NOTE: Applicants accepted to MCC's Practical Nursing program must complete *Cardiopulmonary Resuscitation (EMSP 1000 – CPR)* prior to orientation.

Prerequisites

(must be completed prior to the application deadline)

CHEM 1010 College Chemistry ☞ 6.0

CHEM 1010L College Chemistry Lab 0.0

ENGL 1010 English Composition I ☞ ☹ 4.5

MATH 1310 Intermediate Algebra ☞ 4.5

PSYC 1120 Human Growth and Development ☞ 4.5

First quarter

BIOS 2310 Human Anatomy and Physiology I 6.0

BIOS 2310L Human Anatomy and Physiology I Lab 0.0

NURS 1110 Adult Nursing I 6.0

NURS 1200 Professional Role of the Nurse I 1.0

NURS 1300 Mental Health Nursing I 1.0

NURS 1510 Concepts of Health Assessment and Therapeutic Interventions I 3.5

Second quarter

BIOS 2320 Human Anatomy and Physiology II 6.0

BIOS 2320L Human Anatomy and Physiology II Lab 0.0

NURS 1120 Adult Nursing II 8.0

NURS 1950 Pharmacology 4.0

Third quarter

NURS 1130 Adult Nursing III 8.5

NURS 1400 Family Nursing I 3.0

Associate Degree Nursing Program

Second Year

NOTE: Must be in good standing in MCC's Practical Nursing program and scheduled to graduate on time or be a graduate from a practical nursing program.

Prerequisites

(must be completed prior to the start of the Associate Degree Nursing program)

BIOS 2150 Microbiology 6.0

BIOS 2150L Microbiology Lab 0.0

INFO 1001 Information Systems and Literacy ☞ ☹ 4.5

Fifth quarter

ENGL 1020 English Composition II ☞ ☹ 4.5

NURS 2410 Family Nursing II 5.0

NURS 2520 Concepts of Health Assessment and Therapeutic Interventions II 1.0

Sixth quarter

NURS 2140 Adult Nursing IV 5.0

NURS 2310 Mental Health Nursing II 5.0

Seventh quarter

HMRL 1010 Human Relations Skills ☞ ☹ 4.5

NURS 2150 Adult Nursing V 5.0

NURS 2210 Professional Role of the Nurse II 1.0

Professional Health Studies Degree Options

Numerous and diverse opportunities exist in the area of health and public services. This degree provides students with the flexibility to create career tracks and options based on their personal and professional goals. The degree focuses on career areas as well as general education and presents students with an associate degree, which allows some latitude in selection of

courses in the various health and public services areas. Students should work with an advisor or counselor in planning the completion of this degree.

Responsibilities vary depending on the professional setting, location, and discipline. Graduates work side-by-side with skilled practitioners and career professionals and are an integral part of the healthcare and public service team, providing excellent healthcare and service while making a difference in the lives of the patients and community members they serve.

Degree: Associate in Applied Science

- Professional Health Studies – Dental Assisting (PHSDO) (p. 153)
- Professional Health Studies – Paramedicine (PHPMO) (p. 154)
- Professional Health Studies – General Health Studies (PHSGO) (p. 154)
- Professional Health Studies – Medical Assisting (PHSMO) (p. 155)

Professional Health Studies (PHSAS)

Award: Associate in applied science degree

Program location: South Omaha Campus

Graduation Requirements

General education	33.0*
Major requirements	36.0
Option requirements	13.5-27.0
Total credit hours required	96.0-114.5

*Some general education requirements may have been previously met in the certificate program.

General education requirements (33.0 credit hrs.)

Communications

ENGL 1010	English Composition I	4.5
ENGL 1020	English Composition II	4.5

Social sciences/natural science

Natural science elective	6.0
Social sciences	4.5

See Social sciences course options (p. 42)

Quantitative/numeracy skills

MATH 1310	Intermediate Algebra	4.5
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Additional

HMRL 1010	Human Relations Skills	4.5
INFO 1001	Information Systems and Literacy	4.5

Major requirements for Professional Health Studies (36.0 credit hrs.)

Some major requirements may have been previously met in the certificate program.

Complete a minimum of 36.0 course credit hours from a maximum of two prefixes related to health fields. Select from

these prefixes: HLTH, HIMS, DENT, NURS, BIOS, SCIE, CHEM, PHYS, MDST, EMSP, and FIST.

The following example demonstrates a possible combination:

HIMS 1111	Healthcare Careers	4.5
HIMS 1120	Medical Terminology I	4.5
HIMS 1130	Medical Terminology II	4.5
HIMS 1150	Introduction to Medical Law and Ethics	4.5
HIMS 1180	Disease Processes	4.5
HLTH 1050	Nutrition in the Life Cycle	4.5
HLTH 1200	Long-Term Care - CNA	6.5
HLTH 1300	Medication Aide	5.0

Option requirements for Professional Health Studies tracks (13.5-27.0 credit hrs.)

The Professional Health Studies tracks are available in the areas listed below. See the following pages for specific additional courses required to satisfy each option. Note that not all courses in the degree options may transfer.

Dental Assisting (24.0 credit hrs.)

Professional Health Studies – Dental Assisting (PHSDO) (p. 153)
Paramedicine (19.5 credit hrs.)

Professional Health Studies – Paramedicine (PHPMO) (p. 154)
General Health Studies (27.0 credit hrs.)

Professional Health Studies – General Health Studies (PHSGO) (p. 154)

Medical Assisting (13.5 credit hrs.)

Professional Health Studies – Medical Assisting (PHSMO) (p. 155)

Some general education and major courses have been previously met in the certificate programs; refer to the following pages for additional requirements. Note that not all courses in the degree options may transfer.

Professional Health Studies – Dental Assisting (PHSDO)

Award: Associate in applied science degree

Program location: Fort Omaha Campus, South Omaha Campus

This option allows students to increase the number of opportunities available to them in achieving their personal and professional goals. Students have the opportunity to work toward teaching in a dental assisting program. Students should work with an advisor or counselor in planning the completion of this degree option.

Graduation Requirements

Completed certificate	81.5
General education	24.0
Total credit hours required	105.5

General education requirements (33.0 credit hrs.)**Communications**

ENGL 1010	English Composition I	4.5
ENGL 1020	English Composition II	4.5

Social sciences/natural science

Natural science elective	6.0
Social sciences	4.5

See Social sciences course options (p. 42)

Quantitative/numeracy skills

MATH 1310	Intermediate Algebra	4.5
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Additional

HMRL 1010	Human Relations Skills	4.5
INFO 1001	Information Systems and Literacy	4.5

Option requirements for Dental Assisting track (24.0 credit hrs.)

Students who have successfully completed the Dental Assisting certificate (p. 140) can earn the Professional Health Studies degree by fulfilling the additional 24.0 credit hours of general education requirements. Note that not all courses in the degree may transfer.

Professional Health Studies – Paramedicine (PHPMO)

Award: Associate in applied science degree

Program location: Fort Omaha Campus, South Omaha Campus

This option allows graduates to transfer to a four-year program in health or medical sciences. Graduates often find an expanded job market available to them as some employers require an associate degree as the minimum for hire.

Graduation Requirements

Completed certificate	85.0
General education	19.5
Total credit hours required	104.5

General education requirements (33.0 credit hrs.)**Communications**

ENGL 1010	English Composition I	4.5
ENGL 1020	English Composition II	4.5

Social sciences/natural science

Natural science elective	6.0
Social sciences	4.5

See Social sciences course options (p. 42)

Quantitative/numeracy skills

MATH 1310	Intermediate Algebra	4.5
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Additional

HMRL 1010	Human Relations Skills	4.5
INFO 1001	Information Systems and Literacy	4.5

Option requirements for Paramedicine track (19.5 credit hrs.)

Students who successfully complete the Paramedicine certificate of achievement (p. 142) can earn the Professional Health Studies degree by fulfilling the additional 19.5 credit hours of general education requirements. Note that not all courses in the degree may transfer.

Professional Health Studies – General Health Studies (PHSGO)

Award: Associate in applied science degree

Program location: Fort Omaha Campus, South Omaha Campus

This option provides students who plan to make application to a four-year institution in the areas of health, emergency services, public service, and medical sciences the opportunity to customize their coursework to meet prerequisites for these programs.

Graduation Requirements

General education	33.0
Major requirements	36.0
Option requirements	27.0
Total credit hours required	96.0

General education requirements (33.0 credit hrs.)**Communications**

ENGL 1010	English Composition I	4.5
ENGL 1020	English Composition II	4.5

Social sciences/natural science

Natural science elective	6.0
Social sciences	4.5

See Social sciences course options (p. 42)

Quantitative/numeracy skills

MATH 1310	Intermediate Algebra	4.5
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Additional

HMRL 1010	Human Relations Skills	4.5
INFO 1001	Information Systems and Literacy	4.5

Major requirements for Professional Health Studies (36.0 credit hrs.)

Some major requirements may have been previously met in the certificate program.

Complete a minimum of 36.0 course credit hours from a maximum of two prefixes related to health fields. Select from these prefixes: HLTH, HIMS, DENT, NURS, BIOS, SCIE, CHEM, PHYS, MDST, EMSP, and FIST.

The following example demonstrates a possible combination:

HIMS 1111	Healthcare Careers	4.5
HIMS 1120	Medical Terminology I	4.5
HIMS 1130	Medical Terminology II	4.5
HIMS 1150	Introduction to Medical Law and Ethics	4.5
HIMS 1180	Disease Processes	4.5

HLTH 1050	Nutrition in the Life Cycle	✓	4.5
HLTH 1200	Long-Term Care - CNA		6.5
HLTH 1300	Medication Aide		5.0

Option requirements for General Health Studies track (27.0 credit hrs.)

Select 27.0 credit hours from any of the following health-related prefixes: HLTH, HIMS, DENT, NURS, BIOS, SCIE, CHEM, PHYS, MDST, EMSP, and FIST. Note that not all courses in the degree may transfer.

Professional Health Studies – Medical Assisting (PHSMO)

Award: Associate in applied science degree

Program location: South Omaha Campus

This option allows expansion of graduates' roles in medical assisting to include supervisory, leadership, and managerial roles and positions. It provides the opportunity and a pathway for lifelong learning as well as to pursue advanced degrees and grow professionally in a variety of healthcare careers.

Graduation Requirements

Completed certificate	89.5
General education	19.5
Total credit hours required	109.0

General education requirements (33.0 credit hrs.)

Communications

ENGL 1010	English Composition I	✓	4.5
ENGL 1020	English Composition II	✓	4.5

Social sciences/natural science

Natural science elective	6.0
Social sciences	4.5

See Social sciences course options (p. 42)

Quantitative/numeracy skills

MATH 1310	Intermediate Algebra	✓	4.5
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Additional

HMRL 1010	Human Relations Skills	✓	4.5
INFO 1001	Information Systems and Literacy	✓	4.5

Option requirements for Medical Assisting track (19.5 credit hrs.)

Students who successfully complete the Medical Assisting certificate (p. 141) can earn the Professional Health Studies degree by fulfilling the additional 19.5 credit hours of general education requirements. Note that not all courses in the degree may transfer.

INDUSTRIAL AND TRANSPORTATION

Auto Collision Technology

- Auto Collision Technology, associate in applied science degree (p. 157)
- Auto Collision Technology, certificate of achievement (p. 158)
- Auto Collision Estimating, career certificate (p. 158)

Automotive Technology

- Automotive Technology, associate in applied science degree (p. 159)
- Automotive Maintenance and Light Repair Technician, certificate of achievement (p. 160)
- Automotive Technician Assistant, career certificate (p. 160)
- Automotive Under-Vehicle Specialist, career certificate (p. 160)

Diesel Technology

- Diesel Technology Degree Options (p. 161)
 - Diesel Technology – Diesel Service (p. 161)
 - Diesel Technology – Heavy Equipment (p. 162)
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- CDL–A Truck Driving, career certificate (p. 163)
- Diesel/Automotive Parts Sales, career certificate (p. 163)
- Diesel Truck, career certificate (p. 164)

Industrial and Commercial Trades

- Industrial Electrical/Mechanical Maintenance, associate in applied science degree (p. 164)
- Industrial Distribution, associate in applied science degree (p. 165)
- Industrial Distribution I, certificate of achievement (p. 165)
- Industrial Distribution II, certificate of achievement (p. 166)
- Industrial and Commercial Trades – Industrial Electrical, certificate of achievement (p. 167)
- Beginning Industrial Sales Representative, career certificate (p. 167)
- Advanced Industrial Sales Representative, career certificate (p. 167)
- Building Maintenance, career certificate (p. 168)
- Electrical Mechanical Systems, career certificate (p. 168)
- Electrical Plant Maintenance, career certificate (p. 168)
- General Plant Maintenance, career certificate (p. 168)
- Industrial Electrical, career certificate (p. 169)
- Logistics, career certificate (p. 169)
- Production Maintenance, career certificate (p. 169)
- Programmable Logic Controllers, career certificate (p. 169)

Mechanical Design Technology

- Mechanical Design Technology, associate in applied science degree (p. 170)
- Mechanical Design Technology, certificate of achievement (p. 171)
- Computer-Aided Design, career certificate (p. 171)
- Computer-Aided Drafting, career certificate (p. 171)
- Computer-Aided Manufacturing Design, career certificate (p. 172)

Precision Machine Technology

- Precision Machine Technology Degree Options (p. 172)
 - Precision Machine Technology - CNC and Tool and Die Technology (p. 172)
 - Precision Machine Technology – CNC Technology (p. 173)
- Precision Machine Basics, career certificate (p. 173)

Process Operations Technology

- Process Operations Technology Degree Options (p. 174)
 - Process Operations Technology – Bio-Processing (p. 174)
 - Process Operations Technology - Manufacturing Process Operations (p. 175)
 - Process Operations Technology – Nuclear Power Plant Non-Licensed Operator (p. 175)
 - Process Operations Technology – Power Plant (p. 176)
- Manufacturing Process Operations, career certificate (p. 177)
- Stationary Engineer, career certificate (p. 177)

Utility Line Technician

- Utility Line Technician, associate in applied science degree (p. 178)

Welding Technology

- Welding Technology, associate in applied science degree (p. 179)
- Welding Technology Certificate Options (p. 182)
 - Welding Technology – Manufacturing, certificate of achievement (p. 182)
 - Welding Technology – Pipe, certificate of achievement (p. 182)
 - Welding Technology – Structural, certificate of achievement (p. 183)
- Gas Metal Arc Welding, career certificate (p. 184)
- Gas Tungsten Arc Welding, career certificate (p. 184)
- Pipe Welding, career certificate (p. 185)
- Shielded Metal Arc Welding, career certificate (p. 185)

The manufacturing and transportation industries need a wide variety of skilled professionals. Educational opportunities in automotive, auto collision, diesel and power generation, mechanical design, mechatronics, process operations, precision machining, CNC equipment, utility line, and welding are offered. Students may complete career certificates, certificates of achievement, and two-year associate degrees in various areas, or just choose a single class depending on their needs.

There are a variety of paths for the beginning student seeking entry-level employment into the manufacturing and transportation related trades. Also offered are advanced skills training opportunities for professionals already in the field seeking to improve their abilities. Customized training for industry partners needing to advance their workforce is available.

All programs provide a high quality, hands-on learning environment using the latest technology found in the professions.

Auto Collision Technology

This program covers the entire scope of the auto collision field, including basic and advanced metal finishing repair, frame repair and alignment, panel replacement, major body repair, estimating, and all aspects of automotive painting using the latest technology.

Degree: Associate in Applied Science

Auto Collision Technology

Certificate of Achievement:

Auto Collision Technology

Career Certificate:

Auto Collision Estimating

Auto Collision Technology (ABAS1)

Award: Associate in applied science degree

Program location: Applied Technology Center

This degree covers the entire scope of the field, including basic and advanced metal finishing repair, frame repair and alignment, panel replacement, major body repair, and all aspects of automotive painting using the latest technology.

For entry into the Auto Collision program, a written mechanical reasoning test is required.

Graduation Requirements

General education	27
Major requirements	70.5-78.5
Total credit hours required	97.5-105.5

General education requirements (27.0 credit hrs.)

Communications

English level I	4.5
English level II	4.5

See Communications course options (p. 42)

Humanities/social sciences

Humanities/social sciences	4.5
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See Humanities/social sciences course options (p. 42)

Quantitative/numeracy skills

Mathematics or Financial Literacy	4.5
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See Quantitative/numeracy skills options (p. 44)

MATH 1240 is recommended.

Additional

HMRL 1010	Human Relations Skills	4.5
INFO 1001	Information Systems and Literacy	4.5

Major requirements for Auto Collision Technology (70.5-78.5 credit hrs.)

AUTB 1040	Auto Collision Repair Welding	3.0
AUTB 1100	Structural Repair I	3.0
AUTB 1110	Structural Repair II	3.0
AUTB 1200	Nonstructural Repair I	6.0
AUTB 1210	Nonstructural Repair II	6.0
AUTB 1220	Nonstructural Repair III	6.0
AUTB 2120	Structural Repair III	3.0
AUTB 2230	Nonstructural Repair IV	6.0
AUTB 2240	Nonstructural Repair V	6.0
	OR	
AUTB 2981	Auto Collision Internship	variable
AUTB 2241	Nonstructural Repair VI	6.0
	OR	
AUTB 2981	Auto Collision Internship	variable
AUTB 2300	Automotive Refinishing I	3.0
AUTB 2310	Automotive Refinishing II	6.0
AUTB 2450	Collision Estimating I	3.0
AUTB 2460	Collision Estimating II	3.0
AUTB 2550	Electrical and Mechanical Systems	3.0
RDLS 1200	College Success Strategies	4.5
	OR	
	Elective*	4.5

*Elective must be approved by program faculty

Auto Collision Technology Accelerated Lockstep Program Curriculum Plan

Accelerated Lockstep Program Option

Entrance into the accelerated lockstep program option is determined by an application process. Contact an academic advisor or Student Services to acquire an application packet

First quarter (Fall)

AUTB 1040	Auto Collision Repair Welding	3.0
AUTB 1100	Structural Repair I	3.0
AUTB 1110	Structural Repair II	3.0
AUTB 1200	Nonstructural Repair I	6.0
AUTB 2450	Collision Estimating I	3.0
ENGL 1230	Business Writing	4.5
INFO 1001	Information Systems and Literacy	4.5

RCLS 1200	College Success Strategies ☞	4.5
	OR	
	Elective*	4.5

*Elective must be approved by program faculty

Second quarter (Winter)

A basic tool set is required by the beginning of the second quarter classes.

AUTB 1210	Nonstructural Repair II	6.0
AUTB 2120	Structural Repair III	3.0
AUTB 2300	Automotive Refinishing I	3.0
AUTB 2460	Collision Estimating II	3.0
AUTB 2550	Electrical and Mechanical Systems	3.0

ENGL 1240	Oral and Written Reports ☞	4.5
	Humanities/social science elective	4.5

Third quarter (Spring)

AUTB 1220	Nonstructural Repair III	6.0
AUTB 2230	Nonstructural Repair IV	6.0
AUTB 2310	Automotive Refinishing II	6.0
HMRL 1010	Human Relations Skills ☞☺	4.5
MATH 1240	Applied Mathematics	4.5

Fourth quarter (Summer)

AUTB 2981	Auto Collision Internship	variable
	OR	
AUTB 2240	Nonstructural Repair V	6.0
AUTB 2981	Auto Collision Internship	variable
	OR	
AUTB 2241	Nonstructural Repair VI	6.0

AUTB 2240, AUTB 2241: Students must complete all other degree requirements before signing up for the internship. AUTB 2240 or AUTB 2241 may be substituted for the internship if offered during the summer quarter. Both internship courses must be completed.

Auto Collision Technology (ABTC1)

Award: Certificate of achievement

Pathway to associate degree: Auto Collision Technology (ABAS1)

Program location: Applied Technology Center

This certificate of achievement covers basic sheet metal and frame repair.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academic-Programs/Programs-of-Study/Applied-Technology/Auto-Collision-Technology.aspx.

Graduation Requirements

General education	13.5
Major requirements	36.0
Total credit hours required	49.5

General education requirements (13.5 credit hrs.)

Communications

English level I	4.5
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See Communications course options (p. 42)

Humanities/social sciences

Humanities/social sciences	4.5
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See Humanities/social sciences options (p. 42)

Quantitative/numeracy skills

Mathematics or Financial Literacy	4.5
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See Quantitative/numeracy skills options (p. 44)

Major requirements for Auto Collision Technology (36.0 credit hrs.)

AUTB 1040	Auto Collision Repair Welding	3.0
AUTB 1100	Structural Repair I	3.0
AUTB 1110	Structural Repair II	3.0
AUTB 1200	Nonstructural Repair I	6.0
AUTB 1210	Nonstructural Repair II	6.0
AUTB 1220	Nonstructural Repair III	6.0
AUTB 2120	Structural Repair III	3.0

Select 6.0 credit hours of electives.

Degree-seeking students may take 4.5 hours from any elective, but the other 1.5 hours should come from the major requirements for Auto Collision Technology (p. 157), HMRL 1010, or INFO 1001.

Auto Collision Estimating (ACESD)

Award: Career certificate

Pathway to associate degree: Auto Collision Technology (ABAS1)

Program location: Applied Technology Center

This career certificate qualifies students for a training/intern position as an adjuster for an insurance company or an estimator for a collision repair shop.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academic-Programs/Programs-of-Study/Applied-Technology/Auto-Collision-Technology.aspx.

Requirements for Auto Collision Estimating career certificate (27.0 credit hrs.)

AUTB 1100	Structural Repair I	3.0
AUTB 1200	Nonstructural Repair I	6.0
AUTB 1210	Nonstructural Repair II	6.0
AUTB 2300	Automotive Refinishing I	3.0
AUTB 2450	Collision Estimating I	3.0
AUTB 2460	Collision Estimating II	3.0
AUTB 2550	Electrical and Mechanical Systems	3.0

Automotive Technology

The Automotive Technology program is certified by the National Automotive Technicians Education Foundation (NATEF), hands-on, and focuses on preparing students for careers in the automotive field. The program works closely with regional and national industry to encourage growth and training in preparation for real-world work environments. This program utilizes the most current technology and testing equipment to enhance the training required by today's automotive industry.

Degree: Associate in Applied Science

Automotive Technology

Certificate of Achievement:

Automotive Technology - Automotive Maintenance and Light Repair Technician

Career Certificate:

Automotive Technician Assistant
Automotive Under-Vehicle Specialist

Automotive Technology (AUAAS)

Award: Associate in applied science degree

Program location: South Omaha Campus

The Automotive Technology program is a NATEF MASTER certified program. This is the highest achievement an institution can receive. All MCC instructors are Automotive Service Excellence (ASE) Master Technicians in the fields they teach. MCC is the only college to offer both day and evening classes to meet the needs of those with busy schedules. See the class schedule for class and entry point offering times.

MCC offers an "express lane" certificate for students who successfully complete the first quarter classes so they can show prospective employers their achievements and begin their path to a successful career. This opportunity allows students to earn a living while they attend hybrid classes. Hybrid classes allow students to take tests and prepare for class at their convenience online, and then come to the campus to get hands-on training and mini lectures. This allows students to use their time wisely and not have to sit through long lectures. Class time uses a team-based learning format. Classes are very interactive and provide a high level of engagement.

Other nationally recognized certificates earned along the way include:

- Safety and Pollution Prevention, SP/2 training
- ASE Student Certification
- National Coalition of Certification Centers (NC3) certification for the Snap-On Verus Pro, Vantage Pro, Multimeter systems

Tool Requirements

The automotive technology program supplies the tools needed for course studies while on campus. Tools used on the job must be purchased when you begin employment or enroll in the internship portion of the program.

Graduation Requirements

General education	27.0
Major requirements	83.0
Total credit hours required	110.0

General education requirements (27.0 credit hrs.)

Communications

English level I	4.5
English level II	4.5

See Communications course options (p. 42)

Humanities/social sciences

Humanities/social sciences	4.5
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See Humanities/social sciences options (p. 42)

Quantitative/Numeracy Skills

MATH 1240 Applied Mathematics	4.5
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Additional

HMRL 1010 Human Relations Skills	4.5
INFO 1001 Information Systems and Literacy	4.5

Major requirements for Automotive Technology (83.0 credit hrs.)

AUTT 1110	Automotive 1: Express Lane	12.0
AUTT 1120	Automotive 2: Introduction to Maintenance	12.0
AUTT 1130	Automotive 3: Automotive Maintenance	12.0
AUTT 2110	Automotive 4: Engine Repair	12.0
AUTT 2120	Automotive 5: Driveline Repair	12.0
AUTT 2130	Automotive 6: Diagnostics	12.0
WELD 1261	Combination Welding - Automotive	3.0

Select either AUTT 2981 or the series AUTT 2982 through AUTT 2989 for a total of 8 internship hours.

AUTT 2981	On-the-Job Training/Work Experience	8.0
	OR	
AUTT 2982	OJT/Work Experience I	1.0
AUTT 2983	OJT/Work Experience II	1.0
AUTT 2984	OJT/Work Experience III	1.0
AUTT 2985	OJT/Work Experience IV	1.0
AUTT 2986	OJT/Work Experience V	1.0
AUTT 2987	OJT/Work Experience VI	1.0
AUTT 2988	OJT/Work Experience VII	1.0
AUTT 2989	OJT/Work Experience VIII	1.0

Automotive Advising Tips

- Entry points vary from day and evening classes. Consult class schedule for latest offerings.
- Students entering the program class MUST HAVE a valid driver's license. Licenses are checked on the first day of every class. Students without a license are disenrolled.

- Students are required to purchase the internship tool set (ITS) and the Graduation tool set (GTS) before enrolling in AUTT 2981 (p. 233) or AUTT 2989 (p. 234). Students who do not obtain their tools may be disenrolled.
- This program utilizes a hybrid format. Twenty-five percent of the instruction is online.
- Additional program requirements are detailed in the automotive Student Handbook at http://www.mccneb.edu/autt/documents/StudentHandbook_2014.pdf

Automotive Maintenance and Light Repair Technician (AUMCA)

Award: Certificate of achievement

Pathway to associate degree: Automotive Technology (AUAAS)

Program location: South Omaha Campus

This certificate of achievement provides students with the skills and knowledge necessary for entry-level positions in the automotive field. This program helps students develop skills in diagnosing and repairing common entry level items, while developing a career path focusing on personal growth. The program presents the fundamentals of automotive systems and emphasizes human relations and critical thinking skills for entry-level technicians.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Industrial-Technology/Automotive-Technology.aspx.

Graduation Requirements

General education	13.5
Major requirements	36.0
Total credit hours required	49.5

General education requirements

Communications

English level I 4.5

Humanities/social sciences

Humanities/social sciences 4.5

See Humanities/social sciences options (p. 42)

Quantitative numeracy skills

MATH 1240 Applied Mathematics 4.5

Major requirements for Automotive Technology - Automotive Maintenance and Light Repair Technician (36.0 credit hrs.)

Courses

AUTT 1110	Automotive 1: Express Lane	12.0
AUTT 1120	Automotive 2: Introduction to Maintenance	12.0
AUTT 1130	Automotive 3: Automotive Maintenance	12.0

Automotive Technician Assistant (AUTCC)

Award: Career certificate

Pathway to associate degree: Automotive Technology (AUAAS)

Program location: South Omaha Campus

This career certificate provides students with the skills and knowledge necessary for an advanced entry-level position in the automotive field. This program helps students develop skills needed to become an automotive assistant.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Industrial-Technology/Automotive-Technology.aspx.

Requirements for Automotive Technician Assistant career certificate (24 credit hrs.)

Courses

AUTT 1110	Automotive 1: Express Lane	12.0
AUTT 1120	Automotive 2: Introduction to Maintenance	12.0

Automotive Under-Vehicle Specialist (AUVCC)

Award: Career certificate

Pathway to associate degree: Automotive Technology (AUAAS)

Program location: South Omaha Campus

This career certificate provides students with the skills and knowledge necessary for entry-level positions in the automotive field. This program helps students develop skills in diagnosing and repairing common entry-level items. The program presents the fundamentals of automotive systems and emphasizes mastering entry-level hands-on skills.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Industrial-Technology/Automotive-Technology.aspx.

Requirements for Automotive Under-Vehicle Specialist career certificate (36.0 credit hrs.)

Courses

AUTT 1110	Automotive 1: Express Lane	12.0
AUTT 1120	Automotive 2: Introduction to Maintenance	12.0
AUTT 1130	Automotive 3: Automotive Maintenance	12.0

Diesel Technology

The Diesel Technology program prepares students for a career in the growing transportation industry. Using the latest equipment and technologies, the curriculum is built upon a foundation that includes the fundamentals of compression ignited internal combustion engines and their variations, shop safety, shop operations, brakes, drive trains, suspension, steering, electrical/electronic systems, and heat/air conditioning. The

curriculum addresses the latest technology in engine repair, hydraulic and electrical systems, test procedures and diagnostics, and power generation. The internship courses provide opportunities to interact with industry in real-world scenarios, building confidence and skills needed to succeed.

Degree: Associate in Applied Science

- Diesel Technology - Diesel Service
- Diesel Technology - Heavy Equipment
- Diesel Technology - Power Generation

Career Certificates

- CDL-A Truck Driving
- Diesel/Automotive Parts Sales
- Diesel Truck

Diesel Technology Degree Options

Award: Associate in applied science degree

Program location: Applied Technology Center

This degree prepares students for a career in the growing transportation industry. Students interact with industry in real-world scenarios during the internships, gaining the confidence and skills needed to succeed. Technicians may work on light- to heavy-duty vehicles or expand into various other fields in the transportation industry.

Options available under this degree are:

- Diesel Technology – Diesel Service (DTDSO) (p. 161)
- Diesel Technology – Heavy Equipment (DTHEO) (p. 162)
- Diesel Technology – Power Generation (DTPGO) (p. 162)

Diesel Technology – Diesel Service (DTDSO)

Award: Associate in applied science degree

Program location: Applied Technology Center

With the complexity of trucks and the increasing need for qualified, trained diesel technicians, this degree provides students with the fundamentals needed for employment in the field of diesel service technology.

Graduation Requirements

General education	27.0
Major requirements	36.5
Option requirements	44.0
Total credit hours required	107.5

General education requirements (27.0 credit hrs.)

Communications

English level I	4.5
English level II	4.5

See Communications course options (p. 42)

ENGL 1220 and ENGL 1240 are recommended.

Humanities/social sciences

Humanities/social sciences	4.5
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See Humanities/social sciences course options (p. 42)

PSYC 1000 is recommended.

Quantitative/numeracy skills

MATH	MATH 1240 or higher	4.5
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For students who qualify for a higher level math course than MATH 1240, it is recommended that they take the highest level class they qualify for (4.5 credits or greater).

Additional

HMRL 1010	Human Relations Skills	4.5
INFO 1001	Information Systems and Literacy	4.5

Major requirements for Diesel Technology (36.5 credit hrs.)

DESL 1000	Diesel Preventive Maintenance	4.5
DESL 1210	Electricity and Electronics	6.0
DESL 1230	Diesel Engine Fundamentals	4.0
DESL 2211	Fuel Operating Systems	4.5
DESL 2220	Diesel Engine Diagnostics	4.0
DESL 2230	Diesel Engine Rebuild	4.0
DESL 2240	Emissions and Maintenance	3.0
DESL 2301	CDL Skills Certification Testing	1.0
DESL 2310	CDL for Diesel Technicians	5.5

Students who currently hold a Class A or Class B CDL may ask for a waiver of DESL 2301 and DESL 2310.

Students may not register for DESL 1210 Electricity and Electronics until they qualify by proper MCC testing procedures for entry into MATH 1240 or higher.

Option requirements for Diesel Technology – Diesel Service (44.0 credit hrs.)

DESL 1115	Alternative Fueled Engines	3.0
DESL 1200	Fundamentals of Hydraulics	3.0
DESL 1620	Climate Control/Heating and Air Conditioning	4.0
DESL 2100	Heavy Duty Drivetrain	4.0
DESL 2120	Automatic and Automated Drivetrains	3.0
DESL 2150	Truck ABS and Brakes	4.0
DESL 2200	Steering and Suspension	4.0
DESL 2981	Diesel Internship I	8.0
DESL 2982	Diesel Internship II	8.0
WELD 1261	Combination Welding - Automotive	3.0

DESL 2981 and DESL 2982 each require 320 hours of on-the-job training. Each course can either be taken during one quarter or extended over more than one quarter depending on needs of students and employers.

Diesel Technology – Heavy Equipment (DTHEO)

Award: Associate in applied science degree

Program location: Applied Technology Center

This degree option prepares students for a career in the heavy equipment, construction, and utility industries. This degree serves students by providing a diverse education of coursework that is taught by faculty with direct experience in the industry. A major strength of this program is the strong hands-on approach to learning.

Graduation Requirements

General education	27.0
Major requirements	36.5
Option requirements	42.0
Total credit hours required	105.5

General education requirements (27.0 credit hrs.)

Communications

English level I	4.5
English level II	4.5

See Communications course options (p. 42)

ENGL 1220 and ENGL 1240 are recommended.

Humanities/social sciences

Humanities/social sciences	4.5
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See Humanities/social sciences course options (p. 42)

PSYC 1000 is recommended.

Quantitative/numeracy skills

MATH	MATH 1240 or higher	4.5
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For students who qualify for a higher level math course than MATH 1240, it is recommended that they take the highest level class they qualify for (4.5 credits or greater).

Additional

HMRL 1010	Human Relations Skills	4.5
INFO 1001	Information Systems and Literacy	4.5

Major requirements for Diesel Technology (36.5 credit hrs.)

DESL 1000	Diesel Preventive Maintenance	4.5
DESL 1210	Electricity and Electronics	6.0
DESL 1230	Diesel Engine Fundamentals	4.0
DESL 2211	Fuel Operating Systems	4.5
DESL 2220	Diesel Engine Diagnostics	4.0
DESL 2230	Diesel Engine Rebuild	4.0
DESL 2240	Emissions and Maintenance	3.0
DESL 2301	CDL Skills Certification Testing	1.0
DESL 2310	CDL for Diesel Technicians	5.5

Students who currently hold a Class A or Class B CDL may ask for a waiver of DESL 2301 and DESL 2310.

Students may not register for DESL 1210 Electricity and Electronics until they qualify by proper MCC testing procedures for entry into MATH 1240 or higher.

Option requirements for Diesel Technology - Heavy Equipment (42.0 credit hrs.)

DESL 1200	Fundamentals of Hydraulics	3.0
DESL 1220	Advanced Diesel Hydraulics	6.0
DESL 1620	Climate Control/Heating and Air Conditioning	4.0
DESL 2110	Heavy Equipment Drivetrain	6.0
DESL 2120	Automatic and Automated Drivetrains	3.0
DESL 2250	Field Service Maintenance	6.0
DESL 2985	Heavy Equipment Internship	8.0
WELD 1262	Quick Start	3.0
WELD 1500	Shielded Metal Arc Welding (Stick) - Flat	3.0

Diesel Technology – Power Generation (DTPGO)

Award: Associate in applied science degree

Program location: Applied Technology Center

This degree option prepares students for a career in the growing diesel power generation field. This option is one of only a few nationally that allows students to get both diesel and alternative fuel engine training while learning AC power generation methods and distribution technologies.

Graduation Requirements

General education	27.0
Major requirements	36.5
Option requirements	41.0
Total credit hours required	104.5

General education requirements (27.0 credit hrs.)

Communications

English level I	4.5
English level II	4.5

See Communications course options (p. 42)

ENGL 1220 and ENGL 1240 are recommended.

Humanities/social sciences

Humanities/social sciences	4.5
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See Humanities/social sciences course options (p. 42)

PSYC 1000 is recommended.

Quantitative/numeracy skills

MATH	MATH 1240 or higher	4.5
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For students who qualify for a higher level math course than MATH 1240, it is recommended that they take the highest level class they qualify for (4.5 credits or greater).

Additional

HMRL 1010	Human Relations Skills	4.5
INFO 1001	Information Systems and Literacy	4.5

Major requirements for Diesel Technology (36.5 credit hrs.)

DESL 1000	Diesel Preventive Maintenance ☹	4.5
DESL 1210	Electricity and Electronics ☹	6.0
DESL 1230	Diesel Engine Fundamentals ☹	4.0
DESL 2211	Fuel Operating Systems ☹	4.5
DESL 2220	Diesel Engine Diagnostics ☹	4.0
DESL 2230	Diesel Engine Rebuild	4.0
DESL 2240	Emissions and Maintenance ☹	3.0
DESL 2301	CDL Skills Certification Testing	1.0
DESL 2310	CDL for Diesel Technicians	5.5

Students who currently hold a Class A or Class B CDL may ask for a waiver of DESL 2301 and DESL 2310.

Students may not register for DESL 1210 Electricity and Electronics until they qualify by proper MCC testing procedures for entry into MATH 1240 or higher.

Option requirements for Diesel Technology – Power Generation (41.0 credit hrs.)

DESL 1040	Generator Theory	6.0
DESL 2040	Power Generator Applications	6.0
DESL 1115	Alternative Fueled Engines ☹	3.0
DESL 2100	Heavy Duty Drivetrain ☹	4.0
DESL 2215	Diesel Generator Controls ☹	3.0
DESL 2983	Diesel Internship III	4.0
DESL 2984	Diesel Internship IV	4.0
UTIL 1020	Electricity I ☹	5.5
UTIL 2020	Transformer Theory ☹	5.5

CDL–A Truck Driving (CDLSD)

Award: Career certificate

Pathway to associate degree: General Studies (GSAAS)

Program location: Applied Technology Center

This career certificate provides students with the knowledge and skills needed to obtain a CDL Class A truck driving license. With this license, graduates are able to apply for driving jobs in the trucking industry.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at [mccneb.edu/Academics/Programs-of-Study/Applied-Technology/Truck-Driver-Training-CDL-Class-A.aspx](https://www.mccneb.edu/Academics/Programs-of-Study/Applied-Technology/Truck-Driver-Training-CDL-Class-A.aspx).

Requirements for CDL-A Truck Driving career certificate (30.0 credit hrs.)

DESL 1000	Diesel Preventive Maintenance ☹	4.5
DESL 1230	Diesel Engine Fundamentals ☹	4.0
DESL 1300	Class A CDL Driver Training	10.5
DESL 1300L	Class A CDL Road Training	4.0

DESL 2980	On-the-Job Training/Work Externship	6.0
EMSP 1010	Heartsaver First Aid with CPR and AED	1.0

EMSP 1010 is required for those who do not currently hold a valid CPR/first aid card.

Diesel/Automotive Parts Sales (DTSCC)

Award: Career certificate

Pathway to associate degree: General Studies (GSAAS)

Program location: Applied Technology Center

This career certificate provides the knowledge and skills needed for an entry-level position in the transportation parts industry. The certificate provides students with fundamental instruction in the basic parts sales for diesel engines, brakes, suspension, electrical systems, and power trains.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at

<https://www.mccneb.edu/Academics/Programs-of-Study/Applied-Technology/Diesel-Technology.aspx>.

Requirements for Diesel/Automotive Parts Sales career certificate (32.0 credit hrs.)**BSAD Courses**

Select 9.0 credit hours from the following:

BSAD 1000	Introduction to Business ☹	4.5
BSAD 1010	Principles of Marketing ☹	4.5
BSAD 1200	Principles of Selling ☹	4.5
BSAD 1201	Advertising and Sales Promotion ☹	4.5
BSAD 1210	Retailing	4.5

SPCH Course

Select one of the following:

SPCH 1110	Public Speaking ☹ ☹	4.5
SPCH 1220	Communication in Small Groups	4.5
SPCH 1300	Interpersonal Communication	4.5

DESL Courses

DESL 1000	Diesel Preventive Maintenance ☹	4.5
DESL 1050	Diesel/Automotive Parts Sales	2.0
DESL 1230	Diesel Engine Fundamentals ☹	4.0

Elective

Select two of the following DESL courses:

DESL 2100	Heavy Duty Drivetrain ☹	4.0
DESL 2150	Truck ABS and Brakes ☹	4.0
DESL 2200	Steering and Suspension ☹	4.0

Diesel Truck (DDES1)

Award: Career certificate

Pathway to associate degree: Diesel Technology - Diesel Service (DTDSO)

Program location: Applied Technology Center

This career certificate provides the knowledge and skills needed for an entry-level position in the transportation industry. The career certificate provides students with fundamental instruction in the basic operation of diesel engines, service, brakes, electrical systems, and power trains.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Applied-Technology/Diesel-Technology.aspx.

Requirements for Diesel Truck career certificate (35.0 credit hrs.)

DESL 1000	Diesel Preventive Maintenance	4.5
DESL 1210	Electricity and Electronics	6.0
DESL 1230	Diesel Engine Fundamentals	4.0
DESL 1620	Climate Control/Heating and Air Conditioning	4.0
DESL 2100	Heavy Duty Drivetrain	4.0
DESL 2150	Truck ABS and Brakes	4.0
DESL 2200	Steering and Suspension	4.0
MATH	MATH 1240 or higher	4.5

For students who qualify for a higher level math course than MATH 1240, it is recommended that they take the highest level class they qualify for (4.5 credits or greater).

Students may not register for DESL 1210 Electricity and Electronics until they qualify by proper MCC testing procedures for entry into MATH 1240 or higher.

Industrial and Commercial Trades

The Industrial and Commercial Trades program serves students by providing a diverse education in the trades, maintenance, and distribution fields. All students learn the basics of workplace safety and health as well as effective problem-solving and troubleshooting skills. Depending on the chosen degree option, students prepare to work in building maintenance, industrial maintenance, precision machining, and product distribution fields. Faculty with direct experience in the industry teach the courses. A major strength of the program is the strong hands-on approach to learning.

Degree: Associate in Applied Science

Industrial Electrical/Mechanical Maintenance

Industrial Distribution

Certificates of Achievement

Industrial and Commercial Trades - Industrial Distribution I

Industrial and Commercial Trades - Industrial Distribution II

Industrial and Commercial Trades - Industrial Electrical

Career Certificates

Beginning Industrial Sales Representative

Advanced Industrial Sales Representative

Building Maintenance

Electrical Mechanical Systems

Electrical Plant Maintenance

General Plant Maintenance

Industrial Electrical

Logistics

Production Maintenance

Programmable Logic Controllers

Industrial Electrical/Mechanical Maintenance (IMEM2)

Award: Associate in applied science degree

Program location: South Omaha Campus

This degree option provides education and training for maintenance personnel at industrial and commercial facilities. Students learn standard and advanced electrical systems, mechanical systems, and hydraulic/pneumatic systems.

Graduation Requirements

General education	27.0
Major requirements	67.0
Electives	6.0-9.0
Total credit hours required	100.0-103.0

General education requirements (27.0 credit hrs.)

Communications

English level I	4.5
English level II	4.5

See Communications course options (p. 42)

ENGL 1220 and ENGL 1240 are recommended.

Humanities/social sciences

Humanities/social sciences	4.5
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See Humanities/social sciences course options (p. 42)

PSYC 1000 is recommended.

Quantitative/numeracy skills

MATH 1240	Applied Mathematics	4.5
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Additional

HMRL 1010	Human Relations Skills	4.5
INFO 1001	Information Systems and Literacy	4.5

Major requirements for Industrial Electrical/Mechanical Maintenance (67.0 credit hrs.)

INCT 1000	Industrial Safety and Health	4.5
INCT 1212	Motor and Machine Controls	9.0
INCT 2060	Mechanical Power Systems	4.0
INCT 2070	Hydraulics and Pneumatics	4.0
INCT 2231	Programmable Logic Controllers I	4.5
INCT 2232	Programmable Logic Controllers II	4.5

INCT 2235	Programmable Logic Controllers Applications	9.0
ELTR 1200	Basic Electricity	8.0
PLBG 1010	Introduction to Plumbing	6.5
PRMA 1050	Print Reading	4.0
WELD 1100	Industrial Cutting Processes	3.0
WELD 1200	Gas Metal Arc Welding (MIG) - Steel I	3.0
WELD 1500	Shielded Metal Arc Welding (Stick) - Flat	3.0

Electives (6.0-9.0 credit hrs.)

Select a total of 6.0 to 9.0 credit hours from the following:

ELTR 1210	Residential Wiring	9.0
INCT 2981	Internship	6.0
INFO 1615	Digital Electronics	4.5
PRMA 1401	Machine Tool I	9.0
PROT 1302	Stationary Engineering I	3.0
WELD 1300	Oxy-Acetylene Welding	3.0

Industrial Electrical/Mechanical Maintenance Curriculum Plan

Below is a suggested guide for students planning careers in industrial electrical/mechanical maintenance after two years of full-time study.

First Year

First quarter (Fall)

INCT 1000	Industrial Safety and Health	4.5
MATH 1240	Applied Mathematics	4.5

Second quarter (Winter)

ENGL 1220	Technical Writing	4.5
INCT 2060	Mechanical Power Systems	4.0
PRMA 1050	Print Reading	4.0

Third quarter (Spring)

ENGL 1240	Oral and Written Reports	4.5
	Humanities/social sciences	4.5
INCT 2070	Hydraulics and Pneumatics	4.0

Fourth quarter (Summer)

	Electives	4.0
PLBG 1010	Introduction to Plumbing	6.5

Second Year

Fifth quarter (Fall)

ELTR 1200	Basic Electricity	8.0
HMRL 1010	Human Relations Skills	4.5
WELD 1100	Industrial Cutting Processes	3.0

Sixth quarter (Winter)

INCT 1212	Motor and Machine Controls	9.0
INFO 1001	Information Systems and Literacy	4.5
WELD 1500	Shielded Metal Arc Welding (Stick) - Flat	3.0

Seventh quarter (Spring)

INCT 2231	Programmable Logic Controllers I	4.5
INCT 2232	Programmable Logic Controllers II	4.5
WELD 1200	Gas Metal Arc Welding (MIG) - Steel I	3.0

Eighth quarter (Summer)

INCT 2235	Programmable Logic Controllers Applications	9.0
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Industrial Distribution (IMID2)

Award: Associate in applied science degree

Program location: Elkhorn Valley Campus, Fort Omaha Campus, South Omaha Campus

This degree provides education training for product distribution representatives who move products from the manufacturer to the user and are employed in a wide variety of industries. Job opportunities include sales, product support, product application specialists, management trainees, and shipping/warehouse personnel.

This degree has two certificates of achievement — Industrial Distribution I (p. 165) and Industrial Distribution II (p. 166).

Students completing both certificates are awarded the associate in applied science degree.

Each certificate can be taken separately. People with little or no experience as an industrial sales representative should start with the Industrial Distribution I certificate. People with two or more years of experience in the field may prefer to take the Industrial Distribution II certificate.

Graduation Requirements

General education	27.0
Certificate I requirements	26.0
Certificate II requirements	29.5
Electives	16.5
Total credit hours required	99.0

Industrial Distribution I (ID1C1)

Award: Certificate of achievement

Pathway to associate degree: Industrial Distribution (IMID2)

Program location: South Omaha Campus

This certificate of achievement provides foundational education and training to students interested in pursuing entry level positions as product distribution representatives. The courses focus on selling and distribution. Job opportunities include sales, product support, product application specialists, management trainees, and shipping/warehouse personnel in a wide variety of industries. Students who complete the Industrial Distribution I certificate of achievement and the Industrial Distribution II certificate of achievement are awarded the Industrial Distribution associate in applied science degree. See Industrial Distribution (IMID2) (p. 165).

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Industrial-Technology/Industrial-and-Commercial-Trades.aspx.

Graduation Requirements

General education	18.0
Major requirements	26.0
Elective requirements	9.0

Total credit hours required 53.0

General education requirements (18.0 credit hrs.)

Communications

ENGL 1210	Applied Communications	4.5
	OR	
ENGL 1230	Business Writing ☞	4.5

Students should select ENGL 1210 if not previously completed. If ENGL 1210 previously completed, then select ENGL 1230.

Humanities/social sciences

Humanities/social sciences	4.5
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See Humanities/social sciences course options (p. 42)

PSYC 1000 is recommended.

Quantitative/numeracy skills

MATH 1220	Business Mathematics ☞	4.5
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Additional

INFO 1001	Information Systems and Literacy ☞ ☹	4.5
	OR	

HMRL 1010	Human Relations Skills ☞ ☹	4.5
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Students should select INFO 1001 if not previously completed. If INFO 1001 previously completed, then select HMRL 1010.

Major requirements for Certificate I (26.0 credit hrs.)

BSAD 1200	Principles of Selling ☞	4.5
INCT 1000	Industrial Safety and Health	4.5
INCT 1100	Logistics and Warehousing for Applied Technologies	4.5
INCT 1500	Introduction to Distribution	4.5
INCT 2981	Internship	6.0

Elective requirements for Certificate I (9.0 credit hrs.)

Students should take a minimum of 9.0 elective credits in one or more areas related to their work needs or interests. Acceptable courses are various courses in Chemistry (CHEM), Construction (CNST), Diesel Technology (DESL/CDL), Electrical Technology (ELTR), Entrepreneurship (ENTR), Industrial and Commercial Trades (INCT), Information Technology (INFO), Mechanical Design Technology (DRAF), and Welding (WELD).

Industrial Distribution II (ID2C1)

Award: Certificate of achievement

Pathway to associate degree: Industrial Distribution (IMID2)

Program location: South Omaha Campus

This certificate of achievement provides foundational education and training to students interested in pursuing entry level positions as product distribution representatives. The courses focus on marketing, management, and purchase of materials. Job opportunities include sales, product support, product application specialists, management trainees, and shipping/warehouse personnel in a wide variety of industries. Students who complete the Industrial Distribution I certificate of achievement and the Industrial Distribution II certificate of achievement are awarded the Industrial Distribution associate in applied science degree. See Industrial Distribution (IMID2) (p. 165).

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Industrial-Technology/Industrial-and-Commercial-Trades.aspx.

Graduation Requirements

General education	18.0
Major requirements	29.5
Elective requirements	7.5

Total credit hours required 55.0

General education requirements (18.0 credit hrs.)

Communications

ENGL 1210	Applied Communications	4.5
	OR	
ENGL 1230	Business Writing ☞	4.5

Students should select ENGL 1210 if not previously completed. If ENGL 1210 previously completed, then select ENGL 1230.

Humanities/social sciences

Humanities/social sciences	4.5
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See Humanities/social sciences course options (p. 42)

Quantitative/numeracy skills

MATH 1220	Business Mathematics ☞	4.5
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Additional

INFO 1001	Information Systems and Literacy ☞ ☹	4.5
	OR	

HMRL 1010	Human Relations Skills ☞ ☹	4.5
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Students should select INFO 1001 if not previously completed. If INFO 1001 previously completed, then select HMRL 1010.

Major requirements for Certificate II (29.5 credit hrs.)

BSAD 1000	Introduction to Business ☞	4.5
BSAD 1010	Principles of Marketing ☞	4.5
BSAD 2100	Principles of Management ☞	4.5
BSAD 2400	Business Logistics	4.5

BSAD 2410	Purchasing and Materials Management	4.5
INCT 2050	Problem-Solving	3.0
PRMA 1050	Print Reading	4.0

INCT 2235	Programmable Logic Controllers Applications	9.0
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INCT 2235: Additional prerequisite(s) may be required.

Elective requirements for Certificate II (7.5 credit hrs.)

Students should take a minimum of 7.5 elective credits in one or more areas related to their work needs or interests. Acceptable courses are various courses in Business Management (BSAD), Chemistry (CHEM), Construction (CNST), Electrical Technology (ELTR), Entrepreneurship (ENTR), Industrial and Commercial Trades (INCT), Information Technology (INFO), and Welding (WELD).

Industrial and Commercial Trades – Industrial Electrical (IIECE)

Award: Certificate of achievement

Pathway to associate degree: Industrial Electrical/Mechanical Maintenance (IMEM2)

Program location: South Omaha Campus

This certificate of achievement is for students who may work in the industrial setting. Students gain a working knowledge of industrial electrical systems and control circuit wiring.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mcneb.edu/Academics/Programs-of-Study/Industrial-Technology/Industrial-and-Commercial-Trades.aspx.

Graduation Requirements

General education	13.5
Major requirements	39.5
Total credit hours required	53.0

General education requirements (13.5 credit hrs.)

Communications

ENGL 1220	Technical Writing	4.5
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Humanities/social sciences

Humanities/social sciences	4.5
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See Humanities/social sciences course options (p. 42)

PSYC 1000 is recommended.

Quantitative/numeracy skills

MATH 1240	Applied Mathematics	4.5
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Major requirements for Industrial and Commercial Trades – Industrial Technology (39.5 credit hrs.)

ELTR 1200	Basic Electricity	8.0
INCT 1000	Industrial Safety and Health	4.5
INCT 1212	Motor and Machine Controls	9.0
INCT 2231	Programmable Logic Controllers I	4.5
INCT 2232	Programmable Logic Controllers II	4.5

Beginning Industrial Sales Representative (IBISD)

Award: Career certificate

Pathway to associate degree: Industrial Distribution (IMID2)

Program location: South Omaha Campus

This career certificate provides the minimal skills to get an entry-level job as a sales representative in a manufacturing distribution company.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mcneb.edu/Academics/Programs-of-Study/Industrial-Technology/Industrial-and-Commercial-Trades.aspx.

Requirements for Beginning Industrial Sales Representative career certificate (27.0 credit hrs.)

BSAD 1000	Introduction to Business	4.5
BSAD 1200	Principles of Selling	4.5
ENGL 1210	Applied Communications	4.5
	OR	
ENGL 1230	Business Writing	4.5
INCT 1000	Industrial Safety and Health	4.5
INCT 1500	Introduction to Distribution	4.5
INFO 1001	Information Systems and Literacy	4.5

Advanced Industrial Sales Representative (IAISD)

Award: Career certificate

Pathway to associate degree: Industrial Distribution (IMID2)

Program location: South Omaha Campus

This career certificate enhances students' knowledge of distribution sales. This career certificate is generally for students who are already doing sales or who have completed the Beginning Industrial Sales Representative career certificate.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mcneb.edu/Academics/Programs-of-Study/Industrial-Technology/Industrial-and-Commercial-Trades.aspx.

Requirements for Advanced Industrial Sales Representative career certificate (29.5 credit hrs.)

BSAD 1000	Introduction to Business	4.5
BSAD 1010	Principles of Marketing	4.5

BSAD 2100	Principles of Management	4.5
BSAD 2400	Business Logistics	4.5
BSAD 2410	Purchasing and Materials Management	4.5
INCT 2050	Problem-Solving	3.0
PRMA 1050	Print Reading	4.0

Building Maintenance (IBMSD)

Award: Career certificate

Pathway to associate degree: General Studies (GSAAS)

Program location: Fort Omaha Campus

This career certificate enhances the skills needed for maintenance positions in hospitals, schools, commercial buildings, and property management.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Industrial-Technology/Industrial-and-Commercial-Trades.aspx.

Requirements for Building Maintenance career certificate (27.5 credit hrs.)

CNST 1110	Construction Safety (10 hour)	1.0
ELTR 1200	Basic Electricity	8.0
HVAC 1000	Refrigeration Electrical Theory & Application	6.0
HVAC 1010	Refrigeration Service Principles and Basic Automatic Controls	6.0
PLBG 1010	Introduction to Plumbing	6.5

Electrical Mechanical Systems (IEMSD)

Award: Career certificate

Pathway to associate degree: General Studies (GSAAS)

Program location: South Omaha Campus

This career certificate enhances the skills needed for positions as maintenance technicians in manufacturing environments.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Industrial-Technology/Industrial-and-Commercial-Trades.aspx.

Requirements for Electrical Mechanical Systems career certificate (34.0 credit hrs.)

ELTR 1200	Basic Electricity	8.0
INCT 1212	Motor and Machine Controls	9.0
INCT 2060	Mechanical Power Systems	4.0
INCT 2070	Hydraulics and Pneumatics	4.0
PRMA 1401	Machine Tool I	9.0

Electrical Plant Maintenance (IEPSD)

Award: Career certificate

Pathway to associate degree: Industrial Electrical/Mechanical Maintenance (IMEM2)

Program location: South Omaha Campus

This career certificate enhances the skills needed for positions as maintenance technicians who are responsible for plant electrical systems.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Industrial-Technology/Industrial-and-Commercial-Trades.aspx.

Requirements for Electrical Plant Maintenance career certificate (26.0 credit hrs.)

ELTR 1200	Basic Electricity	8.0
INCT 1000	Industrial Safety and Health	4.5
INCT 1212	Motor and Machine Controls	9.0
INCT 2231	Programmable Logic Controllers I	4.5

General Plant Maintenance (IGPSD)

Award: Career certificate

Pathway to associate degree: Industrial Electrical/Mechanical Maintenance (IMEM2)

Program location: South Omaha Campus

This career certificate enhances the skills needed for machine repair positions in a manufacturing environment.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Industrial-Technology/Industrial-and-Commercial-Trades.aspx.

Requirements for General Plant Maintenance career certificate (29.5 credit hrs.)

ELTR 1200	Basic Electricity	8.0
INCT 1000	Industrial Safety and Health	4.5
INCT 1212	Motor and Machine Controls	9.0
INCT 2060	Mechanical Power Systems	4.0
INCT 2070	Hydraulics and Pneumatics	4.0

Industrial Electrical (IMECC)

Award: Career certificate

Pathway to associate degree: Industrial Electrical/Mechanical Maintenance (IMEM2)

Program location: South Omaha Campus

This career certificate provides the minimum skills to get an entry-level job wiring control circuits in an industrial setting.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Industrial-Technology/Industrial-and-Commercial-Trades.aspx.

Requirements for Industrial Electrical career certificate (30.5 credit hrs.)

ELTR 1200	Basic Electricity	8.0
INCT 1000	Industrial Safety and Health	4.5
INCT 1212	Motor and Machine Controls	9.0
INCT 2231	Programmable Logic Controllers I	4.5
INCT 2232	Programmable Logic Controllers II	4.5

Logistics (IMLCC)

Award: Career certificate

Pathway to associate degree: Industrial Distribution (IMID2)

Program location: South Omaha Campus

This career certificate is a focused set of classes designed to prepare students to work in the supply chain areas of business and industry. Whether in a parts department of an automotive shop, a food manufacturing plant, or a distribution warehouse, this certificate provides a useful set of skills. Upon successful completion of the coursework, students have the opportunity to earn industry recognized, nationally validated certifications through the Manufacturing Skills Standards Council.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Industrial-Technology/Industrial-and-Commercial-Trades.aspx.

Requirements for Logistics career certificate (27.0 credit hrs.)

INCT 1000	Industrial Safety and Health	4.5
INCT 1100	Logistics and Warehousing for Applied Technologies	4.5
	OR	
BSAD 2400	Business Logistics	4.5
INCT 1500	Introduction to Distribution	4.5
BSAD 1000	Introduction to Business	4.5
BSAD 1010	Principles of Marketing	4.5
BSAD 2100	Principles of Management	4.5

Degree-seeking students should select BSAD 2400 Business Logistics.

Upon completion of the courses identified within this career certificate, students are prepared to earn industry standard certifications such as OSHA 30 hour, Manufacturing Skills Standards Council Certified Logistics Associate, and Certified Logistics Technician.

Production Maintenance (IPMSD)

Award: Career certificate

Pathway to associate degree: Industrial Electrical/Mechanical Maintenance (IMEM2)

Program location: South Omaha Campus

This career certificate enhances the skills needed for positions as production workers with some responsibilities for maintenance tasks.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Industrial-Technology/Industrial-and-Commercial-Trades.aspx.

Requirements for Production Maintenance career certificate (29.5 credit hrs.)

ELTR 1200	Basic Electricity	8.0
INCT 1000	Industrial Safety and Health	4.5
INCT 1212	Motor and Machine Controls	9.0
INCT 2060	Mechanical Power Systems	4.0
INCT 2070	Hydraulics and Pneumatics	4.0

Programmable Logic Controllers (IPLSD)

Award: Career certificate

Pathway to associate degree: Industrial Electrical/Mechanical Maintenance (IMEM2)

Program location: South Omaha Campus

This career certificate gives students the information and skills needed for the installation and maintenance of programmable logic controllers as used in industry, building maintenance, and entertainment.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Industrial-Technology/Industrial-and-Commercial-Trades.aspx.

Requirements for Programmable Logic Controllers career certificate (35.0 credit hrs.)

ELTR 1200	Basic Electricity	8.0
INCT 1212	Motor and Machine Controls	9.0
INCT 2231	Programmable Logic Controllers I	4.5
INCT 2232	Programmable Logic Controllers II	4.5
INCT 2235	Programmable Logic Controllers Applications	9.0

Mechanical Design Technology

The Mechanical Design Technology program provides opportunities for students to learn the necessary skills to enter the manufacturing industry as drafting technicians. The program provides a balanced curriculum, which includes coursework in classical drafting techniques, state-of-the-art computer-aided design, and exploration of manufacturing materials and processes. Local industries provide many employment opportunities in drafting and design.

Degree: Associate in Applied Science

Mechanical Design Technology

Certificate of Achievement:

Mechanical Design Technology

Career Certificate:

Computer-Aided Design

Computer-Aided Drafting

Computer-Aided Manufacturing Design

Mechanical Design Technology (DRAS1)

Award: Associate in applied science degree

Program location: Fort Omaha Campus

This degree provides opportunities for students to learn the necessary skills to enter the manufacturing industry as drafting technicians. The program provides a balanced curriculum, which includes coursework in classical drafting techniques, state-of-the-art computer-aided design, and exploration of manufacturing materials and processes. Local industries provide many employment opportunities in drafting and design.

Graduation Requirements

General education	27.0
Major requirements	72.0
Total credit hours required	99.0

General education requirements (27.0 credit hrs.)

Communications

English level I	4.5
English level II	4.5

See Communications course options (p. 42)

Humanities/social sciences

Humanities/social sciences	4.5
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See Humanities/social sciences course options (p. 42)

Quantitative/Numeracy Skills

MATH 1310 Intermediate Algebra	4.5
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Additional

HMRL 1010 Human Relations Skills	4.5
INFO 1001 Information Systems and Literacy	4.5

Major requirements for Mechanical Design Technology (72.0 credit hrs.)

DRAF 1100 AutoCAD Fundamentals	9.0
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DRAF 1200 Design for Precision (Measurement)	9.0
DRAF 1300 Inventor Fundamentals	9.0
DRAF 1400 Manufacturing Process Design	9.0
DRAF 2100 SolidWorks Fundamentals	9.0
DRAF 2200 Machine Design Principles	9.0
DRAF 2300 Creo (Pro/E) Fundamentals	9.0
DRAF 2400 Tool Design Processes	9.0

Mechanical Design Technology Curriculum Plan

Below is a suggested guide for students planning careers in mechanical design technology after one year of full-time study and two years of full-time study.

Curriculum Plan – After One Year

First Year

First quarter

DRAF 1100 AutoCAD Fundamentals	9.0
DRAF 2100 SolidWorks Fundamentals	9.0
English level I	4.5
INFO 1001 Information Systems and Literacy	4.5

Second quarter

DRAF 1400 Manufacturing Process Design	9.0
DRAF 2300 Creo (Pro/E) Fundamentals	9.0
English level II	4.5
MATH 1310 Intermediate Algebra	4.5

Third quarter

DRAF 1300 Inventor Fundamentals	9.0
DRAF 2200 Machine Design Principles	9.0
Humanities/social sciences	4.5

Fourth quarter

DRAF 1200 Design for Precision (Measurement)	9.0
DRAF 2400 Tool Design Processes	9.0
HMRL 1010 Human Relations Skills	4.5

Curriculum Plan – After Two Years

First Year

First quarter

DRAF 1100 AutoCAD Fundamentals	9.0
English level I	4.5
INFO 1001 Information Systems and Literacy	4.5

Second quarter

DRAF 1200 Design for Precision (Measurement)	9.0
English level II	4.5
MATH 1310 Intermediate Algebra	4.5

Third quarter

DRAF 1300 Inventor Fundamentals	9.0
Humanities/social sciences	4.5



Second Year**Fifth quarter**

DRAF 1400	Manufacturing Process Design	9.0
DRAF 2100	SolidWorks Fundamentals	9.0

Sixth quarter

DRAF 2200	Machine Design Principles	9.0
DRAF 2300	Creo (Pro/E) Fundamentals	9.0

Seventh quarter

DRAF 2400	Tool Design Processes	9.0
HMRL 1010	Human Relations Skills  	4.5

Mechanical Design Technology (DRTC1)

Award: Certificate of achievement

Pathway to associate degree: Mechanical Design Technology (DRAS1)

Program location: Fort Omaha Campus

This certificate of achievement provides students with basic skills in classical drafting techniques and computer-aided drafting. Employment opportunities in many phases of drafting exist in local industries.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Industrial-Technology/Mechanical-Design-Technology.aspx.

Graduation Requirements

General education	13.5
Major requirements	36.0
Total credit hours required	49.5

General education requirements (13.5 credit hrs.)**Communications**

English level I	4.5
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See Communications course options (p. 42)

Humanities/social sciences

Humanities/social sciences	4.5
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See Humanities/social sciences course options (p. 42)

Quantitative/numeracy skills

MATH 1310	Intermediate Algebra 	4.5
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Major requirements for Mechanical Design Technology (36.0 credit hrs.)

DRAF 1100	AutoCAD Fundamentals	9.0
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Students can take any design class after successful completion of DRAF 1100. Design classes include: DRAF 1200, DRAF 1400, DRAF 2200, and DRAF 2400.

Select one course from the following:

DRAF 1300	Inventor Fundamentals	9.0
DRAF 2100	SolidWorks Fundamentals	9.0
DRAF 2300	Creo (Pro/E) Fundamentals	9.0

Select two courses from the following:

DRAF 1200	Design for Precision (Measurement)	9.0
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DRAF 1400	Manufacturing Process Design	9.0
DRAF 2200	Machine Design Principles	9.0
DRAF 2400	Tool Design Processes	9.0

Computer-Aided Design (DCDSD)

Award: Career certificate

Pathway to associate degree: Mechanical Design Technology (DRAS1)

Program location: Fort Omaha Campus

This career certificate enables students to enhance their job-relevant skills in the workplace using CAD software. They are able to apply CAD software in the design of cams, gears, mechanisms, and other machine components.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Industrial-Technology/Mechanical-Design-Technology.aspx.

Requirements for Computer-Aided Design career certificate (27.0 credit hrs.)

DRAF 1100	AutoCAD Fundamentals	9.0
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Select two courses from the following:

DRAF 1200	Design for Precision (Measurement)	9.0
DRAF 1400	Manufacturing Process Design	9.0
DRAF 2200	Machine Design Principles	9.0
DRAF 2400	Tool Design Processes	9.0

Computer-Aided Drafting (DCASD)

Award: Career certificate

Pathway to associate degree: Mechanical Design Technology (DRAS1)

Program location: Fort Omaha Campus

This career certificate enables students to enhance their job-relevant skills in the workplace using CAD software. They are able to use 2-D and a variety of 3-D CAD solids modeling software to complete the drafting details and assemblies.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Industrial-Technology/Mechanical-Design-Technology.aspx.

Requirements for Computer-Aided Drafting career certificate (27.0 credit hrs.)

DRAF 1100	AutoCAD Fundamentals	9.0
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Select two courses from the following:

DRAF 1300	Inventor Fundamentals	9.0
DRAF 2100	SolidWorks Fundamentals	9.0
DRAF 2300	Creo (Pro/E) Fundamentals	9.0

Computer-Aided Manufacturing Design (DCMSD)

Award: Career certificate

Pathway to associate degree: Mechanical Design Technology (DRAS1)

Program location: Fort Omaha Campus

This career certificate enables students to enhance their job-relevant skills in the workplace using CAD software. They are able to apply CAD software and 3-D solids modeling in the design of mechanisms and other machine components.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Industrial-Technology/Mechanical-Design-Technology.aspx.

Requirements for Computer-Aided Manufacturing Design career certificate (27.0 credit hrs.)

DRAF 1100	AutoCAD Fundamentals	9.0
Select one course from the following:		
DRAF 1300	Inventor Fundamentals	9.0
DRAF 2100	SolidWorks Fundamentals	9.0
DRAF 2300	Creo (Pro/E) Fundamentals	9.0
Select one course from the following:		
DRAF 1200	Design for Precision (Measurement)	9.0
DRAF 1400	Manufacturing Process Design	9.0
DRAF 2200	Machine Design Principles	9.0
DRAF 2400	Tool Design Processes	9.0

Precision Machine Technology

The Precision Machine Technology program provides students with an education in advanced CNC machining techniques. Students learn the basics of shop safety as well as effective problem-solving and troubleshooting skills. Depending on the chosen degree option, students have the opportunity to learn the basic skills of a tool and die maker. Faculty with direct experience in the industry teach the courses with a strong hands-on approach to learning.

Degree: Associate in Applied Science

Precision Machine Technology - CNC and Tool and Die Technology

Precision Machine Technology - CNC Technology

Career Certificate

Precision Machine Basics

Precision Machine Technology Degree Options

Award: Associate in applied science degree

Program location: South Omaha Campus

This degree option provides education and training in machine tool operation and related subjects. This degree also prepares students for a career in tool and die-related fields. Students study die theory of blanking and notching dies. The student designs and constructs a basic die.

Options available under this degree are:

Precision Machine Technology – Precision Machine CNC and Tool and Die Technology (PMTAS) (p. 172)

Precision Machine Technology – Precision Machine CNC Technology (PMCAS) (p. 173)

Precision Machine Technology - CNC and Tool and Die Technology (PMTAS)

Award: Associate in applied science degree

Program location: South Omaha Campus

This degree option provides education and training in machine tool operation and related subjects. This degree also prepares students for a career in tool and die-related fields. Students study die theory of blanking and notching dies. The student designs and constructs a basic die.

Graduation Requirements

General education	27.0
Major requirements	4.5
Option requirements	74.0
Total credit hours required	105.5

General education requirements (27.0 credit hrs.)

Communications

English level I	4.5
English level II	4.5

See Communications course options (p. 42)

ENGL 1220 and ENGL 1240 are recommended.

Humanities/social sciences

Humanities/social sciences	4.5
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

See Humanities/social sciences course options (p. 42)

PSYC 1000 is recommended.

Quantitative/numeracy skills

MATH 1240	Applied Mathematics	4.5
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Additional

HMRL 1010	Human Relations Skills  	4.5
INFO 1001	Information Systems and Literacy  	4.5

Major requirements for Precision Machine Technology (4.5 credit hrs.)

INCT 1000	Industrial Safety and Health	4.5
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Option requirements for Precision Machine Technology – Precision Machine CNC and Tool and Die Technology (74.0 credit hrs.)

PRMA 1050	Print Reading	4.0
PRMA 1401	Machine Tool I	9.0
PRMA 1402	Machine Tool II	9.0
PRMA 1403	Machine Tool III	9.0
PRMA 1404	Machine Tool IV	9.0
PRMA 2410	CNC I	9.0
PRMA 2412	CNC II	4.0
PRMA 2414	CNC III	4.0
PRMA 2500	Tool and Die Technology	4.0
PRMA 2510	Die Design and Construction	4.0
DRAF 1100	AutoCAD Fundamentals	9.0

The degree option is an area of interest within a program. Although students may complete single or multiple options within this program, only the major degree is awarded.

Precision Machine Technology – CNC Technology (PMTAS)

Award: Associate in applied science degree

Program location: South Omaha Campus

This degree option provides education and training in machine tool operation and related subjects. Instruction covers bench layout, machine tool operation and metal removal processes, measuring devices, and classifications of materials. Training includes hands-on activity and individualized instruction.

Graduation Requirements

General education	27.0
Major requirements	4.5
Option requirements	66.0
Total credit hours required	97.5

General education requirements (27.0 credit hrs.)

Communications

English level I	4.5
English level II	4.5

See Communications course options (p. 42)
ENGL 1220 and ENGL 1240 are recommended.

Humanities/social sciences



Humanities/social sciences	4.5
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See Humanities/social sciences course options (p. 42)
PSYC 1000 is recommended.

Quantitative/numeracy skills

MATH 1240	Applied Mathematics	4.5
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Additional

HMRL 1010	Human Relations Skills 	4.5
INFO 1001	Information Systems and Literacy 	4.5

Major requirements for Precision Machine Technology (4.5 credit hrs.)

INCT 1000	Industrial Safety and Health	4.5
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Option requirements for Precision Machine Technology – Precision Machine CNC Technology (66.0 credit hrs.)

PRMA 1050	Print Reading	4.0
PRMA 1401	Machine Tool I	9.0
PRMA 1402	Machine Tool II	9.0
PRMA 1403	Machine Tool III	9.0
PRMA 1404	Machine Tool IV	9.0
PRMA 2410	CNC I	9.0
PRMA 2412	CNC II	4.0
PRMA 2414	CNC III	4.0
DRAF 1100	AutoCAD Fundamentals	9.0

The degree option is an area of interest within a program. Although students may complete single or multiple options within this program, only the major degree is awarded.

Precision Machine Basics (PMBCC)

Award: Career certificate

Pathway to associate degree: Precision Machine Technology: CNC and Tool and Die Technology (PMTAS); or CNC Technology (PMTAS)

Program location: South Omaha Campus

This career certificate enhances the skills needed for positions as millwrights, machinists, mechanics, and production workers.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Industrial-Technology/Mechanical-Design-Technology.aspx.

Requirements for Precision Machine Basics career certificate (31.5 credit hrs.)

INCT 1000	Industrial Safety and Health	4.5
PRMA 1401	Machine Tool I	9.0
PRMA 1402	Machine Tool II	9.0
PRMA 1403	Machine Tool III	9.0

Process Operations Technology

This program provides training and advancement opportunities for entry-level employees in a variety of continuous process operating plants. These include ethanol and bio-diesel plants along with other bio-processing industries. A complete power plant operations option is also available. Students are trained to operate and maintain process plants and power generating plants. Hands-on training in lab settings simulates real work environments.

Degree: Associate in Applied Science

- Process Operations Technology - Bio-Processing
- Process Operations Technology - Manufacturing Process Operations
- Process Operations Technology - Nuclear Power Plant Non-Licensed Operator
- Process Operations Technology - Power Plant

Career Certificates:

- Manufacturing Process Operations
- Stationary Engineer

Process Operations Technology Degree Options

Award: Associate in applied science degree

Program location: South Omaha Campus

The Process Operations Technology Program prepares students for employment in industries that require continuous monitoring, operation, and maintenance of production and manufacturing processes. Operator technicians, production technicians, and stationary engineers are trained for employment in ethanol plants, bio-diesel plants, fossil-fueled and nuclear power generating plants, boiler/chiller (thermal) plants, manufacturing plants, and other bio-processing industries.

Contact an advisor, counselor or program instructor for details about these learning opportunities.

Options available under this degree are:

- Process Operations Technology – Bio-Processing (PRBPO) (p. 174)
- Process Operations Technology - Manufacturing Process Operations (PRMPO) (p. 175)
- Process Operations Technology – Nuclear Power Plant Non-Licensed Operator (PRPNO) (p. 175)
- Process Operations Technology – Power Plant (PRPPO) (p. 176)

Process Operations Technology – Bio-Processing (PRBPO)

Award: Associate in applied science degree

Program location: South Omaha Campus

Bio-technology generally involves the use of live cells and their molecules to produce useful products. The ethanol and bio-diesel industries are examples where bio-technology is used in the production process. This degree option provides entry-level

training in maintaining, monitoring, and controlling equipment and processes used in bio-processing industries.

Graduation Requirements

General education	27.0
Major requirements	38.0
Option requirements	35.0
Total credit hours required	100.0

General education requirements (27.0 credit hrs.)

Communications

ENGL 1220	Technical Writing ☞	4.5
ENGL 1240	Oral and Written Reports ☞	4.5

Humanities/social sciences

Humanities/social sciences	4.5
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See Humanities/social sciences course options (p. 42)

Quantitative/numeracy skills

MATH 1240	Applied Mathematics	4.5
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Additional

HMRL 1010	Human Relations Skills ☞	4.5
INFO 1001	Information Systems and Literacy ☞	4.5

Major requirements for Process Operations Technology (38.0 credit hrs.)

PROT 1010	Safety Topics for Process and Power Operations	variable
	OR	
INCT 1000	Industrial Safety and Health	4.5
PROT 1100	Process Instrumentation and Control	4.5
PROT 1302	Stationary Engineering I	3.0
PROT 2302	Stationary Engineering II	4.0
PROT 1110	Reading and Understanding Process Diagrams	2.0
INCT 2050	Problem-Solving	3.0
INCT 2060	Mechanical Power Systems	4.0
INCT 2070	Hydraulics and Pneumatics	4.0
PHYS 1010	Applied Physics	4.5
PHYS 1010L	Applied Physics Lab	0.0
WORK 1401	Employability Skills for Process, Power, and Energy-Related Fields	4.5
	OR	
PROT 2981	PROT Internship	4.5

Option requirements for Process Operations Technology – Bio-Processing (35.0 credit hrs.)

PROT 1250	Basic Electricity for Power and Process	6.0
BIOS 1500	Introduction to Bioprocessing	4.5
BIOS 1500L	Introduction to Bioprocessing Lab	0.0
MATH 1310	Intermediate Algebra ☞	4.5

CHEM 1510	Chemistry for Bioindustry I	3.0
CHEM 1510L	Chemistry for Bioindustry I Lab	0.0
CHEM 1520	Chemistry for Bioindustry II	3.0
CHEM 1520L	Chemistry for Bioindustry II Lab	0.0
PROT 2210	Ethanol Process Fundamentals	3.5
PROT 2200	Dynamics of Process Control	4.5

Select one of the following groups:

CHEM 1210	General Chemistry: Part I	2.0
CHEM 1210L	General Chemistry: Part I Lab	0.0
CHEM 1211	General Chemistry: Part II	4.0
CHEM 1211L	General Chemistry: Part II Lab	0.0
	OR	
CHEM 1212	General Chemistry I: Accelerated	6.0
CHEM 1212L	General Chemistry I: Accelerated Lab	0.0

The degree option is an area of interest within a program. Although students may complete single or multiple options within this program, only the major degree is awarded.

Process Operations Technology - Manufacturing Process Operations (PRMPO)

Award: Associate in applied science degree

Program location: South Omaha Campus

Diversified manufacturing requires multi-skilled operator and production technicians to operate, monitor, and maintain various manufacturing processes. This degree option provides education and training related to manufacturing in safety, instrumentation and processes control, power transmission, maintenance procedures and programs, and quality and continuous improvement.

Graduation Requirements

General education	27.0
Major requirements	38.0
Option requirements	35.0
Total credit hours required	100.0

General education requirements (27.0 credit hrs.)

Communications

ENGL 1220	Technical Writing ☞	4.5
ENGL 1240	Oral and Written Reports ☞	4.5

Humanities/social sciences

Humanities/social sciences 4.5

See Humanities/social sciences course options (p. 42)

Quantitative/numeracy skills

MATH 1240	Applied Mathematics	4.5
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Additional

HMRL 1010	Human Relations Skills ☞ ☹	4.5
INFO 1001	Information Systems and Literacy ☞ ☹	4.5

Major requirements for Process Operations Technology (38.0 credit hrs.)

PROT 1010	Safety Topics for Process and Power Operations OR	variable
INCT 1000	Industrial Safety and Health	4.5
PROT 1100	Process Instrumentation and Control	4.5
PROT 1302	Stationary Engineering I	3.0
PROT 2302	Stationary Engineering II	4.0
PROT 1110	Reading and Understanding Process Diagrams	2.0
INCT 2050	Problem-Solving	3.0
INCT 2060	Mechanical Power Systems	4.0
INCT 2070	Hydraulics and Pneumatics	4.0
PHYS 1010	Applied Physics	4.5
PHYS 1010L	Applied Physics Lab	0.0
WORK 1401	Employability Skills for Process, Power, and Energy-Related Fields OR	4.5
PROT 2981	PROT Internship	4.5

Option requirements for Process Operations Technology - Manufacturing Process Operations (35.0 credit hrs.)

Courses

PROT 1000	Introduction to Process and Power Operations	variable
PROT 1020	Introduction to Process Operations in Manufacturing Technology ☹	4.5
PROT 1030	Introduction to Quality and Continuous Improvement ☹	4.5
ELTR 1200	Basic Electricity	8.0
INCT 1212	Motor and Machine Controls	9.0
INCT 2231	Programmable Logic Controllers I	4.5

Process Operations Technology – Nuclear Power Plant Non-Licensed Operator (PRPNO)

Award: Associate in applied science degree

Program location: South Omaha Campus

Nuclear power plants produce steam to be used in the production of electricity. This degree option provides entry-level training in maintaining, monitoring, and controlling equipment, systems, and processes found in both fossil- and nuclear-fueled power generating plants.

Graduation Requirements

General education	27.0
Major requirements	38.0
Option requirements	43.5
Total credit hours required	108.5

General education requirements (27.0 credit hrs.)

Communications

ENGL 1220	Technical Writing ☞	4.5
ENGL 1240	Oral and Written Reports ☞	4.5

Humanities/social sciences

Humanities/social sciences	4.5
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See Humanities/social sciences course options (p. 42)

Quantitative/numeracy skills

MATH 1240	Applied Mathematics	4.5
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Additional

HMRL 1010	Human Relations Skills ☞ ☹	4.5
INFO 1001	Information Systems and Literacy ☞ ☹	4.5

Major requirements for Process Operations Technology (38.0 credit hrs.)

PROT 1010	Safety Topics for Process and Power Operations OR	variable
INCT 1000	Industrial Safety and Health	4.5
PROT 1100	Process Instrumentation and Control	4.5
PROT 1302	Stationary Engineering I	3.0
PROT 2302	Stationary Engineering II	4.0
PROT 1110	Reading and Understanding Process Diagrams	2.0
INCT 2050	Problem-Solving	3.0
INCT 2060	Mechanical Power Systems	4.0
INCT 2070	Hydraulics and Pneumatics	4.0
PHYS 1010	Applied Physics	4.5
PHYS 1010L	Applied Physics Lab	0.0
WORK 1401	Employability Skills for Process, Power, and Energy-Related Fields OR	4.5
PROT 2981	PROT Internship	4.5

Option requirements for Process Operations Technology – Nuclear Power Plant Non-Licensed Operator (43.5 credit hrs.)

PROT 1250	Basic Electricity for Power and Process	6.0
PROT 2310	Steam Plant Operation I	4.5
PROT 2320	Steam Plant Operation II	4.5
PROT 2330	Steam Plant Operation III	6.0
PROT 2410	Nuclear Plant Operation I	4.5
PROT 2420	Nuclear Plant Operation II	3.0
CHEM 1010	College Chemistry ☞	6.0
CHEM 1010L	College Chemistry Lab	0.0
MATH 1310	Intermediate Algebra ☞	4.5
MATH 1410	Statistics ☞	4.5

The degree option is an area of interest within a program. Although students may complete single or multiple options within this program, only the major degree is awarded.

Process Operations Technology – Power Plant (PRPPO)

Award: Associate in applied science degree

Program location: South Omaha Campus

Many industries produce steam to be used in process and operations. This degree option provides entry-level training in maintaining, operating, and controlling equipment that produces and uses steam in fossil-fueled industrial and power generating plants.

Graduation Requirements

General education	27.0
Major requirements	38.0
Option requirements	34.5
Total credit hours required	99.5

General education requirements (27.0 credit hrs.)

Communications

ENGL 1220	Technical Writing ☞	4.5
ENGL 1240	Oral and Written Reports ☞	4.5

Humanities/social sciences

Humanities/social sciences	4.5
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See Humanities/social sciences course options (p. 42)

Quantitative/numeracy skills

MATH 1240	Applied Mathematics	4.5
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Additional

HMRL 1010	Human Relations Skills ☞ ☹	4.5
INFO 1001	Information Systems and Literacy ☞ ☹	4.5

Major requirements for Process Operations Technology (38.0 credit hrs.)

PROT 1010	Safety Topics for Process and Power Operations OR	variable
INCT 1000	Industrial Safety and Health	4.5
PROT 1100	Process Instrumentation and Control	4.5
PROT 1302	Stationary Engineering I	3.0
PROT 2302	Stationary Engineering II	4.0
PROT 1110	Reading and Understanding Process Diagrams	2.0
INCT 2050	Problem-Solving	3.0
INCT 2060	Mechanical Power Systems	4.0
INCT 2070	Hydraulics and Pneumatics	4.0

PHYS 1010	Applied Physics	4.5
PHYS 1010L	Applied Physics Lab	0.0
WORK 1401	Employability Skills for Process, Power, and Energy-Related Fields OR	4.5
PROT 2981	PROT Internship	4.5

Option requirements for Process Operations Technology – Power Plant (34.5 credit hrs.)

PROT 1250	Basic Electricity for Power and Process	6.0
PROT 1320	Fuel Handling	3.0
PROT 2310	Steam Plant Operation I	4.5
PROT 2320	Steam Plant Operation II	4.5
PROT 2330	Steam Plant Operation III	6.0
MATH 1310	Intermediate Algebra	4.5
CHEM 1010	College Chemistry	6.0
CHEM 1010L	College Chemistry Lab	0.0

The degree option is an area of interest within a program. Although students may complete single or multiple options within this program, only the major degree is awarded.

Manufacturing Process Operations (PRMCC)

Award: Career certificate

Pathway to associate degree: Process Operations Technology - Manufacturing Process Operations (PRMPO)

Program location: South Omaha Campus

Students who complete the Manufacturing Process Operations career certificate learn the enhanced skills required for understanding the shift work, processes, and operations found in various manufacturing industries.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mcneb.edu/Academics/Programs-of-Study/Industrial-Technology/Mechanical-Design-Technology.aspx.

Requirements for Manufacturing Process Operations career certificate (32.0 credit hrs.)

PROT 1000	Introduction to Process and Power Operations	variable
PROT 1010	Safety Topics for Process and Power Operations	variable
PROT 1020	Introduction to Process Operations in Manufacturing Technology	4.5
PROT 1030	Introduction to Quality and Continuous Improvement	4.5
PROT 1302	Stationary Engineering I	3.0

ELTR 1200	Basic Electricity	8.0
WORK 1401	Employability Skills for Process, Power, and Energy-Related Fields OR	4.5
PROT 2981	PROT Internship	4.5

Stationary Engineer (PRESD)

Award: Career certificate

Pathway to associate degree: Process Operations Technology - Nuclear Power Plant Non-Licensed Operator (PRPNO)

Program location: South Omaha Campus

This career certificate provides enhanced skills required for understanding the shift work and procedures required in the operation and maintenance of boilers and auxiliary equipment used in the power and process industries.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mcneb.edu/Academics/Programs-of-Study/Industrial-Technology/Process-Operations-and-Power-Plant-Technology.aspx.

Requirements for Stationary Engineer career certificate (32.5 credit hrs.)

PROT 1250	Basic Electricity for Power and Process	6.0
PROT 1302	Stationary Engineering I	3.0
PROT 2302	Stationary Engineering II	4.0
PROT 2310	Steam Plant Operation I	4.5
PROT 2320	Steam Plant Operation II	4.5
PROT 2330	Steam Plant Operation III	6.0
WORK 1401	Employability Skills for Process, Power, and Energy-Related Fields OR	4.5
PROT 2981	PROT Internship	4.5

Utility Line Technician

This program prepares students to enter the power utility industry. The coursework instructs students in the theory and practical application to install and repair power lines; climb poles and towers; make transformer connections; and operate digger-derrick equipment, backhoes, trenchers, cable stringing equipment, and basket trucks.

Degree: Associate in Applied Science

Utility Line Technician

Utility Line Technician (UTAAS)

Award: Associate in applied science degree

Program location: Applied Technology Center

This degree prepares students to enter the power utility industry. The coursework instructs students in the theory and practical application to install and repair power lines; climb poles and towers; make transformer connections; and operate digger-derrick equipment, backhoes, trenchers, cable stringing equipment, and basket trucks.

Entrance into the Utility Line Technician program is determined by an application process. Contact an academic advisor or faculty member to acquire an application packet. Applications can also be completed online at <https://www.mccneb.edu/Academic-Programs/Programs-of-Study/Applied-Technologies/Utility-Line/Application-Form-for-Admission.aspx>

Graduation Requirements

General education	27.0
Major requirements	73.0-74.5
Total credit hours required	100.0-101.5

General education requirements (27.0 credit hrs.)

Communications

English level I	4.5
English level II	4.5

See Communications course options (p. 42)

ENGL 1220 and ENGL 1240 are recommended.

Humanities/social sciences

Humanities/social sciences	4.5
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See Humanities/social sciences course options (p. 42)

PSYC 1000 is recommended.

Quantitative/numeracy skills

Mathematics or Financial Literacy	4.5
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See Quantitative/numeracy skills course options (p. 44)

MATH 1240 is recommended.

Additional

HMRL 1010	Human Relations Skills	4.5
INFO 1001	Information Systems and Literacy	4.5

Major requirements for Utility Line Technician (73.0-74.5 credit hrs.)

DESL 131U	CDL Training for Utility Line	3.5
UTIL 1010	Pole Climbing	4.5
UTIL 1020	Electricity I	5.5
UTIL 1030	Ropes, Rigging, and Safety	4.5
UTIL 1110	Line Construction I	5.5
UTIL 1240	Underground Distribution Systems I	5.5
UTIL 2020	Transformer Theory	5.5
UTIL 2030	Secondary Electrical Systems	4.5

UTIL 2110	Line Construction II	5.5
UTIL 2210	Overhead Distribution Systems I	5.5
UTIL 2220	Overhead Distribution Systems II	5.5
UTIL 2230	Distribution Systems Maintenance	4.5
UTIL 2240	Underground Distribution Systems II	4.5
EMSP 1010	Heartsaver First Aid with CPR and AED	1.0

DESL 131U is waived for students who currently hold a valid Class A CDL license with 0 restriction.

EMSP 1010 is waived for students who currently hold a valid CPR card.

Select a minimum of 7.5 credit hrs. from the following courses:

ELTR 1210	Residential Wiring	9.0
INCT 1000	Industrial Safety and Health	4.5
INCT 1212	Motor and Machine Controls	9.0
INCT 2050	Problem-Solving	3.0
UTIL 2981	Internship	8.0

Utility Line Technician Curriculum Plans

Curriculum Plans

Below is a suggested guide for the traditional and weekend options and a suggested guide for recent high school graduates. General education requirements can be completed before, during, or after the UTIL coursework is completed; however, completing the general education requirements before the UTIL classes improves students' chances of being accepted into the program. Students should contact Student Services to design a plan of study.

Traditional Track

First Year

First quarter (Fall)

DESL 131U	CDL Training for Utility Line	3.5
UTIL 1010	Pole Climbing	4.5
UTIL 1020	Electricity I	5.5
UTIL 1030	Ropes, Rigging, and Safety	4.5
UTIL 1110	Line Construction I	5.5

Second quarter (Winter)

UTIL 1240	Underground Distribution Systems I	5.5
UTIL 2020	Transformer Theory	5.5
UTIL 2110	Line Construction II	5.5
UTIL 2210	Overhead Distribution Systems I	5.5
EMSP 1010	Heartsaver First Aid with CPR and AED	1.0

Third quarter (Spring)

UTIL 2030	Secondary Electrical Systems	4.5
UTIL 2220	Overhead Distribution Systems II	5.5
UTIL 2230	Distribution Systems Maintenance	4.5
UTIL 2240	Underground Distribution Systems II	4.5

Fourth quarter (Summer)

Elective(s) 8.0

Weekend Track

First Year

First quarter (Spring)

UTIL 1010 Pole Climbing ☞ 4.5

UTIL 1030 Ropes, Rigging, and Safety ☞ 4.5

Second quarter (Summer)

DESL 131U CDL Training for Utility Line 3.5

UTIL 1020 Electricity I ☞ 5.5

UTIL 1110 Line Construction I ☞ 5.5

Third quarter (Fall)

UTIL 1240 Underground Distribution Systems I ☞ 5.5

UTIL 2210 Overhead Distribution Systems I ☞ 5.5

Fourth quarter (Winter)

UTIL 2020 Transformer Theory ☞ 5.5

UTIL 2110 Line Construction II ☞ 5.5

EMSP 1010 Heartsaver First Aid with CPR and AED 1.0

Second Year

Fifth quarter (Spring)

UTIL 2030 Secondary Electrical Systems ☞ 4.5

UTIL 2220 Overhead Distribution Systems II ☞ 5.5

Sixth quarter (Summer)

UTIL 2230 Distribution Systems Maintenance 4.5

UTIL 2240 Underground Distribution Systems II ☞ 4.5

Internship

UTIL 2981 Internship 8.0

UTIL 2981 can be taken after one year of study in the weekend option.

Recent High School Graduate Track

This track would allow students to satisfy all of the general education requirements and the elective requirements for the UTAAS degree. Students completing this track would be given preference in the admission process.

First quarter (Fall)

ELTR 1200 Basic Electricity 8.0

INFO 1001 Information Systems and Literacy ☞ ☞ 4.5

Mathematics 4.5

Second quarter (Winter)

ELTR 1210 Residential Wiring 9.0

EMSP 1010 Heartsaver First Aid with CPR and AED 1.0

English level I 4.5

Humanities/social sciences 4.5

Third quarter (Spring)

English level II 4.5

HMRL 1010 Human Relations Skills ☞ ☞ 4.5

INCT 1000 Industrial Safety and Health 4.5

NOTE: EMSP 1010 can be taken in any quarter it is offered.

Welding Technology

This program provides basic to advanced training in the major welding processes. Students completing the program are exposed to standard welding procedures used in construction and industry as well as established safety standards and measures. A fabrication project requires students to use their welding skills, including the reading of welding blueprints. Students graduating from the Welding Technology program earn the qualification/certification of their choice, which they can transfer from job to job.

Degree: Associate in Applied Science

Welding Technology

Certificate of Achievement:

Welding Technology - Manufacturing

Welding Technology - Pipe

Welding Technology - Structural

Career Certificates:

Gas Metal Arc Welding

Gas Tungsten Arc Welding

Shielded Metal Arc Welding

Pipe Welding

Welding Technology (WEAAS)

Award: Associate in applied science degree

Program location: South Omaha Campus

This degree provides basic to advanced training in the major welding processes. Students completing the program are exposed to standard welding procedures used in construction and industry as well as established safety standards and measures. A fabrication project that requires students to use their welding skills, including the reading of welding blueprints, is required. Students graduating from the Welding Technology program earn the qualification/certification of their choice, which they can transfer from job to job.

Graduation Requirements

General education	27.0
Major requirements	70.0
Electives	11.0
Total credit hours required	108.0

General education requirements (27.0 credit hrs.)

Communications

English level I	4.5
English level II	4.5

See Communications course options (p. 42)

ENGL 1220 and ENGL 1240 are recommended.

Humanities/social sciences

Humanities/social sciences	4.5
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See Humanities/social sciences course options (p. 42)

PSYC 1000 is recommended.

Quantitative/numeracy skills

Mathematics or Financial Literacy	4.5
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See Quantitative/numeracy skills course options (p. 44)

MATH 1240 is recommended.

Additional

HMRL 1010	Human Relations Skills	4.5
INFO 1001	Information Systems and Literacy	4.5

Major requirements for Welding Technology (70.0 credit hrs.)

Students can establish their own schedule in many welding courses through MCC's open-entry/open-exit process. Entrance into the program is determined by an Individual Education Plan (IEP) document. Students who are interested need to make an appointment to speak with an advisor at 531-622-4500 or make an appointment with a full-time instructor at 531-622-4567.

DRAF 1100	AutoCAD Fundamentals	9.0
WELD 1000	Print Reading for Welders	3.0
WELD 1100	Industrial Cutting Processes	3.0
WELD 1200	Gas Metal Arc Welding (MIG) - Steel I	3.0
WELD 1300	Oxy-Acetylene Welding	3.0
WELD 1400	Gas Tungsten Arc Welding (TIG) - Steel I	3.0
WELD 1410	Gas Tungsten Arc Welding (TIG) - Stainless I	3.0
WELD 1420	Gas Tungsten Arc Welding (TIG) - Aluminum I	3.0
WELD 1500	Shielded Metal Arc Welding (Stick) - Flat	3.0
WELD 1510	Shielded Metal Arc Welding (Stick) - Vertical	3.0
WELD 1700	Introductory Fabrication	3.0
WELD 2200	Gas Metal Arc Welding (MIG) - Steel II	3.0
WELD 2220	Gas Metal Arc Welding (MIG) - Stainless	3.0
WELD 2230	Gas Metal Arc Welding (MIG) - Aluminum	3.0
WELD 2240	Flux-Cored Arc Welding I	3.0
WELD 2242	Submerged Arc and Metal-Cored Welding	3.0
WELD 2400	Gas Tungsten Arc Welding (TIG) - Steel II	3.0
WELD 2500	Shielded Metal Arc Welding (Stick) - Horizontal	3.0
WELD 2510	SMAW (Stick) - Overhead	3.0
WELD 2710	Industrial Fabrication Project	3.0
WELD 2810	Welder Pre-Qualification	3.0
WELD 2820	Welder Qualification (Certification)	1.0

Electives for Welding Technology (11.0 credit hrs.)**Select 11.0 credit hours from the following:**

BSAD 1000	Introduction to Business	4.5
BSAD 2610	Labor and Management Relations	4.5
ELTR 1200	Basic Electricity	8.0
INCT 1000	Industrial Safety and Health	4.5
INCT 2070	Hydraulics and Pneumatics	4.0
PRMA 1401	Machine Tool I	9.0
WELD 2241	Flux-Cored Arc Welding II	3.0
WELD 2410	Gas Tungsten Arc Welding (TIG) - Stainless II	3.0
WELD 2420	Gas Tungsten Arc Welding (TIG) - Aluminum II	3.0
WELD 2520	Shielded Metal Arc Welding (Stick) - Pipe I	3.0
WELD 2530	Shielded Metal Arc Welding (Stick) - Pipe II	3.0
WELD 2540	Shielded Metal Arc Welding (Stick) - Pipe III	3.0
WELD 2600	Gas Shielded Arc Welding - Pipe	3.0

Attendance at the first class session is mandatory for all welding lab sections.

Welding Technology Curriculum Plans**Curriculum Plan – One-and-a-Half Years of Full-Time Study**

Below is a suggested guide for students planning careers in welding technology after one-and-a-half years of full-time study. This plan is best implemented under the open-entry, open-exit program.

First Year**First quarter**





INFO 1001	Information Systems and Literacy	4.5
WELD 1000	Print Reading for Welders	3.0
WELD 1100	Industrial Cutting Processes	3.0
WELD 1200	Gas Metal Arc Welding (MIG) - Steel I	3.0
WELD 2200	Gas Metal Arc Welding (MIG) - Steel II	3.0

Second quarter

Mathematics	4.5	
WELD 2220	Gas Metal Arc Welding (MIG) - Stainless	3.0
WELD 2230	Gas Metal Arc Welding (MIG) - Aluminum	3.0
WELD 2240	Flux-Cored Arc Welding I	3.0
WELD 2242	Submerged Arc and Metal-Cored Welding	3.0

Third quarter

HMRL 1010	Human Relations Skills	4.5
WELD 1500	Shielded Metal Arc Welding (Stick) - Flat	3.0

WELD 1510	Shielded Metal Arc Welding (Stick) - Vertical	3.0	WELD 2242	Submerged Arc and Metal-Cored Welding	3.0
WELD 2500	Shielded Metal Arc Welding (Stick) - Horizontal	3.0	Fourth quarter		
WELD 2510	SMAW (Stick) - Overhead	3.0		English level I	4.5
Fourth quarter			WELD 1510	Shielded Metal Arc Welding (Stick) - Vertical	3.0
	English level I	4.5	WELD 2500	Shielded Metal Arc Welding (Stick) - Horizontal	3.0
WELD 1300	Oxy-Acetylene Welding	3.0	WELD 2510	SMAW (Stick) - Overhead	3.0
WELD 1400	Gas Tungsten Arc Welding (TIG) - Steel I	3.0	Second Year		
WELD 1410	Gas Tungsten Arc Welding (TIG) - Stainless I	3.0	Fifth quarter		
WELD 1700	Introductory Fabrication	3.0		English level II	4.5
Second Year			WELD 1300	Oxy-Acetylene Welding	3.0
Fifth quarter			WELD 1400	Gas Tungsten Arc Welding (TIG) - Steel I	3.0
DRAF 1100	AutoCAD Fundamentals	9.0	WELD 1700	Introductory Fabrication	3.0
	Electives	1.0-6.5	Sixth quarter		
WELD 1420	Gas Tungsten Arc Welding (TIG) - Aluminum I	3.0	DRAF 1100	AutoCAD Fundamentals	9.0
Sixth quarter			WELD 1410	Gas Tungsten Arc Welding (TIG) - Stainless I	3.0
	Electives	1.0-6.5	Seventh quarter		
	English level II	4.5		Electives	3.0-6.5
WELD 2400	Gas Tungsten Arc Welding (TIG) - Steel II	3.0		Humanities/social sciences	4.5
WELD 2710	Industrial Fabrication Project	3.0	WELD 1420	Gas Tungsten Arc Welding (TIG) - Aluminum I	3.0
Seventh quarter			WELD 2400	Gas Tungsten Arc Welding (TIG) - Steel II	3.0
	Humanities/social sciences	4.5	Eighth quarter		
WELD 2810	Welder Pre-Qualification	3.0		Electives	3.0-6.5
WELD 2820	Welder Qualification (Certification)	1.0	WELD 2710	Industrial Fabrication Project	3.0
Curriculum Plan – Two Years of Full-Time Study			WELD 2810	Welder Pre-Qualification	3.0
Below is a suggested guide for students planning careers in welding technology after two years of full-time study.			WELD 2820	Welder Qualification (Certification)	1.0
First Year					
First quarter					
INFO 1001	Information Systems and Literacy  	4.5			
WELD 1000	Print Reading for Welders	3.0			
WELD 1100	Industrial Cutting Processes	3.0			
WELD 1200	Gas Metal Arc Welding (MIG) - Steel I	3.0			
Second quarter					
	Mathematics	4.5			
WELD 2200	Gas Metal Arc Welding (MIG) - Steel II	3.0			
WELD 2220	Gas Metal Arc Welding (MIG) - Stainless	3.0			
WELD 2230	Gas Metal Arc Welding (MIG) - Aluminum	3.0			
Third quarter					
HMRL 1010	Human Relations Skills  	4.5			
WELD 1500	Shielded Metal Arc Welding (Stick) - Flat	3.0			
WELD 2240	Flux-Cored Arc Welding I	3.0			

Welding Technology Certificate Options

Award: Certificate of achievement

Pathway to associate degree: Welding Technology (WEAAS)

Program location: South Omaha Campus

This certificate of achievement provides students with basic skills in oxy-acetylene, shielded metal arc, gas metal arc, and gas tungsten arc welding. The program is primarily devoted to skill building, which provides students with the opportunity for employment in local industry.

Options available under this certificate are:

Welding Technology – Manufacturing (WELMO) (p. 182)

Welding Technology – Pipe (WELPO) (p. 182)

Welding Technology – Structural (WELSO) (p. 183)

Welding Technology – Manufacturing (WELMO)

Award: Certificate of achievement

Pathway to associate degree: Welding Technology (WEAAS)

Program location: South Omaha Campus

This certificate of achievement provides students with basic welding skills needed to work in manufacturing industries. Students completing the program are exposed to print reading with special focus on interpreting welding symbols as well as skill training in plasma cutting; gas metal arc welding (MIG); gas tungsten arc welding (TIG) of steel, stainless steel, and aluminum; and flux-cored arc welding (FCAW).

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Industrial-Technology/Welding-Technology.aspx.

Graduation Requirements

General education	13.5
Major requirements	21.0
Option and elective requirements	21.0
Total credit hours required	55.5

General education requirements (13.5 credit hrs.)

Communications

English level I	4.5
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See Communications course options (p. 42)

Humanities/social sciences

Humanities/social sciences	4.5
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See Humanities/social sciences course options (p. 42)

Quantitative/numeracy skills

Mathematics or Financial Literacy	4.5
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See Quantitative/numeracy skills course options (p. 44)

Major requirements for Welding Technology (21.0 credit hrs.)

WELD 1000	Print Reading for Welders	3.0
WELD 1100	Industrial Cutting Processes	3.0

WELD 1200	Gas Metal Arc Welding (MIG) - Steel I	3.0
WELD 1300	Oxy-Acetylene Welding	3.0
WELD 1400	Gas Tungsten Arc Welding (TIG) - Steel I	3.0
WELD 1500	Shielded Metal Arc Welding (Stick) - Flat	3.0
WELD 2200	Gas Metal Arc Welding (MIG) - Steel II	3.0

Option requirements for Welding Technology – Manufacturing (15.0 credit hrs.)

WELD 1410	Gas Tungsten Arc Welding (TIG) - Stainless I	3.0
WELD 1420	Gas Tungsten Arc Welding (TIG) - Aluminum I	3.0
WELD 2220	Gas Metal Arc Welding (MIG) - Stainless	3.0
WELD 2230	Gas Metal Arc Welding (MIG) - Aluminum	3.0
WELD 2240	Flux-Cored Arc Welding I	3.0

Electives for Welding Technology – Manufacturing (6.0 credit hrs.)

WELD 1300	Oxy-Acetylene Welding	3.0
WELD 2241	Flux-Cored Arc Welding II	3.0
WELD 2242	Submerged Arc and Metal-Cored Welding	3.0
WELD 2400	Gas Tungsten Arc Welding (TIG) - Steel II	3.0
WELD 2410	Gas Tungsten Arc Welding (TIG) - Stainless II	3.0
WELD 2420	Gas Tungsten Arc Welding (TIG) - Aluminum II	3.0
WELD 2600	Gas Shielded Arc Welding - Pipe	3.0
WELD 2810	Welder Pre-Qualification	3.0
WELD 2820	Welder Qualification (Certification)	1.0

The certificate option is an area of interest within a program. Although students may complete single or multiple options within this program, only the major certificate is awarded.

Welding Technology – Pipe (WELPO)

Award: Certificate of achievement

Pathway to associate degree: Welding Technology (WEAAS)

Program location: South Omaha Campus

This certificate of achievement provides students with basic welding skills needed to work in industries where welding of low-pressure pipe is required. Students who complete the program are exposed to print reading with special focus on interpreting welding symbols as well as skill training in oxy-fuel cutting, shielded metal arc welding (stick), gas metal arc welding (MIG) of steel pipe, and flux-cored arc welding (FCAW) of plate.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Industrial-Technology/Welding-Technology.aspx.

Graduation Requirements

General education	13.5
Major requirements	21.0
Option and elective requirements	21.0
Total credit hours required	55.5

General education requirements (13.5 credit hrs.)

Communications

English level I	4.5
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See Communications course options (p. 42)

Humanities/social sciences

Humanities/social sciences	4.5
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See Humanities/social sciences course options (p. 42)

Quantitative/numeracy skills

Mathematics or Financial Literacy	4.5
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See Quantitative/numeracy skills course options (p. 44)

Major requirements for Welding Technology (21.0 credit hrs.)

WELD 1000	Print Reading for Welders	3.0
WELD 1100	Industrial Cutting Processes	3.0
WELD 1200	Gas Metal Arc Welding (MIG) - Steel I	3.0
WELD 1300	Oxy-Acetylene Welding	3.0
WELD 1400	Gas Tungsten Arc Welding (TIG) - Steel I	3.0
WELD 1500	Shielded Metal Arc Welding (Stick) - Flat	3.0
WELD 2200	Gas Metal Arc Welding (MIG) - Steel II	3.0

Option requirements for Welding Technology – Pipe (15.0 credit hrs.)

WELD 1510	Shielded Metal Arc Welding (Stick) - Vertical	3.0
WELD 2500	Shielded Metal Arc Welding (Stick) - Horizontal	3.0
WELD 2510	SMAW (Stick) - Overhead	3.0
WELD 2520	Shielded Metal Arc Welding (Stick) - Pipe I	3.0
WELD 2530	Shielded Metal Arc Welding (Stick) - Pipe II	3.0

Electives for Welding Technology – Pipe (6.0 credit hrs.)

WELD 1300	Oxy-Acetylene Welding	3.0
WELD 1410	Gas Tungsten Arc Welding (TIG) - Stainless I	3.0
WELD 1420	Gas Tungsten Arc Welding (TIG) - Aluminum I	3.0
WELD 2220	Gas Metal Arc Welding (MIG) - Stainless	3.0
WELD 2230	Gas Metal Arc Welding (MIG) - Aluminum	3.0
WELD 2240	Flux-Cored Arc Welding I	3.0
WELD 2241	Flux-Cored Arc Welding II	3.0
WELD 2400	Gas Tungsten Arc Welding (TIG) - Steel II	3.0
WELD 2410	Gas Tungsten Arc Welding (TIG) - Stainless II	3.0
WELD 2420	Gas Tungsten Arc Welding (TIG) - Aluminum II	3.0
WELD 2540	Shielded Metal Arc Welding (Stick) - Pipe III	3.0
WELD 2810	Welder Pre-Qualification	3.0
WELD 2820	Welder Qualification (Certification)	1.0

The certificate option is an area of interest within a program. Although students may complete single or multiple options within this program, only the major certificate is awarded.

Welding Technology – Structural (WELSO)

Award: Certificate of achievement

Pathway to associate degree: Welding Technology (WEAAS)

Program location: South Omaha Campus

This certificate of achievement provides students with basic welding skills needed to do structural welding either in construction (e.g., as an ironworker) or as a structural steel fabricator. Students completing the program are exposed to print reading with special focus on interpreting welding symbols as well as skill training in oxy-fuel cutting, shielded metal arc welding (stick), gas metal arc welding (MIG), flux-cored arc welding (FCAW), and gas tungsten arc welding (TIG).

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Industrial-Technology/Welding-Technology.aspx.

Graduation Requirements

General education	13.5
Major requirements	21.0
Option and elective requirements	21.0
Total credit hours required	55.5

General education requirements (13.5 credit hrs.)**Communications**

English level I 4.5

See Communications course options (p. 42)

Humanities/social sciences

Humanities/social sciences 4.5

See Humanities/social sciences course options (p. 42)

Quantitative/numeracy skills

Mathematics or Financial Literacy 4.5

See Quantitative/numeracy skills course options (p. 44)

Major requirements for Welding Technology (21.0 credit hrs.)

WELD 1000	Print Reading for Welders	3.0
WELD 1100	Industrial Cutting Processes	3.0
WELD 1200	Gas Metal Arc Welding (MIG) - Steel I	3.0
WELD 1300	Oxy-Acetylene Welding	3.0
WELD 1400	Gas Tungsten Arc Welding (TIG) - Steel I	3.0
WELD 1500	Shielded Metal Arc Welding (Stick) - Flat	3.0
WELD 2200	Gas Metal Arc Welding (MIG) - Steel II	3.0

Option requirements for Welding Technology – Structural (15.0 credit hrs.)

WELD 1510	Shielded Metal Arc Welding (Stick) - Vertical	3.0
WELD 2240	Flux-Cored Arc Welding I	3.0
WELD 2400	Gas Tungsten Arc Welding (TIG) - Steel II	3.0
WELD 2500	Shielded Metal Arc Welding (Stick) - Horizontal	3.0
WELD 2510	SMAW (Stick) - Overhead	3.0

Electives for Welding Technology – Structural (6.0 credit hrs.)**Select 6.0 credits from the following:**

WELD 1410	Gas Tungsten Arc Welding (TIG) - Stainless I	3.0
WELD 1420	Gas Tungsten Arc Welding (TIG) - Aluminum I	3.0
WELD 2241	Flux-Cored Arc Welding II	3.0
WELD 2242	Submerged Arc and Metal-Cored Welding	3.0
WELD 2410	Gas Tungsten Arc Welding (TIG) - Stainless II	3.0
WELD 2420	Gas Tungsten Arc Welding (TIG) - Aluminum II	3.0
WELD 2520	Shielded Metal Arc Welding (Stick) - Pipe I	3.0

WELD 2530	Shielded Metal Arc Welding (Stick) - Pipe II	3.0
WELD 2540	Shielded Metal Arc Welding (Stick) - Pipe III	3.0
WELD 2810	Welder Pre-Qualification	3.0
WELD 2820	Welder Qualification (Certification)	1.0

The certificate option is an area of interest within a program. Although students may complete single or multiple options within this program, only the major certificate is awarded.

Gas Metal Arc Welding (WGMSD)**Award:** Career certificate**Pathway to associate degree:** Welding Technology (WEAAS)**Program location:** South Omaha Campus

This career certificate is for students wishing to concentrate their studies on wire-based processes, procedures, and techniques. Students learn to read prints and interpret welding symbols; safely and skillfully use oxy-fuel, plasma, and air carbon arc cutting processes; safely and skillfully use gas metal arc and flux-cored arc welding equipment; produce sound fillet and groove welds in steel, stainless steel, and aluminum in all positions with gas metal arc welding using short-circuit, spray, and pulsed spray modes of metal transfer; and produce sound fillet and groove welds in steel using flux-cored arc welding.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Industrial-Technology/Welding-Technology.aspx.

Requirements for Gas Metal Arc Welding career certificate (27.0 credit hrs.)

WELD 1000	Print Reading for Welders	3.0
WELD 1100	Industrial Cutting Processes	3.0
WELD 1200	Gas Metal Arc Welding (MIG) - Steel I	3.0
WELD 2200	Gas Metal Arc Welding (MIG) - Steel II	3.0
WELD 2220	Gas Metal Arc Welding (MIG) - Stainless	3.0
WELD 2230	Gas Metal Arc Welding (MIG) - Aluminum	3.0
WELD 2240	Flux-Cored Arc Welding I	3.0
WELD 2241	Flux-Cored Arc Welding II	3.0
WELD 2242	Submerged Arc and Metal-Cored Welding	3.0

Gas Tungsten Arc Welding (WGTSD)**Award:** Career certificate**Pathway to associate degree:** Welding Technology (WEAAS)**Program location:** South Omaha Campus

This career certificate is for students wishing to concentrate their studies on gas tungsten arc welding (TIG) processes, procedures, and techniques. Students learn to read prints and interpret welding symbols; safely and skillfully use oxy-fuel, plasma, and air carbon arc cutting processes; safely and skillfully use gas tungsten arc welding equipment; produce sound fillet and groove welds in steel, stainless steel, and aluminum in all positions with gas tungsten arc welding; and produce sound fillet and groove welds using pulsed gas tungsten arc welding.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Industrial-Technology/Welding-Technology.aspx.

Requirements for Gas Tungsten Arc Welding career certificate (27.0 credit hrs.)

WELD 1000	Print Reading for Welders	3.0
WELD 1100	Industrial Cutting Processes	3.0
WELD 1300	Oxy-Acetylene Welding	3.0
WELD 1400	Gas Tungsten Arc Welding (TIG) - Steel I	3.0
WELD 1410	Gas Tungsten Arc Welding (TIG) - Stainless I	3.0
WELD 1420	Gas Tungsten Arc Welding (TIG) - Aluminum I	3.0
WELD 2400	Gas Tungsten Arc Welding (TIG) - Steel II	3.0
WELD 2410	Gas Tungsten Arc Welding (TIG) - Stainless II	3.0
WELD 2420	Gas Tungsten Arc Welding (TIG) - Aluminum II	3.0

Pipe Welding (WPWSD)

Award: Career certificate

Pathway to associate degree: Welding Technology (WEAAS)

Program location: South Omaha Campus

This career certificate is for students wishing to concentrate their studies on SMAW (stick)- and GTAW (TIG)-based processes, procedures, and techniques as they are applied to pipe welding. Students learn to read prints and interpret welding symbols; safely and skillfully use oxy-fuel, plasma, and air carbon arc cutting processes; safely and skillfully use shielded metal arc welding (stick) equipment; safely and skillfully use gas tungsten arc welding (TIG) equipment; produce sound fillet and groove welds in steel plate and pipe using E6010 and E7018 electrodes and steel plate using GTAW; and produce sound groove welds in pipe using GTAW.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Industrial-Technology/Welding-Technology.aspx.

Requirements for Pipe-Welding career certificate (30.0 credit hrs.)

WELD 1000	Print Reading for Welders	3.0
WELD 1100	Industrial Cutting Processes	3.0
WELD 1300	Oxy-Acetylene Welding	3.0
WELD 1400	Gas Tungsten Arc Welding (TIG) - Steel I	3.0
WELD 1500	Shielded Metal Arc Welding (Stick) - Flat	3.0
WELD 1510	Shielded Metal Arc Welding (Stick) - Vertical	3.0
WELD 2400	Gas Tungsten Arc Welding (TIG) - Steel II	3.0
WELD 2510	SMAW (Stick) - Overhead	3.0
WELD 2520	Shielded Metal Arc Welding (Stick) - Pipe I	3.0
WELD 2530	Shielded Metal Arc Welding (Stick) - Pipe II	3.0

Shielded Metal Arc Welding (WSM SD)

Award: Career certificate

Pathway to associate degree: Welding Technology (WEAAS)

Program location: South Omaha Campus

This career certificate is for students wishing to concentrate their studies on the shielded metal arc welding process, procedures, and techniques. Students learn to read prints and interpret welding symbols; safely and skillfully use oxy-fuel, plasma, and air carbon arc cutting processes; safely and skillfully use shielded metal arc welding (stick) equipment; and produce sound fillet and groove welds in steel plate and pipe using E6010 and E7018 electrodes.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Industrial-Technology/Welding-Technology.aspx.

Requirements for Shielded Metal Arc Welding career certificate (27.0 credit hrs.)

WELD 1000	Print Reading for Welders	3.0
WELD 1100	Industrial Cutting Processes	3.0
WELD 1300	Oxy-Acetylene Welding	3.0
WELD 1500	Shielded Metal Arc Welding (Stick) - Flat	3.0
WELD 1510	Shielded Metal Arc Welding (Stick) - Vertical	3.0
WELD 2500	Shielded Metal Arc Welding (Stick) - Horizontal	3.0
WELD 2510	SMAW (Stick) - Overhead	3.0
WELD 2520	Shielded Metal Arc Welding (Stick) - Pipe I	3.0
WELD 2530	Shielded Metal Arc Welding (Stick) - Pipe II	3.0

INFORMATION TECHNOLOGY

Computer Technology Transfer

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Information Technology

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Interdisciplinary

- Critical Facilities Operations, associate in applied science degree (p. 200)
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Versatilist Information Technology

- Versatilist Information Technology, associate in applied science degree (p. 202)
- Versatilist Information Technology - Business Intelligence Systems, certificate of achievement (p. 204)
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- Full Stack Web Development, career certificate (p. 207)

Computer Technology Transfer

Degree: Associate in Science

Computer Technology Transfer - Computer Science
 Computer Technology Transfer - Management Information Systems

Computer Technology Transfer - Computer Science (CTSAS)

Award: Associate in science degree

Program location: Fort Omaha Campus, Sarpy Center, South Omaha Campus, Online

This degree provides students with the dual option of seeking entry-level programming positions and/or continuing their studies at a four-year institution. Currently, Bellevue University and the University of Nebraska at Omaha accept this degree. Areas of emphasis include Logic C, C++, VB, and Java.

Graduation Requirements

General education	42.5–44.0
Major requirements	56.0
Total credit hours required	98.5–100.0

General education requirements (42.5-44.0 credit hrs.)

The general education requirements for this degree program exceed the minimum standard number of hours. For more information, contact Student Services.

Communications

ENGL 1010	English Composition I	4.5
ENGL 1020	English Composition II	4.5
SPCH 1110	Public Speaking	4.5

Natural sciences

Select one group from the following:

Group One

PHYS 110A	Principles of Physics IA	2.5
PHYS 110AL	Principles of Physics IA Lab	0.0
PHYS 110B	Principles of Physics IB	2.5
PHYS 110BL	Principles of Physics IB Lab	0.0
PHYS 110C	Principles of Physics IC	2.5
PHYS 110CL	Principles of Physics IC Lab	0.0

Group Two

BIOS 1010	General Biology	6.0
BIOS 1010L	General Biology Lab	0.0

Group Three

CHEM 1010	College Chemistry	6.0
CHEM 1010L	College Chemistry Lab	0.0

Group Four

SCIE 1300	Astronomy	☑	4.5
SCIE 1310	Astronomy Laboratory	☑	1.5

Group Five

GEOG 1150	Introduction to Physical Geography - Weather and Climate	☑	6.0
	OR		
GEOG 1160	Introduction to Physical Geography - Landforms	☑	6.0
	OR		
GEOG 1210	Introduction to Physical Geology	☑	6.0

Quantitative/numeracy skills

MATH 1420	College Algebra	☑	5.0
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MATH 1420: Additional prerequisite(s) may be required.

Social sciences

Select two courses, one from group one and one from group two:

Group One

ECON 1000	Macroeconomics	☑	4.5
ECON 1100	Microeconomics	☑	4.5
PSYC 1010	Introduction to Psychology	☑ ☹	4.5
SOCI 1010	Introduction to Sociology	☑ ☹	4.5
SOCI 2050	Current Social Problems	☑	4.5

Group Two

SOCI 2060	Multicultural Issues	☑	4.5
SOCI 2160	Marital and Family Relationships	☑	4.5

Additional

HMRL 1010	Human Relations Skills	☑ ☹	4.5
INFO 1001	Information Systems and Literacy	☑ ☹	4.5

UNO additional general education requirements to be taken after transfer: one natural and physical science course; three humanities and fine arts courses; and one diversity/global course.

Major requirements for Computer Technology Transfer – Computer Science (56.0 credit hrs.)

INFO 1002	Introduction to Information Technology	☑ ☹	4.5
INFO 1003	Problem Solving and Programming Logic	☑ ☹	5.0
INFO 1023	Networking Essentials	☑ ☹	4.5
INFO 1521	Java Programming I	☑	4.5
INFO 1522	C++ Programming I	☑	4.5
INFO 1531	Java Programming II	☑	4.5
INFO 1532	C++ Programming II	☑	4.5
INFO 2521	Intel Assembly Language I		4.5
INFO 2531	Intel Assembly Language II		4.5

MATH 2410	Analytic Geometry and Calculus I	☑	7.5
MATH 2411	Calculus II	☑	7.5

MATH 2410: Additional prerequisite(s) may be required.

Students should refer to <https://www.mccneb.edu/Prospective-Students/Transfer-Students/Articulation.aspx> for complete information on this transfer degree.

Computer Technology Transfer – Management Information Systems (CTMAS)

Award: Associate in science degree

Program location: Fort Omaha Campus, Sarpy Center, South Omaha Campus, Online

This degree provides students with the dual option of seeking entry-level programming positions and/or continuing their studies at a four-year institution. Currently, Bellevue University and the University of Nebraska at Omaha accept this degree. Areas of emphasis include Logic C, C++, VB, and Java.

Graduation Requirements

General education	39.5+
Major requirements	62.0
Total credit hours required	101.5+

General education requirements (39.5+)

The general education requirements for this degree program exceed the minimum standard number of hours. For more information, contact Student Services.

Communications

ENGL 1010	English Composition I	☑ ☹	4.5
ENGL 1020	English Composition II	☑ ☹	4.5
SPCH 1110	Public Speaking	☑ ☹	4.5

Humanities

Select one course from the following:

ARTS 1000	Introduction to the Visual Arts	☹	4.5
ENGL 2530	Ethnic Literature		4.5
HIST 1050	Introduction to Black History	☑	4.5
HIST 1110	World Civilization from Prehistory to 1500	☑	4.5
HIST 1120	World Civilization from 1500 to Present	☑ ☹	4.5
HUMS 1000	Humanities through the Arts	☹	4.5
HUMS 1100	Classical Humanities	☑	4.5
HUMS 1120	The Humanities in the Medieval - Renaissance World	☑	4.5
HUMS 1130	The Humanities in the Modern World	☑	4.5
HUMS 1150	The Humanities in the Non-Western World	☑	4.5
PHIL 2200	Introduction to Comparative Religion	☑	4.5

Natural sciences

Select one group from the following:

Group One

PHYS 110A	Principles of Physics IA	2.5
PHYS 110AL	Principles of Physics IA Lab	0.0
PHYS 110B	Principles of Physics IB	2.5
PHYS 110BL	Principles of Physics IB Lab	0.0
PHYS 110C	Principles of Physics IC	2.5
PHYS 110CL	Principles of Physics IC Lab	0.0

Group Two

BIOS 1010	General Biology	6.0
BIOS 1010L	General Biology Lab	0.0

Group Three

CHEM 1010	College Chemistry	6.0
CHEM 1010L	College Chemistry Lab	0.0

Group Four

SCIE 1300	Astronomy	4.5
SCIE 1310	Astronomy Laboratory	1.5

Group Five

BIOS 1250	Environmental Biology	4.5
	OR	
GEOG 1150	Introduction to Physical Geography - Weather and Climate	6.0
	OR	
GEOG 1160	Introduction to Physical Geography - Landforms	6.0
	OR	
GEOG 1210	Introduction to Physical Geology	6.0

Quantitative/numeracy skills

MATH 1420	College Algebra	5.0
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MATH 1420: Additional prerequisite(s) may be required.

Social sciences

Select one course from the following:

ECON 1000	Macroeconomics	4.5
ECON 1100	Microeconomics	4.5
GEOG 1010	Fundamentals of Geography	4.5
GEOG 1050	Introduction to Human Geography	4.5
SOCI 2060	Multicultural Issues	4.5
SOCI 2160	Marital and Family Relationships	4.5

Additional

HMRL 1010	Human Relations Skills	4.5
INFO 1001	Information Systems and Literacy	4.5

Major requirements for Computer Technology Transfer – Management Information Systems (62.0 credit hrs.)

ACCT 1100	Accounting I	4.0
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ACCT 1110	Accounting II	4.0
ACCT 1120	Accounting III	4.0
INFO 1002	Introduction to Information Technology	4.5
INFO 1003	Problem Solving and Programming Logic	5.0
INFO 1311	Web Page Creation	4.5
INFO 1521	Java Programming I	4.5
INFO 1522	C++ Programming I	4.5
INFO 1531	Java Programming II	4.5
INFO 1532	C++ Programming II	4.5
INFO 1620	Introduction to Database Design	4.5
INFO 2340	Internet Scripting	4.5
INFO 2630	Structured Query Language (SQL)	4.5

Students should refer to <https://www.mccneb.edu/Prospective-Students/Transfer-Students/Articulation.aspx> for complete information on this transfer degree.

Information Technology

Individuals interested in an IT career should be curious, have the ability to think logically, and have strong problem-solving skills. A working knowledge of mathematics and good communication skills are also important because troubleshooting, teamwork, and helping others are important aspects of most IT jobs. In addition, Web developers also need creative skills. Whether dealing with customers, managers, or other computer specialists, IT professionals need the abilities to solve technical challenges as well as to communicate effectively on paper, in person, and electronically.

Degree: Associate in Applied Science

- Information Technology - Cisco Network Technician
- Information Technology - Cyber Security
- Information Technology – Data Center Operations
- Information Technology – Database Management
- Information Technology – Desktop Support Specialist
- Information Technology – Programming for Database/Web
- Information Technology – Server Administration
- Information Technology – Front End Web Development

Certificate of Achievement:

- Information Technology – Data Center Technician

Career Certificate:

- Cisco Certified Network Associate
- IT Service Technician

Information Technology Degree Options

Award: Associate in applied science degree

Program location: Fort Omaha Campus, Sarpy Center, South Omaha Campus, Online

Microcomputers are an integral part of today's business environment. This degree provides a strong foundation in emerging jobs in the networking, help desk, database, web design, and computer programming fields.

Options available under this degree are:

Information Technology – Cisco Network Technician (ITCNO) (p. 189)

Information Technology - Cyber Security (ITCSO) (p. 190)

Information Technology – Data Center Operations (ITDC1) (p. 191)

Information Technology – Database Management (ITDA1) (p. 192)

Information Technology – Desktop Support Specialist (ITDS1) (p. 193)

Information Technology – Programming for Database/Web (ITDWO) (p. 194)

Information Technology – Server Administration (ITSAO) (p. 195)

Information Technology – Front End Web Development (ITWD1) (p. 197)

Students who complete an Associate in Applied Science in Information Technology at MCC have completed the major requirements for Bellevue University. Students need to take at least 30.0 semester hours at Bellevue and can take additional coursework at MCC toward their Bellevue University degree.

Information Technology – Cisco Network Technician (ITCNO)

Award: Associate in applied science degree

Program location: South Omaha Campus

This degree provides students with the latest knowledge used by many businesses to build and maintain their network systems. Students learn the hands-on skills needed to build networks as well as the skills needed to successfully complete the Cisco certification (CCNA).

Graduation Requirements

General education	27.0-27.5
Major requirements	32.0
Option requirements	45.0
Total credit hours required	104.0-104.5

General education requirements (27.0-27.5 credit hrs.)

The general education requirements for this degree program exceed the minimum standard number of hours. For more information, contact Student Services.

Communications

English level I	4.5
English level II	4.5

See Communications course options (p. 42)

Humanities/social sciences

Humanities/social sciences 4.5



See Humanities/social sciences course options (p. 42)



Quantitative/Numeracy Skills


MATH MATH 1220 or higher 4.5

Students planning to transfer to a four-year institution should select MATH 1420.

Additional



INFO 1001 Information Systems and Literacy 4.5
 


HMRL 1010 Human Relations Skills   4.5
 OR



RDLS 1200 College Success Strategies  4.5



Major requirements for Information Technology (32.0 credit hrs.)



INFO 1002 Introduction to Information Technology   4.5



INFO 1003 Problem Solving and Programming Logic   5.0

INFO 1023 Networking Essentials   4.5

INFO 1110 Windows Operating Systems I  4.5


INFO 1111 Linux Operating Systems I   4.5

INFO 1311 Web Page Creation   4.5

INFO 1620 Introduction to Database Design   4.5

Option requirements for Information Technology – Cisco Network Technician (45.0 credit hrs.)

INFO 1105 IT Essentials PC Repair I 4.5

INFO 1125 IT Essentials PC Repair II 4.5

INFO 1200 Cisco Network Fundamentals 9.0

INFO 1201 Cisco Routing 9.0

INFO 2220 Cisco LAN Switching 9.0

INFO 2230 Cisco Accessing the WAN 9.0

The degree option is an area of interest within a program. Although students may complete single or multiple options within this program, only the major degree is awarded.



Information Technology - Cisco Network Technician Curriculum Plan



Below is a suggested guide for students planning careers as network technicians after two years of full-time study.

First Year

First quarter

English level I 4.5

INFO 1001 Information Systems and Literacy 4.5
 

INFO 1003 Problem Solving and Programming Logic   5.0

Second quarter

INFO 1002	Introduction to Information Technology ☞ ☹	4.5
INFO 1110	Windows Operating Systems I ☞ ☹	4.5
INFO 1620	Introduction to Database Design ☞ ☹	4.5

Third quarter

INFO 1111	Linux Operating Systems I ☞ ☹	4.5
INFO 1311	Web Page Creation ☞ ☹	4.5
MATH 1220	Business Mathematics ☞	4.5
	OR	
MATH 1420	College Algebra ☞	5.0

Fourth quarter

	English level II	4.5
HMRL 1010	Human Relations Skills ☞ ☹	4.5
INFO 1023	Networking Essentials ☞ ☹	4.5

Second Year

Fifth quarter

	Humanities/social sciences	4.5
INFO 1200	Cisco Network Fundamentals	9.0

Sixth quarter

INFO 1201	Cisco Routing	9.0
INFO 1105	IT Essentials PC Repair I	4.5

Seventh quarter

INFO 2220	Cisco LAN Switching	9.0
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Eighth quarter

INFO 1125	IT Essentials PC Repair II	4.5
INFO 2230	Cisco Accessing the WAN	9.0

Information Technology – Cyber Security (ITCSO)

Award: Associate in applied science degree

Program location: Fort Omaha Campus, Fremont Area Center, Sarpy Center, Online

This degree prepares students to engage in the issues and emerging information and management concepts related to cyber security. Students are provided with a strong technical foundation to analyze, identify, plan, and apply the knowledge and skills learned to defend a network.

Graduation Requirements

General education	27.0–27.5
Major requirements	32.0
Option requirements	49.5
Total credit hours required	108.5-109.0

General education requirements (27.0-27.5 credit hrs.)

The general education requirements for this degree program exceed the minimum standard number of hours. For more information, contact Student Services.

Communications

English level I	4.5
English level II	4.5

See Communications course options (p. 42)

Humanities/social sciences

Humanities/social sciences	4.5
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See Humanities/social sciences course options (p. 42)

Quantitative/Numeracy Skills

MATH	MATH 1220 or higher	4.5 - 5.0
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Students planning to transfer to a four-year institution should select MATH 1420.

Additional

INFO 1001	Information Systems and Literacy ☞ ☹	4.5
HMRL 1010	Human Relations Skills ☞ ☹	4.5
	OR	
RDLS 1200	College Success Strategies ☞	4.5

Major requirements for Information Technology (32.0 credit hrs.)

INFO 1002	Introduction to Information Technology ☞ ☹	4.5
INFO 1003	Problem Solving and Programming Logic ☞ ☹	5.0
INFO 1023	Networking Essentials ☞ ☹	4.5
INFO 1110	Windows Operating Systems I ☞ ☹	4.5
INFO 1111	Linux Operating Systems I ☞ ☹	4.5
INFO 1311	Web Page Creation ☞ ☹	4.5
INFO 1620	Introduction to Database Design ☞ ☹	4.5

Option requirements for Information Technology – Cyber Security (49.5 credit hrs.)

INFO 2122	Writing Scripts with BASH ☞ ☹	4.5
INFO 2135	Network Infrastructure ☞ ☹	4.5
INFO 2142	Windows Active Directory ☞ ☹	4.5
INFO 2351	Introduction to XML ☞ ☹	4.5
INFO 2362	Building Secure Environments ☞ ☹	4.5
INFO 2805	Network and Information Security Basics ☞ ☹	4.5
INFO 2806	Network Attacks, Intrusions, and Penetration Testing ☞ ☹	4.5
INFO 2808	Boundary Protection ☞ ☹	4.5
INFO 2809	Information Systems, Forensics, and Legal Topics ☞ ☹	4.5
INFO 2810	Security Capstone ☞ ☹	4.5
INFO 2981	Internship	Variable

The degree option is an area of interest within a program. Although students may complete single or multiple options within this program, only the major degree is awarded.

Information Technology – Data Center Operations (ITDC1)

Award: Associate in applied science degree

Program location: Fort Omaha Campus, Fremont Area Center, Online

Data centers are a critical part of today’s data processing world. This degree familiarizes students with the physical components, design, management, support, and operations of a data center. Students learn about the data center infrastructure, create a server environment to meet specific needs, and daily operations of data center activities.

Graduation Requirements

General education	27.0–27.5
Major requirements	32.0
Option requirements	40.5
Total credit hours required	99.5–100.0

General education requirements (27.0-27.5 credit hrs.)

The general education requirements for this degree program exceed the minimum standard number of hours. For more information, contact Student Services.

Communications

English level I	4.5
English level II	4.5

See Communications course options (p. 42)

Humanities/social sciences

Humanities/social sciences	4.5
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See Humanities/social sciences course options (p. 42)

Quantitative/Numeracy Skills

MATH MATH 1220 or higher	4.5
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Students planning to transfer to a four-year institution should select MATH 1420.

Additional

INFO 1001 Information Systems and Literacy ☞ ☹	4.5
HMRL 1010 Human Relations Skills ☞ ☹ OR	4.5
RDLS 1200 College Success Strategies ☞	4.5

Major requirements for Information Technology (32.0 credit hrs.)

INFO 1002 Introduction to Information Technology ☞ ☹	4.5
INFO 1003 Problem Solving and Programming Logic ☞ ☹	5.0
INFO 1023 Networking Essentials ☞ ☹	4.5
INFO 1110 Windows Operating Systems I ☞ ☹	4.5
INFO 1111 Linux Operating Systems I ☞ ☹	4.5
INFO 1311 Web Page Creation ☞ ☹	4.5
INFO 1620 Introduction to Database Design ☞ ☹	4.5

Option requirements for Information Technology – Data Center Operations (40.5 credit hrs.)

INFO 1401 Introduction to Data Center Operations ☞ ☹	4.5
INFO 1413 Data Center Technician I ☞ ☹	4.5
INFO 1421 Virtualization Technologies Monitoring ☞ ☹	4.5
INFO 1422 DC Storage Management ☞ ☹	4.5
INFO 1423 Data Center Technician II ☞ ☹	4.5
INFO 1433 DC Operations and Management ☞ ☹	4.5
INFO 2805 Network and Information Security Basics ☞ ☹	4.5
INFO 2990 Data Center Operations Capstone ☞ ☹	4.5
CFOT 1000 Introduction to Critical Facilities ☞ ☹	4.5

The degree option is an area of interest within a program. Although students may complete single or multiple options within this program, only the major degree is awarded.

Information Technology - Data Center Operations Curriculum Plan

Below is a suggested guide for students planning careers in data center operations after two years of full-time study.

First Year

First quarter

English level I	4.5
INFO 1001 Information Systems and Literacy ☞ ☹	4.5
INFO 1003 Problem Solving and Programming Logic ☞ ☹	5.0

Second quarter

INFO 1002 Introduction to Information Technology ☞ ☹	4.5
INFO 1110 Windows Operating Systems I ☞ ☹	4.5
INFO 1620 Introduction to Database Design ☞ ☹	4.5

Third quarter

English level II	4.5
INFO 1023 Networking Essentials ☞ ☹	4.5
INFO 1311 Web Page Creation ☞ ☹	4.5

Fourth quarter

HMRL 1010 Human Relations Skills ☞ ☹	4.5
INFO 1111 Linux Operating Systems I ☞ ☹	4.5
CFOT 1000 Introduction to Critical Facilities ☞ ☹	4.5

Second Year

Fifth quarter

INFO 1401 Introduction to Data Center Operations ☞ ☹	4.5
INFO 1413 Data Center Technician I ☞ ☹	4.5
INFO 2805 Network and Information Security Basics ☞ ☹	4.5

Sixth quarter

INFO 1421	Virtualization Technologies Monitoring	4.5
INFO 1422	DC Storage Management	4.5
MATH	Elective	4.5-5.0

Seventh quarter

INFO 1423	Data Center Technician II	4.5
INFO 1433	DC Operations and Management	4.5
	Humanities/social science elective	4.5

Eighth quarter

INFO 2990	Data Center Operations Capstone	4.5
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Information Technology – Database Management (ITDA1)

Award: Associate in applied science degree

Program location: Fort Omaha Campus, South Omaha Campus, Sarpy Center, Online

Databases are the core of today’s information systems and comprise one of the fastest growing areas of the information technology field. This degree provides students with a strong technical foundation in the design, implementation, and management of a relational database system.

Graduation Requirements

General education	27.0–27.5
Major requirements	32.0
Option requirements	40.5
Total credit hours required	99.5–100.0

General education requirements (27.0-27.5 credit hrs.)

The general education requirements for this degree program exceed the minimum standard number of hours. For more information, contact Student Services.

Communications

English level I	4.5
English level II	4.5

See Communications course options (p. 42)

Humanities/social sciences

Humanities/social sciences	4.5
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See Humanities/social sciences course options (p. 42)

Quantitative/Numeracy Skills

MATH	MATH 1220 or higher	4.5 - 5.0
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Students planning to transfer to a four-year institution should select MATH 1420.

Additional

INFO 1001	Information Systems and Literacy	4.5
HMRL 1010	Human Relations Skills	4.5
	OR	
RDLS 1200	College Success Strategies	4.5

Major requirements for Information Technology (32.0 credit hrs.)

INFO 1002	Introduction to Information Technology	4.5
INFO 1003	Problem Solving and Programming Logic	5.0
INFO 1023	Networking Essentials	4.5
INFO 1110	Windows Operating Systems I	4.5
INFO 1111	Linux Operating Systems I	4.5
INFO 1311	Web Page Creation	4.5
INFO 1620	Introduction to Database Design	4.5

Option requirements for Information Technology – Database Management (40.5 credit hrs.)

INFO 2630	Structured Query Language (SQL)	4.5
INFO 2635	MySQL Programming	4.5
INFO 2641	SQL Server Design and Implementation	4.5
INFO 2642	Transact SQL	4.5
INFO 2643	Implementing Data Warehouses	4.5
INFO 2644	Database Reporting	4.5
INFO 2645	Database Analysis Services	4.5
INFO 2945	Database Administration Capstone	4.5

INFO 2945 is required for this program; it is the last course to be taken.

Select 4.5 credit hours from the following:

INFO 1009	Introduction to Cloud Computing	4.5
INFO 1011	Project Management	4.5
INFO 1600	Emerging Technologies in IT	variable
INFO 2351	Introduction to XML	4.5
INFO 2640	Oracle SQL and PL/SQL Programming	4.5

The degree option is an area of interest within a program. Although students may complete single or multiple options within this program, only the major degree is awarded.

Information Technology - Database Management Curriculum Plan

Below is a suggested guide for students planning careers in database management after two years of full-time study.

First Year

First quarter

	English level I	4.5
INFO 1001	Information Systems and Literacy	4.5
INFO 1003	Problem Solving and Programming Logic	5.0

Second quarter

INFO 1002	Introduction to Information Technology	4.5
INFO 1110	Windows Operating Systems I	4.5
INFO 1620	Introduction to Database Design	4.5

Third quarter

	English level II	4.5
INFO 1023	Networking Essentials	4.5
INFO 2630	Structured Query Language (SQL)	4.5

Fourth quarter

INFO 1111	Linux Operating Systems I	4.5
INFO 2641	SQL Server Design and Implementation	4.5
HMRL 1010	Human Relations Skills	4.5

Second Year

Fifth quarter

INFO 1311	Web Page Creation	4.5
INFO 2642	Transact SQL	4.5
INFO	Elective	4.5

Sixth quarter

INFO 2635	MySQL Programming	4.5
INFO 2643	Implementing Data Warehouses	4.5
MATH	Elective	4.5-5.0

Seventh quarter

INFO 2644	Database Reporting	4.5
INFO 2645	Database Analysis Services	4.5

Eighth quarter

INFO 2945	Database Administration Capstone	4.5
	Humanities/social science elective	4.5

Information Technology – Desktop Support Specialist (ITDS1)

Award: Associate in applied science degree

Program location: Fort Omaha Campus, Sarpy Center, Online

This program provides critical services to ensure effective IT operations. Students gain a diverse set of skills to provide desktop support covering a multitude of technologies including software support, hardware support, basic networking skills, telephony support, security and a wide range of other technology issues.

Graduation Requirements

General education	27.0–27.5
Major requirements	32.0
Option requirements	40.5
Total credit hours required	99.5–100.0

General education requirements (27.0-27.5 credit hrs.)

The general education requirements for this degree program exceed the minimum standard number of hours. For more information, contact Student Services.

Communications

English level I	4.5
English level II	4.5

See Communications course options (p. 42)

Humanities/social sciences

Humanities/social sciences	4.5
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See Humanities/social sciences course options (p. 42)

Quantitative/Numeracy Skills

MATH	MATH 1220 or higher	4.5 - 5.0
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Students planning to transfer to a four-year institution should select MATH 1420.

Additional

INFO 1001	Information Systems and Literacy	4.5
HMRL 1010	Human Relations Skills	4.5
	OR	
RDLS 1200	College Success Strategies	4.5

Major requirements for Information Technology (32.0 credit hrs.)

INFO 1002	Introduction to Information Technology	4.5
INFO 1003	Problem Solving and Programming Logic	5.0
INFO 1023	Networking Essentials	4.5
INFO 1110	Windows Operating Systems I	4.5
INFO 1111	Linux Operating Systems I	4.5
INFO 1311	Web Page Creation	4.5
INFO 1620	Introduction to Database Design	4.5

Option requirements for Desktop Support Specialist (40.5 credit hrs.)

INFO 1022	Business Telecommunication Systems	4.5
INFO 1030	Introduction to Service Desk Operations	4.5
INFO 1120	Windows Operating Systems II	4.5
INFO 1135	IT Communication Skills	4.5
INFO 1413	Data Center Technician I	4.5
INFO 2261	Software Applications Support	4.5
INFO 2805	Network and Information Security Basics	4.5
INFO 2942	Desktop Support Capstone	4.5

Select 4.5 credit hours from the following:

INFO 1600	Emerging Technologies in IT	variable
INFO 1805	A+ Certified Professional	4.5
INFO 2981	Internship	variable

The degree option is an area of interest within a program. Although students may complete single or multiple options within this program, only the major degree is awarded.

Information Technology - Desktop Support Specialist Curriculum Plan

Below is a suggested guide for students planning careers as desktop support specialists after two years of full-time study.

First Year

First quarter

	ENGL level I	4.5
INFO 1001	Information Systems and Literacy	4.5
INFO 1003	Problem Solving and Programming Logic	5.0

Second quarter

INFO 1002	Introduction to Information Technology	4.5
INFO 1110	Windows Operating Systems I	4.5
INFO 1620	Introduction to Database Design	4.5

Third quarter

	ENGL level II	4.5
INFO 1023	Networking Essentials	4.5
INFO 1311	Web Page Creation	4.5

Fourth quarter

INFO 1022	Business Telecommunication Systems	4.5
INFO 1120	Windows Operating Systems II	4.5
HMRL 1010	Human Relations Skills	4.5

Second Year

Fifth quarter

INFO 1030	Introduction to Service Desk Operations	4.5
INFO 1111	Linux Operating Systems I	4.5
INFO 1135	IT Communication Skills	4.5

Sixth quarter

INFO 1413	Data Center Technician I	4.5
INFO 2261	Software Applications Support	4.5
MATH	Elective	4.5-5.0

Seventh quarter

INFO 2805	Network and Information Security Basics	4.5
INFO	Elective	4.5

Eighth quarter

	Humanities/social science elective	4.5
INFO 2942	Desktop Support Capstone	4.5

Information Technology – Programming for Database/Web (ITDWO)

Award: Associate in applied science degree

Program location: Fort Omaha Campus, Sarpy Center, Online

This degree option provides students with a strong foundation in program design, Web programming and design, and database processing that is needed in today's business world. Students gain experience in databases, Web design, and programming languages.

Graduation Requirements

General education	27.0–27.5
Major requirements	32.0
Option requirements	45.0
Total credit hours required	104.0–104.5

General education requirements (27.0-27.5 credit hrs.)

The general education requirements for this degree program exceed the minimum standard number of hours. For more information, contact Student Services.

Communications

English level I	4.5
English level II	4.5

See Communications course options (p. 42)

Humanities/social sciences

Humanities/social sciences	4.5
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See Humanities/social sciences course options (p. 42)

Quantitative/Numeracy Skills

MATH	MATH 1220 or higher	4.5
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Students planning to transfer to a four-year institution should select MATH 1420.

Additional

INFO 1001	Information Systems and Literacy	4.5
HMRL 1010	Human Relations Skills	4.5
	OR	
RDLS 1200	College Success Strategies	4.5

Major requirements for Information Technology (32.0 credit hrs.)

INFO 1002	Introduction to Information Technology	4.5
INFO 1003	Problem Solving and Programming Logic	5.0
INFO 1023	Networking Essentials	4.5
INFO 1110	Windows Operating Systems I	4.5
INFO 1111	Linux Operating Systems I	4.5
INFO 1311	Web Page Creation	4.5
INFO 1620	Introduction to Database Design	4.5

Option requirements for Information Technology – Programming for Database/Web (45.0 credit hrs.)

Students must take two programming language options, level I and level II courses.

Option 1:

INFO 1521	Java Programming I	4.5
INFO 1531	Java Programming II	4.5

Option 2:

INFO 1529	PHP Programming I	4.5
INFO 1539	PHP Programming II	4.5

Option 3:

INFO 1523	Visual Basic.NET I	4.5
INFO 1533	Visual Basic.NET II	4.5

Option 4:

INFO 1526	C# (C-Sharp) Programming I	4.5
INFO 1536	C# (C-Sharp) Programming II	4.5

Option 5:

INFO 1527	Ruby Programming	4.5
INFO 1537	Ruby on Rails	4.5

Also required:

INFO 2351	Introduction to XML	4.5
INFO 2630	Structured Query Language (SQL)	4.5
INFO 2635	MySQL Programming	4.5
INFO 2940	Database and Web Programming Capstone	4.5

INFO 2940 is required for the degree; however, it is the last course taken.

Select 9.0 credit hours from the following:

INFO 1009	Introduction to Cloud Computing	4.5
INFO 1011	Project Management	4.5
INFO 1401	Introduction to Data Center Operations	4.5
INFO 1600	Emerging Technologies in IT	variable
INFO 2538	Systems Analysis and Design	4.5

The degree option is an area of interest within a program. Although students may complete single or multiple options within this program, only the major degree is awarded.

Information Technology - Programming for Database/Web Curriculum Plan

Below is a suggested guide for students planning careers in programming for database/Web after two years of full-time study.

First Year

First quarter

	English level I	4.5
INFO 1001	Information Systems and Literacy	4.5
INFO 1003	Problem Solving and Programming Logic	5.0

Second quarter

INFO 1002	Introduction to Information Technology	4.5
INFO 1110	Windows Operating Systems I	4.5
INFO 1620	Introduction to Database Design	4.5

Third quarter

	English level II	4.5
INFO 1023	Networking Essentials	4.5
INFO 1311	Web Page Creation	4.5

Fourth quarter

HMRL 1010	Human Relations Skills Programming level I	4.5
INFO	Elective	4.5

Second Year

Fifth quarter

INFO 2351	Introduction to XML	4.5
INFO 2630	Structured Query Language (SQL)	4.5
	Programming level II	4.5

Sixth quarter

INFO 2635	MySQL Programming	4.5
	Programming level I	4.5
MATH	Elective	4.5-5.0

Seventh quarter

	Programming level II	4.5
INFO	Elective	4.5
	Humanities/social science elective	4.5

Eighth quarter

INFO 2940	Database and Web Programming Capstone	4.5
HMRL 1010	Human Relations Skills	4.5

Information Technology – Server Administration (ITSAO)

Award: Associate in applied science degree

Program location: Fort Omaha Campus, Sarpy Center, South Omaha Campus, Online

This degree prepares students to successfully implement, configure, and maintain a Windows server in the Active Directory environment of large companies. Students gain a strong technical foundation in monitoring and managing a network infrastructure.

Graduation Requirements

General education	27.0–27.5
Major requirements	32.0
Option requirements	45.0
Total credit hours required	104.0–104.5

General education requirements (27.0-27.5 credit hrs.)

The general education requirements for this degree program exceed the minimum standard number of hours. For more information, contact Student Services.

Communications

English level I	4.5
English level II	4.5

See Communications course options (p. 42)

Humanities/social sciences

Humanities/social sciences	4.5
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See Humanities/social sciences course options (p. 42)

Quantitative/Numeracy Skills

MATH MATH 1220 or higher	4.5
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Students planning to transfer to a four-year institution should select MATH 1420.

Additional

INFO 1001 Information Systems and Literacy ☞ ☹	4.5
HMRL 1010 Human Relations Skills ☞ ☹ OR	4.5
RDLS 1200 College Success Strategies ☞	4.5

Major requirements for Information Technology (32.0 credit hrs.)

INFO 1002 Introduction to Information Technology ☞ ☹	4.5
INFO 1003 Problem Solving and Programming Logic ☞ ☹	5.0
INFO 1023 Networking Essentials ☞ ☹	4.5
INFO 1110 Windows Operating Systems I ☞ ☹	4.5
INFO 1111 Linux Operating Systems I ☞ ☹	4.5
INFO 1311 Web Page Creation ☞ ☹	4.5
INFO 1620 Introduction to Database Design ☞ ☹	4.5

Option requirements for Information Technology – Server Administration (45.0 credit hrs.)

INFO 1120 Windows Operating Systems II ☞ ☹	4.5
INFO 1421 Virtualization Technologies Monitoring ☞ ☹	4.5
INFO 2135 Network Infrastructure ☞ ☹	4.5
INFO 2142 Windows Active Directory ☞ ☹	4.5
INFO 2145 Windows Server Administration ☞ ☹	4.5
INFO 2351 Introduction to XML ☞ ☹	4.5
INFO 2362 Building Secure Environments ☞ ☹	4.5
INFO 2805 Network and Information Security Basics ☞ ☹	4.5
INFO 2946 Server Administration Capstone ☞	4.5

The degree option is an area of interest within a program. Although students may complete single or multiple options within this program, only the major degree is awarded.

Information Technology - Server Administration Curriculum Plan

Below is a suggested guide for students planning careers in server administration after two years of full-time study.

First Year**First quarter**

English level I	4.5
INFO 1001 Information Systems and Literacy ☞ ☹	4.5
INFO 1003 Problem Solving and Programming Logic ☞ ☹	5.0

Second quarter

INFO 1002 Introduction to Information Technology ☞ ☹	4.5
INFO 1110 Windows Operating Systems I ☞ ☹	4.5
INFO 1620 Introduction to Database Design ☞ ☹	4.5

Third quarter

ENGL level II	4.5
INFO 1023 Networking Essentials ☞ ☹	4.5
INFO 1311 Web Page Creation ☞ ☹	4.5

Fourth quarter

INFO 1120 Windows Operating Systems II ☞ ☹	4.5
HMRL 1010 Human Relations Skills ☞ ☹	4.5

Second Year**Fifth quarter**

INFO 1111 Linux Operating Systems I ☞ ☹	4.5
INFO 2135 Network Infrastructure ☞ ☹	4.5
INFO 2351 Introduction to XML ☞ ☹	4.5

Sixth quarter

INFO 1421 Virtualization Technologies Monitoring ☞ ☹	4.5
INFO 2142 Windows Active Directory ☞ ☹	4.5
MATH Elective	4.5-5.0

Seventh quarter

INFO 2145 Windows Server Administration ☞ ☹	4.5
INFO 2362 Building Secure Environments ☞ ☹	4.5
INFO 2805 Network and Information Security Basics ☞ ☹	4.5

Eighth quarter

INFO 2946 Server Administration Capstone ☞	4.5
Humanities/social science elective	4.5

Information Technology – Front End Web Development (ITWD1)

Award: Associate in applied science degree

Program location: Fort Omaha Campus

This degree prepares students to successfully manage the World Wide Web environment. Students are provided with a strong technical foundation in developing content for the World Wide Web and any Internet-related support.

Graduation Requirements

General education	27.0–27.5
Major requirements	32.0
Option requirements	45.0
Total credit hours required	104.0–104.5

General education requirements (27.0-27.5 credit hrs.)

The general education requirements for this degree program exceed the minimum standard number of hours. For more information, contact Student Services.

Communications

English level I	4.5
English level II	4.5

See Communications course options (p. 42)

Humanities/social sciences

Humanities/social sciences	4.5
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See Humanities/social sciences course options (p. 42)

Quantitative/Numeracy Skills

MATH	MATH 1220 or higher	4.5
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Students planning to transfer to a four-year institution should select MATH 1420.

Additional

INFO 1001	Information Systems and Literacy ☞ ☹	4.5
HMRL 1010	Human Relations Skills ☞ ☹ OR	4.5
RDLS 1200	College Success Strategies ☞	4.5

Major requirements for Information Technology (32.0 credit hrs.)

INFO 1002	Introduction to Information Technology ☞ ☹	4.5
INFO 1003	Problem Solving and Programming Logic ☞ ☹	5.0
INFO 1023	Networking Essentials ☞ ☹	4.5
INFO 1110	Windows Operating Systems I ☞ ☹	4.5
INFO 1111	Linux Operating Systems I ☞ ☹	4.5
INFO 1311	Web Page Creation ☞ ☹	4.5
INFO 1620	Introduction to Database Design ☞ ☹	4.5

Option requirements for Information Technology – Front End Web Development (45.0 credit hrs.)

INFO 1314	Photoshop ☞	4.5
INFO 1315	Interface Design ☞ ☹	4.5
INFO 1316	Dreamweaver ☞	4.5
INFO 1322	Basic WordPress ☞	4.5
INFO 2340	Internet Scripting ☞	4.5
INFO 2351	Introduction to XML ☞ ☹	4.5
INFO 2362	Building Secure Environments ☞ ☹	4.5
INFO 2439	Mobile Application Development ☞ ☹	4.5
INFO 2944	Web Development Capstone ☞	4.5

Select one of the following courses:

DIMA 1120	Digital Design: Vector	4.5
INFO 1529	PHP Programming I ☞	4.5
INFO 1600	Emerging Technologies in IT ☞ ☹	variable
INFO 2630	Structured Query Language (SQL) ☞	4.5
INFO 2900	Special Topics in Information Technology	variable
INFO 2981	Internship	variable

The degree option is an area of interest within a program. Although students may complete single or multiple options within this program, only the major degree is awarded.

Information Technology - Front End Web Development Curriculum Plan

Below is a suggested guide for students planning careers in Web development after two years of full-time study.

First Year

First quarter

	ENGL level I	4.5
INFO 1001	Information Systems and Literacy ☞ ☹	4.5
INFO 1003	Problem Solving and Programming Logic ☞ ☹	5.0

Second quarter

INFO 1002	Introduction to Information Technology ☞ ☹	4.5
INFO 1110	Windows Operating Systems I ☞ ☹	4.5
INFO 1620	Introduction to Database Design ☞ ☹	4.5

Third quarter

	ENGL level II	4.5
INFO 1023	Networking Essentials ☞ ☹	4.5
INFO 1311	Web Page Creation ☞ ☹	4.5

Fourth quarter

HMRL 1010	Human Relations Skills ☞ ☹	4.5
INFO 1111	Linux Operating Systems I ☞ ☹	4.5
INFO 1315	Interface Design ☞ ☹	4.5

Second Year

Fifth quarter

INFO 1314	Photoshop ☑	4.5
INFO 2351	Introduction to XML ☑ ☒	4.5
MATH	Elective	4.5-5.0

Sixth quarter

	Elective	4.5
INFO 1316	Dreamweaver ☑	4.5
INFO 2340	Internet Scripting ☑	4.5

Seventh quarter

INFO 2439	Mobile Application Development ☑ ☒	4.5
INFO 2362	Building Secure Environments ☑ ☒	4.5

Eighth quarter

INFO 2944	Web Development Capstone ☑	4.5
	Humanities/social science elective	4.5

Information Technology Technician Certificate Options

Award: Certificate of achievement

Program location: Fort Omaha Campus, Sarpy Center, South Omaha Campus, Online

Microcomputers have become an integral part of today's office and home environment. This certificate of achievement prepares students with the skills to utilize microcomputers and their software in a variety of applications.

Options available under this certificate are:

Information Technology – Data Center Technician (ITCCO) (p. 198)

Information Technology – Server Technician (ITSRO) (p. 199)

Information Technology – Data Center Technician (ITCCO)

Award: Certificate of achievement

Pathway to associate degree: Information Technology - Data Center Operations (ITDC1)

Program location: Fort Omaha Campus, Fremont Center, Online

This certificate of achievement provides students with an introduction to data center operations. Students learn how to assist in monitoring and implementing data center projects.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Information-Technology-and-E-Learning/Information-Technology.aspx.

Graduation Requirements

General education	18.0–18.5
Major requirements	13.5
Option requirements	23.0
Total credit hours required	54.5–55.0

General education requirements (18.0 – 18.5 credit hrs.)

The general education requirements for this degree program exceed the minimum standard number of hours. For more information, contact Student Services.

Communications

English level I 4.5

See Communications course options (p. 42)

Humanities/social sciences

Humanities/social sciences 4.5

See Humanities/social sciences course options (p. 42)

Quantitative/Numeracy Skills

MATH MATH 1220 or higher 4.5

Students planning to transfer to a four-year institution should select MATH 1420.

Additional

INFO 1001 Information Systems and Literacy ☑ ☒ 4.5

Major requirements for Information Technology Technician (13.5 credit hrs.)

INFO 1002 Introduction to Information Technology ☑ ☒ 4.5

INFO 1110 Windows Operating Systems I ☑ ☒ 4.5

INFO 1311 Web Page Creation ☑ ☒ 4.5

Option requirements for Information Technology – Data Center Technician (23.0 credit hrs.)

INFO 1003 Problem Solving and Programming Logic ☑ ☒ 5.0

INFO 1023 Networking Essentials ☑ ☒ 4.5

INFO 1401 Introduction to Data Center Operations ☑ ☒ 4.5

INFO 1413 Data Center Technician I ☑ ☒ 4.5

CFOT 1000 Introduction to Critical Facilities ☑ ☒ 4.5

The certificate option is an area of interest within a program. Although students may complete single or multiple options within this program, only the major certificate is awarded.

Information Technology - Data Center Technician Curriculum Plan

Below is a suggested guide for students planning careers as data center technicians after one year of full-time study.

First Year

First quarter

ENGL level I 4.5

INFO 1001 Information Systems and Literacy ☑ ☒ 4.5

MATH Elective 4.5-5.0

Second quarter

INFO 1002	Introduction to Information Technology	4.5
INFO 1003	Problem Solving and Programming Logic	5.0
INFO 1110	Windows Operating Systems I	4.5

Third quarter

INFO 1023	Networking Essentials	4.5
INFO 1311	Web Page Creation	4.5
CFOT 1000	Introduction to Critical Facilities	4.5

Fourth quarter

INFO 1401	Introduction to Data Center Operations	4.5
INFO 1413	Data Center Technician I Humanities/social science elective	4.5

Information Technology – Server Technician (ITSRO)

Award: Certificate of achievement

Pathway to associate degree: Information Technology - Server Administration (ITSAO)

Program location: Fort Omaha Campus, Sarpy Center, Online
Servers have become an integral part of today’s office and home environment. This certificate of achievement option teaches the foundation skills necessary to support servers.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Information-Technology-and-E-Learning/Information-Technology.aspx.

Graduation Requirements

General education	18.0–18.5
Major requirements	13.5
Option requirements	23.0
Total credit hours required	54.5–55.0

General education requirements (18.0 – 18.5 credit hrs.)

The general education requirements for this degree program exceed the minimum standard number of hours. For more information, contact Student Services.

Communications

English level I	4.5
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See Communications course options

Humanities/social sciences

Humanities/social sciences	4.5
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See Humanities/social sciences course options

Quantitative/Numeracy Skills

MATH	MATH 1220 or higher	4.5
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Students planning to transfer to a four-year institution should select MATH 1420.

Other

INFO 1001	Information Systems and Literacy	4.5
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Major requirements for Information Technology Technician (13.5 credit hrs.)

INFO 1002	Introduction to Information Technology	4.5
INFO 1110	Windows Operating Systems I	4.5
INFO 1311	Web Page Creation	4.5

Option requirements for Information Technology – Server Technician (23.0 credit hrs.)

INFO 1003	Introduction to Computer Programming	5.0
INFO 1023	Networking Essentials	4.5
INFO 1120	Windows Operating Systems II	4.5
INFO 2135	Network Infrastructure	4.5
INFO 2142	Windows Active Directory	4.5

The certificate option is an area of interest within a program. Although students may complete single or multiple options within this program, only the major certificate is awarded.

Information Technology - Server Technician Curriculum Plan

Below is a suggested guide for students planning careers as server technicians after one year of full-time study.

First Year

First quarter

INFO 1001	Information Systems and Literacy	4.5
INFO 1003	Introduction to Computer Programming	5.0
	ENGL level I	4.5

Second quarter

INFO 1002	Introduction to Information Technology	4.5
INFO 1023	Networking Essentials	4.5
INFO 1110	Windows Operating Systems I	4.5

Third quarter

INFO 1120	Windows Operating Systems II	4.5
INFO 1311	Web Page Creation	4.5
INFO 2135	Network Infrastructure	4.5

Fourth quarter

INFO 2142	Windows Active Directory	4.5
	Humanities/Social Science course	4.5
MATH	Elective	4.5-5.0

Cisco Certified Network Associate (ITCCC)

Award: Career certificate

Pathway to associate degree: Information Technology - Cisco Network Technician (ITCNO)

Program location: South Omaha Campus

This career certificate allows students to sit the certification exam for the Cisco Certified Network Associate.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Information-Technology-and-E-Learning/Cisco-Networking.aspx.

Requirements for Cisco Certified Network Associate career certificate (36.0 credit hrs.)

INFO 1200	Cisco Network Fundamentals	9.0
INFO 1201	Cisco Routing	9.0
INFO 2220	Cisco LAN Switching	9.0
INFO 2230	Cisco Accessing the WAN	9.0

Interdisciplinary Studies

In the 21st century, people are living and working in a world that increases in complexity by the minute. And so it is that the workplace has evolved to a point where it is sometimes difficult to categorize an occupation based on the skills and knowledge of a single field. Institutions of higher education are increasingly combining courses from different fields into order to prepare the workers of the future.

Academic programs that offer courses from more than one area are known as interdisciplinary programs. Here is the formal definition of interdisciplinary programs:

Interdisciplinary programs are instructional programs that derive from two or more distinct programs to provide a cross-cutting focus on a subject concentration that is not subsumed under a single discipline or occupational field.

Degrees from interdisciplinary programs aid students in developing skills, knowledge, and aptitudes necessary to seek employment in fields that overlap and are highly complex. MCC's first interdisciplinary degree is in Critical Facilities Operations where skills from information technology and multiple trades converge to prepare workers in critical facilities like hospitals and data centers.

Degree: Associate in Applied Science

Critical Facilities Operations
Prototype Design

Critical Facilities Operations (CFOAS)

Award: Associate in applied science degree

The Critical Facilities Operations degree prepares the student to enter the field of critical facilities operation with applied understanding of the synergistic relationships among components of information technology and a host of technical trade content areas, including HVAC, electrical, and industrial maintenance. Graduates are able to apply their understanding of multiple interconnected systems that make up a critical facility, such as a data center or hospital.

Graduation Requirements

General education	27.0
Major requirements	79.5
Total credit hours required	106.5

General education requirements (27.0 credit hrs.)

Communications

ENGL 1220	Technical Writing	4.5
ENGL 1240	Oral and Written Reports	4.5

Humanities/social sciences

Humanities/social sciences 4.5

See Humanities/social sciences course options (p. 42)

Quantitative/Numeracy Skills

MATH 1240	Applied Mathematics	4.5
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Additional

INFO 1001	Information Systems and Literacy	4.5
HMRL 1010	Human Relations Skills	4.5
	OR	
RDLS 1200	College Success Strategies	4.5

Major requirements for Critical Facilities Operations (79.5 credit hrs.)

CFOT 1000	Introduction to Critical Facilities	4.5
PROT 1000	Introduction to Process and Power Operations	4.5
PROT 1302	Stationary Engineering I	3.0
PROT 2302	Stationary Engineering II	4.0
PROT 2310	Steam Plant Operation I	4.5
PROT 2330	Steam Plant Operation III	6.0
HVAC 2570	Automated Building Controls	4.5
ELTR 1200	Basic Electricity	8.0
INCT 1000	Industrial Safety and Health	4.5
INCT 1212	Motor and Machine Controls	9.0
INFO 1003	Problem Solving and Programming Logic	5.0
INFO 1023	Networking Essentials	4.5
INFO 1110	Windows Operating Systems I	4.5
INFO 1401	Introduction to Data Center Operations	4.5
INFO 1433	DC Operations and Management	4.5
CFOT 2980	Critical Facilities Capstone	4.0

Interdisciplinary Studies - Prototype Design (PDTAS)

Award: Associate in applied science degree

Program location: Fort Omaha Campus

This program provides students with a mix of business, design, and prototyping concepts in order to gain experience in the prototyping process. Students gain specialized, high-skilled experience to prepare them to work in a technology-savvy workforce that spans across business and industry.

Graduation Requirements

General education	27.0
Major requirements	72.0
Total credit hours required	99.0

General education requirements (27.0 credit hrs.)

The general education requirements for this degree program exceed the minimum standard number of hours. For more information, contact Student Services.

Communications

English level I	4.5
English level II	4.5

See Communications course options (p. 42)

Humanities/social sciences

Humanities/social sciences	4.5
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See Humanities/social sciences course options (p. 42)

Quantitative/Numeracy Skills

MATH	MATH 1220 or higher	4.5
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Students planning to transfer to a four-year institution should select MATH 1420.

Additional

INFO 1001	Information Systems and Literacy ☞ ☹	4.5
HMRL 1010	Human Relations Skills ☞ ☹	4.5

Major requirements for Prototype Design (72.0 credit hrs.)

BSAD 1000	Introduction to Business ☞	4.5
BSAD 2420	Production and Operations Management	4.5
DIMA 1305	Concept Development	4.5
DRAF 2100	SolidWorks Fundamentals	9.0
INFO 1011	Project Management ☞ ☹	4.5
INFO 1515	Robotic Concepts in Prototyping	4.5
INFO 1615	Digital Electronics ☹	4.5
INFO 1950	The Business of Innovation ☹	4.5
INFO 1951	Introduction to Prototype Design ☹	4.5
INFO 1955	How to Build Almost Anything ☹	4.5
INFO 1965	Rapid Prototyping ☹	4.5
INFO 1968	Basic Modelmaking and Design ☹	4.5
INFO 2105	Intermediate SolidWorks ☹	4.5

INFO 2160	The Internet of Things ☹	4.5
PROT 1020	Introduction to Process Operations in Manufacturing Technology ☹	4.5

Prototype Design Curriculum Plan

Below is a suggested guide for students planning careers in prototype design after two years of full-time study.

First Year

First quarter

	English level I	4.5
INFO 1001	Information Systems and Literacy ☞ ☹	4.5
INFO 1951	Introduction to Prototype Design ☹	4.5

Second quarter

	English level II	4.5
DIMA 1305	Concept Development	4.5
INFO 1955	How to Build Almost Anything ☹	4.5

Third quarter

INFO 1011	Project Management ☞ ☹	4.5
INFO 1615	Digital Electronics ☹	4.5
MATH 1220	Business Mathematics ☞	4.5

Fourth quarter

BSAD 1000	Introduction to Business ☞	4.5
HMRL 1010	Human Relations Skills ☞ ☹	4.5
INFO 1515	Robotic Concepts in Prototyping	4.5

Second Year

Fifth quarter

DRAF 2100	SolidWorks Fundamentals	9.0
INFO 1965	Rapid Prototyping ☹	4.5

Sixth quarter

BSAD 2420	Production and Operations Management	4.5
INFO 1950	The Business of Innovation ☹	4.5
INFO 2105	Intermediate SolidWorks ☹	4.5

Seventh quarter

	Humanities/Social Science course	4.5
INFO 1968	Basic Modelmaking and Design ☹	4.5
PROT 1020	Introduction to Process Operations in Manufacturing Technology ☹	4.5

Eighth quarter

INFO 2160	The Internet of Things ☹	4.5
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Versatilist Information Technology

Degree: Associate in Applied Science

Versatilist Information Technology (VITAS) (p. 202)

Certificates of Achievement:

Versatilist Information Technology - Business Intelligence Systems (VBICE) (p. 204)

Versatilist Information Technology - Computer Programming (VCPCE) (p. 205)

Versatilist Information Technology - UNIX/Linux Operating Systems (VUXCE) (p. 206)

Career Certificate:

Full Stack Web Development (VFSCC) (p. 207)

Versatilist Information Technology (VITAS)

Award: Associate in applied science degree

Program location: Fort Omaha Campus, Sarpy Center, South Omaha Campus, Online

Information technology is an integral part of today's business environment. The Versatilist Information Technology degree allows students to customize their program of study, while at the same time being able to change easily to another focus. This degree provides a process where students can adapt to the requirements of current and future IT trends.

Graduation Requirements

General education	27.0–27.5
Major requirements	32.0
Option requirements	40.5
Total credit hours required	99.5–100.0

General education requirements (27.0-27.5 credit hrs.)

The general education requirements for this degree program exceed the minimum standard number of hours. For more information, contact Student Services.

Communications

English level I	4.5
English level II	4.5

See Communications course options (p. 42)

Humanities/social sciences

Humanities/social sciences	4.5
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See Humanities/social sciences course options (p. 42)

Quantitative/Numeracy Skills

MATH	MATH 1220 or higher	4.5
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Students planning to transfer to a four-year institution should select MATH 1420.

Additional

INFO 1001	Information Systems and Literacy ☞ ☹	4.5
HMRL 1010	Human Relations Skills ☞ ☹ OR	4.5
RDLS 1200	College Success Strategies ☞	4.5

Major requirements for Versatilist Information Technology (32.0 credit hrs.)

INFO 1002	Introduction to Information Technology ☞ ☹	4.5
INFO 1003	Problem Solving and Programming Logic ☞ ☹	5.0
INFO 1023	Networking Essentials ☞ ☹	4.5
INFO 1110	Windows Operating Systems I ☞ ☹	4.5
INFO 1111	Linux Operating Systems I ☞ ☹	4.5
INFO 1311	Web Page Creation ☞ ☹	4.5
INFO 1620	Introduction to Database Design ☞ ☹	4.5

Option requirements for Versatilist Information Technology (40.5 credit hrs.)

Students are required to complete 18 credit hours in each of two levels of courses. Students build their schedule by selecting classes for the two levels of INFO courses listed below after completion of a minimum of six major requirements. Students are also required to pick one of the INFO capstone courses that best fits the course plan they have designed in this degree.

Versatilist Information Technology Course Levels

Level One

INFO 1007	Introduction to Object-Oriented Computer Programming ☞	3.0
INFO 1009	Introduction to Cloud Computing ☞	4.5
INFO 1010	Customer Service Skills ☞	4.5
INFO 1011	Project Management ☞ ☹	4.5
INFO 1022	Business Telecommunication Systems ☞ ☹	4.5
INFO 1030	Introduction to Service Desk Operations ☞ ☹	4.5
INFO 1105	IT Essentials PC Repair I	4.5
INFO 1113	AIX Operating System ☞	4.5
INFO 1125	IT Essentials PC Repair II	4.5
INFO 1135	IT Communication Skills ☞ ☹	4.5
INFO 1200	Cisco Network Fundamentals	9.0
INFO 1201	Cisco Routing	9.0
INFO 1314	Photoshop ☞	4.5
INFO 1315	Interface Design ☞ ☹	4.5
INFO 1322	Basic WordPress ☞	4.5
INFO 1401	Introduction to Data Center Operations ☞ ☹	4.5
INFO 1413	Data Center Technician I ☞ ☹	4.5
INFO 1422	DC Storage Management ☞ ☹	4.5
INFO 1515	Robotic Concepts in Prototyping	4.5
INFO 1521	Java Programming I ☞	4.5
INFO 1522	C++ Programming I ☞	4.5
INFO 1523	Visual Basic.NET I ☞	4.5
INFO 1524	COBOL I	5.0

INFO 1526	C# (C-Sharp) Programming I	4.5	INFO 2023	Network and Certification Preparation Network+ Certification Prep	4.5
INFO 1527	Ruby Programming	4.5			
INFO 1529	PHP Programming I	4.5			
INFO 1600	Emerging Technologies in IT	variable	INFO 2025	Introduction to Embedded Systems	4.5
INFO 1615	Digital Electronics	4.5	INFO 2122	Writing Scripts with BASH	4.5
INFO 1805	A+ Certified Professional	4.5	INFO 2124	JavaScript for Front-End Programming	4.5
INFO 1950	The Business of Innovation	4.5	INFO 2135	Network Infrastructure	4.5
INFO 1951	Introduction to Prototype Design	4.5	INFO 2142	Windows Active Directory	4.5
INFO 1955	How to Build Almost Anything	4.5	INFO 2145	Windows Server Administration	4.5
INFO 1962	How to Build an Electric Guitar	4.5	INFO 2160	The Internet of Things	4.5
INFO 1965	Rapid Prototyping	4.5	INFO 2220	Cisco LAN Switching	9.0
INFO 2362	Building Secure Environments	4.5	INFO 2225	CCNA Security	4.5
INFO 2521	Intel Assembly Language I	4.5	INFO 2230	Cisco Accessing the WAN	9.0
INFO 2630	Structured Query Language (SQL)	4.5	INFO 2261	Software Applications Support	4.5
INFO 2642	Transact SQL	4.5	INFO 2340	Internet Scripting	4.5
INFO 2805	Network and Information Security Basics	4.5	INFO 2351	Introduction to XML	4.5
INFO 2806	Network Attacks, Intrusions, and Penetration Testing	4.5	INFO 2439	Mobile Application Development	4.5
Level Two			INFO 2530	Data Structures Using Java	4.5
INFO 1120	Windows Operating Systems II	4.5	INFO 2531	Intel Assembly Language II	4.5
INFO 1121	Linux Operating Systems II	4.5	INFO 2538	Systems Analysis and Design	4.5
INFO 1316	Dreamweaver	4.5	INFO 2621	DB2 Database Management	4.5
INFO 1320	Internet Commerce	4.5	INFO 2635	MySQL Programming	4.5
INFO 1421	Virtualization Technologies Monitoring	4.5	INFO 2640	Oracle SQL and PL/SQL Programming	4.5
INFO 1423	Data Center Technician II	4.5	INFO 2641	SQL Server Design and Implementation	4.5
INFO 1433	DC Operations and Management	4.5	INFO 2642	Transact SQL	4.5
INFO 1531	Java Programming II	4.5	INFO 2643	Implementing Data Warehouses	4.5
INFO 1532	C++ Programming II	4.5	INFO 2644	Database Reporting	4.5
INFO 1533	Visual Basic.NET II	4.5	INFO 2645	Database Analysis Services	4.5
INFO 1534	COBOL II	5.0	INFO 2808	Boundary Protection	4.5
INFO 1536	C# (C-Sharp) Programming II	4.5	INFO 2809	Information Systems, Forensics, and Legal Topics	4.5
INFO 1537	Ruby on Rails	4.5	INFO 2900	Special Topics in Information Technology	variable
INFO 1539	PHP Programming II	4.5	INFO 2981	Internship	Variable
INFO 1591	Web Application Essentials	7.0			
INFO 1592	Web Application Development I	7.0			
INFO 1593	Web Application Development II	7.0			
INFO 1594	Web App Development III	7.0			
INFO 1831	VMware vSphere	4.5			
INFO 1941	360 Web I	14.0			
INFO 1942	360 Web II	14.0			
INFO 1968	Basic Modelmaking and Design	4.5			

Versatilist Information Technology Capstone Selection (4.5 credit hrs.)

The student must select one of the following capstone courses that best fits their designed degree.

INFO 2810	Security Capstone	4.5
INFO 2940	Database and Web Programming Capstone	4.5

INFO 2942	Desktop Support Capstone	☞	4.5
INFO 2944	Web Development Capstone	☞	4.5
INFO 2945	Database Administration Capstone	☞	4.5
INFO 2949	Prototype Design Capstone	☞	4.5
INFO 2990	Data Center Operations Capstone	☞	4.5

Students who complete an Associate in Applied Science in Information Technology at MCC have completed the major requirements for Bellevue University. Students need to take at least 30.0 semester hours at Bellevue and can take additional coursework at MCC toward their Bellevue University degree.

Versatilist Information Technology Curriculum Plan

Below is a suggested guide for students planning careers in general information technology after two years of full-time study.

First Year

First quarter

	English level I		4.5
INFO 1001	Information Systems and Literacy	☞	4.5
INFO 1003	Problem Solving and Programming Logic	☞	5.0

Second quarter

INFO 1002	Introduction to Information Technology	☞	4.5
INFO 1110	Windows Operating Systems I	☞	4.5
INFO 1620	Introduction to Database Design	☞	4.5

Third quarter

	English level II		4.5
INFO 1023	Networking Essentials	☞	4.5
INFO 1311	Web Page Creation	☞	4.5

Fourth quarter

HMRL 1010	Human Relations Skills	☞	4.5
INFO 1111	Linux Operating Systems I	☞	4.5
MATH 1220	Business Mathematics	☞	4.5
	OR		
MATH 1420	College Algebra	☞	5.0

Second Year

Fifth quarter

INFO	Elective		4.5
INFO	Elective		4.5
INFO	Elective		4.5

Sixth quarter

INFO	Elective		4.5
INFO	Elective		4.5
INFO	Elective		4.5

Seventh quarter

INFO	Elective		4.5
INFO	Elective		4.5
	Social sciences elective		4.5

Eighth quarter

INFO	Capstone course		4.5
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Versatilist Information Technology - Business Intelligence Systems (VBICE)

Award: Certificate of achievement

Pathway to associate degree: Versatilist Information Technology (VITAS)

Program location: Fort Omaha Campus, Online

This certificate of achievement provides students with a strong foundation in various aspects of business intelligence development. The certificate program helps prepare students for the Microsoft Business Intelligence certification.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Information-Technology-and-E-Learning/Information-Technology.aspx.

Graduation Requirements

General education	18.0-18.5
Major requirements	36.5
Total credit hours required	54.5-55.0

General education requirements (18.0-18.5 credit hrs.)

Communications

English level I	4.5
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See Communications course options (p. 42)

Humanities/social sciences

Humanities/social sciences	4.5
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See Humanities/social sciences course options (p. 42)

Quantitative/numeracy skills

MATH 1220	Business Mathematics	☞	4.5
	OR		
MATH 1420	College Algebra	☞	5.0

MATH 1420: Additional prerequisite(s) may be required.

Additional

INFO 1001	Information Systems and Literacy	☞	4.5
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Major requirements for Versatilist Information Technology - Business Intelligence Systems (36.5 credit hrs.)

Courses

INFO 1003	Problem Solving and Programming Logic	☞	5.0
INFO 1620	Introduction to Database Design	☞	4.5
INFO 2630	Structured Query Language (SQL)	☞	4.5
INFO 2641	SQL Server Design and Implementation	☞	4.5
INFO 2642	Transact SQL	☞	4.5
INFO 2643	Implementing Data Warehouses	☞	4.5
INFO 2644	Database Reporting	☞	4.5
INFO 2645	Database Analysis Services	☞	4.5

Versatilist Information Technology - Business Intelligence Systems Curriculum Plan

Below is a suggested guide for students planning careers in business intelligence after one year of full-time study.

First Year

First quarter

INFO 1001	Information Systems and Literacy ☞ ☹	4.5
INFO 1003	Problem Solving and Programming Logic ☞ ☹	5.0
INFO 1620	Introduction to Database Design ☞ ☹	4.5

Second quarter

MATH 1220	Business Mathematics ☞ OR	4.5
MATH 1420	College Algebra ☞	5.0
INFO 2630	Structured Query Language (SQL) ☞ Humanities/social sciences	4.5

Third quarter

INFO 2641	SQL Server Design and Implementation ☞	4.5
INFO 2642	Transact SQL ☞ English level I	4.5

Fourth quarter

INFO 2643	Implementing Data Warehouses ☞	4.5
INFO 2644	Database Reporting ☞	4.5
INFO 2645	Database Analysis Services ☞ ☹	4.5

Versatilist Information Technology - Computer Programming (VCPCE)

Award: Certificate of achievement

Pathway to associate degree: Versatilist Information Technology (VITAS)

Program location: Fort Omaha Campus, Sarpy Center, South Omaha Campus, Online

This certificate of achievement provides students with a foundation in programming logic and modern computer languages. Students become familiar with a language that is utilized in today's IT businesses.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mcneb.edu/Academics/Programs-of-Study/Information-Technology-and-E-Learning/Information-Technology.aspx.

Graduation Requirements

General education	18.0–18.5
Major requirements	36.5
Total credit hours required	54.5–55.0

General education requirements (18.0-18.5 credit hrs.)

Communications

English level I 4.5

See Communications course options (p. 42)

Humanities/social sciences

Humanities/social sciences 4.5

See Humanities/social sciences course options (p. 42)

Quantitative/numeracy skills

MATH 1220 Business Mathematics ☞ 4.5

OR

MATH 1420 College Algebra ☞ 5.0

MATH 1420: Additional prerequisite(s) may be required.

Additional

INFO 1001 Information Systems and Literacy ☞ ☹ 4.5

Major requirements for Computer Programming (36.5 credit hrs.)

INFO 1003 Problem Solving and Programming Logic ☞ ☹ 5.0

INFO 1009 Introduction to Cloud Computing ☞ 4.5

INFO 1311 Web Page Creation ☞ ☹ 4.5

INFO 1620 Introduction to Database Design ☞ ☹ 4.5

INFO 2351 Introduction to XML ☞ ☹ 4.5

INFO 2630 Structured Query Language (SQL) ☞ 4.5

Select one of the following pair of language options:

Option 1:

INFO 1521 Java Programming I ☞ 4.5

INFO 1531 Java Programming II ☞ 4.5

Option 2:

INFO 1523 Visual Basic.NET I ☞ 4.5

INFO 1533 Visual Basic.NET II ☞ 4.5

Option 3:

INFO 1526 C# (C-Sharp) Programming I ☞ 4.5

INFO 1536 C# (C-Sharp) Programming II ☞ 4.5

Versatilist Information Technology - Computer Programming Curriculum Plan

Below is a suggested guide for students planning careers in computer programming after one year of full-time study.

First Year

First quarter

English level I 4.5

INFO 1001 Information Systems and Literacy ☞ ☹ 4.5

INFO 1003 Problem Solving and Programming Logic ☞ ☹ 5.0

Second quarter

INFO 1009	Introduction to Cloud Computing	4.5
INFO 1620	Introduction to Database Design	4.5
MATH 1220	Business Mathematics OR	4.5
MATH 1420	College Algebra	5.0

Third quarter

INFO 1311	Web Page Creation	4.5
INFO 2630	Structured Query Language (SQL)	4.5
	Language option	4.5

Fourth quarter

INFO 2351	Introduction to XML Language option	4.5
		4.5

Versatilist Information Technology - UNIX/Linux Operating Systems (VUXCE)

Award: Certificate of achievement

Pathway to associate degree: Versatilist Information Technology (VITAS)

Program location: Fort Omaha Campus, South Omaha Campus, Online

UNIX and Linux are popular operating systems in the information world today. This certificate of achievement provides skills in using these operating systems.

For more information about educational cost, median loan debt, and other important information related to this program, please visit our website at mccneb.edu/Academics/Programs-of-Study/Information-Technology-and-E-Learning/Information-Technology.aspx.

Graduation Requirements

General education	18.0-18.5
Major requirements	32.0
Total credit hours required	50.0-50.5

General education requirements (18.0-18.5 credit hrs.)

The general education requirements for this certificate program exceed the minimum standard number of hours. For more information, contact Student Services.

Communications

English level I	4.5
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See Communications course options (p. 42)

Humanities/social sciences

Humanities/social sciences	4.5
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See Humanities/social sciences course options (p. 42)

Quantitative/Numeracy Skills

MATH	MATH 1220 or higher	4.5
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Students planning to transfer to a four-year institution should select MATH 1420.

Additional

INFO 1001	Information Systems and Literacy	4.5
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Major requirements for UNIX/Linux Operating Systems (32.0 credit hrs.)

INFO 1002	Introduction to Information Technology	4.5
INFO 1003	Problem Solving and Programming Logic	5.0
INFO 1111	Linux Operating Systems I	4.5
INFO 1113	AIX Operating System	4.5
INFO 1121	Linux Operating Systems II	4.5
INFO 1805	A+ Certified Professional	4.5
INFO 2122	Writing Scripts with BASH	4.5

Versatilist Information Technology - UNIX/Linux Operating Systems Curriculum Plan

Below is a suggested guide for students planning careers in UNIX/Linux operating systems.

First Year**First quarter**

INFO 1001	Information Systems and Literacy	4.5
INFO 1002	Introduction to Information Technology	4.5
	ENGL level I	4.5

Second quarter

INFO 1111	Linux Operating Systems I	4.5
INFO 1805	A+ Certified Professional	4.5
	Social science elective	4.5

Third quarter

INFO 1003	Problem Solving and Programming Logic	5.0
INFO 1113	AIX Operating System	4.5
MATH	Elective	4.5-5.0

Fourth quarter

INFO 1121	Linux Operating Systems II	4.5
INFO 2122	Writing Scripts with BASH	4.5

Full Stack Web Development (VFSCC)

Award: Career certificate

Pathway to associate degree: Versatilist Information Technology (VITAS)

Program location: Fort Omaha Campus, Online

This program is designed for students who have a working knowledge of HTML 5, CSS, and basic computer development concepts such as flow control and object-oriented programming concepts. Students gain the knowledge and skills of the essential elements of Full Stack web development. This program allows students to gain employment for web application development.

For more information about educational cost, median loan debt, and other important information related to this program, please

visit our website at mccneb.edu/Academics/Programs-of-Study/Information-Technology-and-E-Learning.aspx.

Requirements for Full Stack Web Development career certificate (28.0 credit hrs.)

Select one group:

Group 1

INFO 1941	360 Web I ☺	14.0
INFO 1942	360 Web II ☺	14.0

Group 2

INFO 1591	Web Application Essentials ☺	7.0
INFO 1592	Web Application Development I ☺	7.0
INFO 1593	Web Application Development II ☺	7.0
INFO 1594	Web App Development III ☺	7.0

LIBERAL ARTS AND SCIENCES/GENERAL STUDIES

Academic Transfer

- Liberal Arts/Academic Transfer, associate in arts degree (p. 208)
- Liberal Arts/Academic Transfer - Language Studies, associate in arts degree (p. 209)
- Liberal Arts/Academic Transfer, associate in science degree (p. 212)

Business Transfer

- Business Transfer, associate in arts degree (p. 210)

Computer Technology Transfer

- Computer Science, associate in science degree (p. 214)
- Management Information Systems, associate in science degree (p. 215)

General Studies Transfer

- General Studies, associate in applied science degree (p. 216)

General Studies

- Building Maintenance (p. 168)
- Business Start-Up (p. 82)
- CDL-A Truck Driving (p. 163)
- Customer Service Management (p. 80)
- Customer Service Representative (p. 92)
- Diesel/Automotive Parts Sales (p. 163)
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- Global Perspectives (p. 51)
- Immigration Laws, Policies, and Procedures (p. 88)
- Not-for-Profit Management (p. 79)
- Professional Communication (p. 52)
- Professional Skills (p. 81)
- Spanish for Business (p. 81)
- Spanish for Healthcare (p. 143)

Human Services Transfer

- Human Services Transfer, associate in applied science degree (p. 211)

Associate in Arts Degree

The Liberal Arts/Academic Transfer degree provides a solid foundation for any bachelor's degree in the arts, humanities, or social sciences. These include fine arts, performing arts, history, political science, psychology, sociology, anthropology, geography, library science, early childhood education, or education with an emphasis in any of the areas previously listed.

Associate in Arts degrees - Associate-to-Bachelors (A-to-B)

MCC has many Associate-to-Bachelor (A-to-B) Agreements, or articulation agreements, that allow MCC students to transfer their entire associate degree toward a four-year college degree. Visit mccneb.edu/Current-Students/Transfer-Students/Articulation.aspx for a complete list of A-to-B Agreements and Transfer Guides along with their course listings and requirements. Additional transfer information and tips can be found in the Transfer Information (p. 218) section of the catalog.

Liberal Arts/Academic Transfer (LATAA) - associate in arts

Award: Associate in arts degree

Program location: Elkhorn Valley Campus, Fort Omaha Campus, South Omaha Campus

This degree strengthens foundation skills, provides broad understanding, and develops thinking skills as students prepare for advanced sequences of courses at four-year institutions. Each transfer institution publishes requirements for admission, general education, and major concentration areas. Students should consult the catalog of the transfer institution of their choice. This degree can be completed online by selecting courses with the online course designation.

Graduation Requirements

General education	27.0
Major requirements	69.0
Total credit hours required	96.0

General education requirements (27.0 credit hrs.)

Communications

ENGL 1010	English Composition I	4.5
ENGL 1020	English Composition II	4.5
SPCH 1110	Public Speaking	4.5

Quantitative/numeracy skills

MATH 1310	Intermediate Algebra	4.5
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Take MATH 1310 or higher level MATH course. For students planning to transfer to UNL, MATH 1410 Statistics is recommended.

Other

HMRL 1010	Human Relations Skills	4.5
INFO 1001	Information Systems and Literacy	4.5

Major requirements for Liberal Arts/Academic Transfer (69.0 credit hours)

Students should select courses from each of the following categories to meet the required credit hours. A total of 36.0 credits must be taken in the social sciences and humanities categories combined in order to receive the Associate in Arts

degree. Students should consult with an advisor or counselor to select courses that best meet their transfer needs.

Students may not use the same course to satisfy more than one degree requirement.

Quantitative/numeracy skills or major-related

Select 4.5 credit hours from the mathematics courses listed in transfer course options (p. 220) that meet a requirement for your chosen major. Refer to the transfer guide for the specific transfer program and college. If no additional math is required, select another major requirement.

Social sciences/Humanities

Select a total of **36.0 credit hours combined from the social sciences and humanities transfer course options**. Note that **students must take a minimum of 9.0 credit hours in both social sciences and in humanities**; the remaining 18.0 credit hours can be any combination of transfer courses listed in transfer course options (p. 220).

Natural sciences

Select 12.0 credit hours from the natural sciences courses listed in transfer course options (p. 221). At least one course should include a lab.

Cultural studies

Select 4.5 credit hours from the cultural studies courses listed in transfer course options (p. 220).

Electives

Select 12.0 credit hours. Elective credits may be selected from courses throughout the catalog, but students are strongly advised to consult with the four-year college to which they plan to transfer when choosing particular courses. The degree plan to be followed at a four-year institution should also be followed where possible in choosing elective courses at MCC.

Additional transfer information is available in Student Services or by visiting <https://www.mccneb.edu/Prospective-Students/Transfer-Students/Articulation.aspx>. Counselors and advisors are available to provide assistance with the selection of MCC courses that transfer to area four-year institutions.

Liberal Arts/Academic Transfer – Language Studies (LTLAA) - associate in arts

Award: Associate in arts degree

Program location: Elkhorn Valley Campus, Fort Omaha Campus, Sarpy Center, South Omaha Campus

This degree offers a broad-based liberal arts education to students interested in pursuing language studies at a four-year college or university. Students build a solid foundation of knowledge in Spanish, French, Japanese or American Sign Language and cultural studies. This program also prepares students to better communicate with non-English speaking or deaf clients and friends in business and social situations.

Graduation Requirements

General education	27.0
Major requirements	58.5
Electives	11.0-13.5
Total credit hours required	96.5-99.0

General education requirements (27.0 credit hrs.)

Communications

ENGL 1010	English Composition I	4.5
ENGL 1020	English Composition II	4.5
SPCH 1110	Public Speaking	4.5

Quantitative/numeracy skills

MATH 1310	Intermediate Algebra	4.5
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Take MATH 1310 or higher level MATH course

Other

HMRL 1010	Human Relations Skills	4.5
INFO 1001	Information Systems and Literacy	4.5

Major requirements for Liberal Arts/Academic Transfer – Language Studies (69.5 -72.0 credit hrs.)

Humanities

Select one group:

Group 1:

FREN 1110	Elementary French I	7.5
FREN 1120	Elementary French II	7.5
FREN 2110	Intermediate French I	4.5
FREN 2120	Intermediate French II	4.5
	An additional elective	4.5

Group 2:

JAPN 1010	Beginning Japanese I	7.5
JAPN 1020	Beginning Japanese II	7.5
JAPN 2010	Intermediate Japanese I	4.5
JAPN 2020	Intermediate Japanese II	4.5
JAPN 2030	Intermediate Japanese III	4.5

Group 3:

SPAN 1110	Elementary Spanish I	7.5
SPAN 1120	Elementary Spanish II	7.5
SPAN 2110	Intermediate Spanish I	4.5
SPAN 2120	Intermediate Spanish II	4.5
SPAN 2210	Conversation Skills I	4.5

Group 4:

SPAN 1410	Spanish for High Beginners I	7.5
SPAN 1411	Spanish for High Beginners II	7.5
SPAN 2110	Intermediate Spanish I	4.5
SPAN 2120	Intermediate Spanish II	4.5
SPAN 2210	Conversation Skills I	4.5

Group 5:

SLIS 1010	American Sign Language I	6.0
SLIS 1020	American Sign Language II	6.0
SLIS 1030	American Sign Language III	6.0
SLIS 1040	American Sign Language IV	6.0
SLIS 2201	History, Psychology and Sociology of Deafness	4.5

Social sciences

Select 9.0 credit hours from the social sciences courses listed in Transfer course options (p. 220).

HIST 1080 Traditional and Modern Japan is recommended for Japanese majors.

HIST 2200 Latin American History is recommended for Spanish majors.

Quantitative/numeracy skills or major-related

Select 4.5 credit hours from the mathematics courses listed in Transfer course options that meet a requirement for your chosen major. Refer to the transfer guide for the specific transfer program and college. If no additional math is required, select another major requirement.

Cultural studies

Select 4.5 credit hours from the cultural studies courses listed in Transfer course options (p. 220).

Natural sciences

Select 12.0 credit hours from the natural sciences courses listed in Transfer course options (p. 221).

Electives (11.0-13.5 credit hrs.)**Select 11.0 - 13.5 credit hours from the following:**

FREN 2900	Special Topics in French	variable
JAPN 2040	Intermediate Japanese IV	4.5
JAPN 2900	Special Topics in Japanese	variable
SPAN 1050	Spanish for Business I	4.5
SPAN 1051	Spanish for Business II	4.5
SPAN 1060	Spanish for Healthcare I	4.5
SPAN 1061	Spanish for Healthcare II	4.5
SPAN 1810	Spanish Study Abroad	variable
SPAN 1900	Special Topics in Spanish I	variable
SPAN 2050	Intermediate Spanish for Business I	4.5
SPAN 2060	Intermediate Spanish for Healthcare I	4.5
SPAN 2061	Intermediate Spanish for Healthcare II	4.5
SPAN 2220	Conversation Skills II	4.5
SPAN 2480	Cinematica	4.5
SPAN 2490	Introduction to Latin American Literature	4.5
SPAN 2900	Special Topics in Spanish II	variable
LANG	Courses of choice	

Business Transfer (BSTAA)

Award: Associate in arts degree

Program location: Elkhorn Valley Campus, Fort Omaha Campus, South Omaha Campus, Online

This degree provides students with the dual option of seeking entry-level business positions and/or continuing their studies at a

four-year institution. Currently, Bellevue University, Midland University, University of Nebraska–Lincoln, Northwest Missouri State, and University of Nebraska at Omaha accept this degree. Areas of emphasis include accounting, economics, management, and marketing.

Graduation Requirements

General education	55.5-57.5
Major requirements	43.5
Total credit hours required	99.0-101.0

General education requirements (55.5 - 57.5 credit hrs.)

The general education requirements for this degree exceed the minimum standard number of hours. For more information, contact Student Services.

Communications

ENGL 1010	English Composition I	4.5
ENGL 1020	English Composition II	4.5
SPCH 1110	Public Speaking	4.5

Cultural diversity

Select one course from the following:

ENGL 2530	Ethnic Literature	4.5
HIST 1050	Introduction to Black History	4.5
PHIL 2200	Introduction to Comparative Religion	4.5
SOCI 2060	Multicultural Issues	4.5

Humanities

Select two courses from the following:

ARTS 1110	Art History-Ancient to Gothic	4.5
ARTS 1120	Art History-Renaissance to Modern	4.5
ENGL 2470	Introduction to Women's Literature	4.5
ENGL 2530	Ethnic Literature	4.5
ENGL 2610	British Literature I	4.5
ENGL 2620	British Literature II	4.5
MUSC 1010	Introduction to Music I	4.5
MUSC 1020	Introduction to Music II	4.5
PHIL 1010	Introduction to Philosophy	4.5
PHIL 1100	Critical Reasoning	4.5
PHIL 2030	Introduction to Ethics	4.5
PHIL 2200	Introduction to Comparative Religion	4.5
THEA 1000	Introduction to Theatre	4.5

Natural sciences

Natural sciences	6.0-7.5
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See *Natural Sciences* (p. 221) course options

Social sciences

Select two courses from the following:

GEOG 1010	Fundamentals of Geography	4.5
GEOG 1050	Introduction to Human Geography	4.5
HIST 1010	United States History to 1877	4.5

HIST 1020	United States History from 1865 to Present	4.5
HIST 1110	World Civilization from Prehistory to 1500	4.5
HIST 1120	World Civilization from 1500 to Present	4.5
HIST 2050	Modern Europe Since 1789	4.5
PSYC 1010	Introduction to Psychology	4.5
SOCI 1010	Introduction to Sociology	4.5
SOCI 1250	Introduction to Anthropology	4.5
SOCI 2050	Current Social Problems	4.5
SOCI 2160	Marital and Family Relationships	4.5

Quantitative/numeracy skills

MATH 1420	College Algebra	5.0
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MATH 1420: Additional prerequisite(s) may be required.

Additional

HMRL 1010	Human Relations Skills	4.5
INFO 1001	Information Systems and Literacy	4.5
	OR	
ACCT 2230	Microcomputer Business Applications	4.0

Major requirements for Business Transfer (43.5 credit hrs.)

ACCT 1100	Accounting I	4.0
ACCT 1110	Accounting II	4.0
ACCT 1120	Accounting III	4.0
BSAD 1000	Introduction to Business	4.5
BSAD 1010	Principles of Marketing	4.5
BSAD 1100	Business Law I	4.5
BSAD 2100	Principles of Management	4.5
ECON 1000	Macroeconomics	4.5
ECON 1100	Microeconomics	4.5

Select one course from the following:

BSAD 2700	Introduction to International Business and Global Entrepreneurship	4.5
BSAD 2720	International Marketing Management	4.5
ECON 2720	International Economics	4.5

UNO and UNL may have more specific requirements. Refer to <https://www.mccneb.edu/Prospective-Students/Transfer-Students/Articulation.aspx> for current information.

For the most current transfer listings, visit <https://www.mccneb.edu/Prospective-Students/Transfer-Students/Articulation.aspx>.

To optimize credit transfer to the business programs within the University of Nebraska system, follow the detailed business transfer guides listed under UNL and UNO as they may have more specific requirements.

Associate in Applied Science Degree**Human Services Transfer (HSTAA)**

Award: Associate in applied science degree

Program location: Fort Omaha Campus

The Human Services Transfer degree is designed to develop essential knowledge and skills required in the Human Services field and to efficiently accommodate transfer to four year human services-related fields from around the area. Social work programs at some area colleges and universities also accept the human service transfer degree; please check your transfer guides.

Graduation Requirements

General education	51.0
Major requirements	49.5
Total credit hours required	100.5

All required classes with a HMSV prefix must have a grade of C or better to graduate in this program.

General education requirements (51.0 credit hrs.)**Communications**

ENGL 1010	English Composition I	4.5
ENGL 1020	English Composition II	4.5
SPCH 1110	Public Speaking	4.5

Humanities

Select one course from the following:

ARTS 1110	Art History-Ancient to Gothic	4.5
ARTS 1120	Art History-Renaissance to Modern	4.5
ENGL 2470	Introduction to Women's Literature	4.5
ENGL 2530	Ethnic Literature	4.5
ENGL 2610	British Literature I	4.5
ENGL 2620	British Literature II	4.5
MUSC 1010	Introduction to Music I	4.5
MUSC 1020	Introduction to Music II	4.5
PHIL 1010	Introduction to Philosophy	4.5
PHIL 2030	Introduction to Ethics	4.5
PHIL 2200	Introduction to Comparative Religion	4.5
THEA 1000	Introduction to Theatre	4.5

Natural sciences

Natural science	6.0
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See Natural sciences course options (p. 221)

Social sciences

PSYC 1010	Introduction to Psychology	4.5
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Select 9.0 hours from the following:

ECON 1000	Macroeconomics	4.5
	OR	
POLS 2050	American National Government	4.5
GEOG 1010	Fundamentals of Geography	4.5
GEOG 1050	Introduction to Human Geography	4.5
HIST 1010	United States History to 1877	4.5
HIST 1110	World Civilization from Prehistory to 1500	4.5
HIST 1120	World Civilization from 1500 to Present	4.5
HIST 2050	Modern Europe Since 1789	4.5
PSYC 2350	Fundamentals of Abnormal Psychology	4.5
SOCI 1250	Introduction to Anthropology	4.5
SOCI 2050	Current Social Problems	4.5
SOCI 2160	Marital and Family Relationships	4.5
SOWK 1010	Introduction to Social Work	4.5

Students are advised to check the transfer guides at <https://www.mccneb.edu/Prospective-Students/Transfer-Students/Articulation.aspx> for the school they plan to attend prior to selecting elective courses.

Quantitative/numeracy skills

MATH 1310	Intermediate Algebra	4.5
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Additional

HMRL 1010	Human Relations Skills	4.5
INFO 1001	Information Systems and Literacy	4.5

Major requirements for Human Services Transfer (49.5 credit hrs.)

HMSV 1010	Introduction to Human Services	4.5
HMSV 1120	Helping Skills and Techniques	4.5
HMSV 1130	Introduction to Counseling Theories	4.5
HMSV 1140	Assessment, Case Planning, and Management	4.5
HMSV 1150	Community Resources	4.5
HMSV 2050	Ethics and Professionalism	4.5
HMSV 2110	Group Counseling	4.5
HMSV 2120	Social Services Policy and Exceptional Populations	4.5
HMSV 2150	Multicultural Counseling	4.5
PSYC 1120	Human Growth and Development	4.5
SOCI 1010	Introduction to Sociology	4.5

Associate in Science Degree

The Liberal Arts/Academic Transfer (LATAS) Associate in Science degree provides a solid foundation for a bachelor's degree in science, technology, engineering or math. It provides the flexibility to complete most of the general education requirements for a bachelor's degree, with room in the schedule to take the major-related courses and pre-requisites required to complete a bachelor's degree in a STEM field within four years.

Liberal Arts/Academic Transfer (LATAS) - associate in science

Award: Associate in science degree

Program location: Elkhorn Valley Campus, Fort Omaha Campus, South Omaha Campus

This degree strengthens foundation skills, provides broad understanding, and develops reasoning skills as students prepare for advanced studies in a natural sciences, mathematics, or science-dependent program. By taking the suggested courses below, students are able to transfer into a baccalaureate degree program at a four-year college upon completion of the associate degree. Each transfer institution publishes requirements for admission, general education, and major concentration areas. Students should consult the catalogs of the transfer institution of their choice.

Graduation Requirements

General education	27.0
Major requirements	69.0
Total credit hours required	96.0

General education requirements (27.0 credit hrs.)**Communications**

ENGL 1010	English Composition I	4.5
ENGL 1020	English Composition II	4.5
SPCH 1110	Public Speaking	4.5

Quantitative/numeracy skills

MATH 1310	Intermediate Algebra	4.5
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Take MATH 1310 or higher level MATH course

Other

HMRL 1010	Human Relations Skills	4.5
INFO 1001	Information Systems and Literacy	4.5

Major requirements for Liberal Arts/Academic Transfer (69.0 credit hrs.)

Students should select courses from each of the following categories to meet the required credit hours. Students should consult with an advisor or counselor to select courses that best meet their transfer needs.

Quantitative/numeracy skills/computer sciences

Select 4.5 credit hours from the mathematics courses listed in Transfer course options (p. 220).

Computer sciences courses are required for some majors; see specific articulation documents online.

Social sciences

Select 9.0 credit hours from the social sciences courses listed in Transfer course options (p. 220).

Humanities

Select 4.5 credit hours from the humanities courses listed in Transfer course options (p. 221).

Natural sciences/quantitative/numeracy skills

Select 28.5 credit hours from the natural sciences/mathematics courses listed in Transfer course options (p. 221).

A minimum of 12.0 credit hours must be taken in the area of BIOS, CHEM, PHYS, or SCIE and must include at least one lab course.

Cultural studies

Select 4.5 credits from the cultural studies courses listed in Transfer course options (p. 220).

Electives

Select 18.0 credit hours.

Elective credits may be selected from courses throughout the catalog, but students are strongly advised to consult with the colleges to which they plan to transfer when choosing particular courses. The degree plan to be followed at a four-year institution should also be followed where possible in choosing elective courses at MCC.

Additional transfer information is available in Student Services. Counselors and advisors are available to provide assistance with the selection of MCC courses that transfer to area four-year institutions.

Associate-to-Bachelors (A-to-B) Degrees

Listed below are associate in science degree transfer agreements developed with specific courses that transfer to a four-year institution. These are special agreements with the four-year institutions, and all courses should be completed for maximum transfer. Completing an A-to-B Agreement does not guarantee admission into the four-year school.

Visit <https://www.mccneb.edu/Current-Students/Transfer-Students/Articulation.aspx> for complete course listings and the requirements.

Associate in science transfer agreements	Four-year institution	
Pre-Agricultural Sciences (LAGAS)	University of Nebraska–Lincoln	
Pre-Biology (LABAS)	University of Nebraska at Omaha	
Pre-BioTechnology (LBTAS)	University of Nebraska at Omaha	
Pre-Chemistry (LACAS)	University of Nebraska at Omaha	
Pre-Clinical Laboratory Science (PSMT2)	University of Nebraska at Omaha University of Nebraska Medical Center	
Pre-Engineering	University of Nebraska-Lincoln/Omaha campus	
Pre-Architectural Engineering (PEARO)		
Pre-Civil Engineering (PECVO)		
Pre-Computer Engineering (PECPO)		
Pre-Construction Engineering Technology (PECTO)		
Pre-Construction – Management (PECMO)		
Pre-Electronic Engineering (PEELO)		
Pre-Math (LAMAS)		University of Nebraska at Omaha
Pre-Nursing (LASNO)	University of Nebraska Medical Center	
Pre-Physics (LAPAS)	University of Nebraska at Omaha	
Teacher Preparation	University of Nebraska at Omaha	
Pre-Elementary Education - see transfer guide		
Pre-Secondary Education		
Arts Endorsement (PSAE1)		
Language Arts Endorsement (LALAO)		
Math Endorsement (LAEMO)		
Cultural Science Endorsement (LANSO)		
Social Sciences Endorsement (LASSO)		
Pre-Deaf or Hard of Hearing Endorsement (LAPDO)		
Pre-Veterinarian (PVAS1)		University of Nebraska–Lincoln/Iowa State University

Computer Technology Transfer

There are two options under the Computer Technology Transfer Degree:

Computer Technology Transfer - Computer Science

Computer Technology Transfer - Management Information Systems

Computer Technology Transfer - Computer Science (CTSAS)

Award: Associate in science degree

Program location: Fort Omaha Campus, Sarpy Center, South Omaha Campus, Online

This degree provides students with the dual option of seeking entry-level programming positions and/or continuing their studies at a four-year institution. Currently, Bellevue University and the University of Nebraska at Omaha accept this degree. Areas of emphasis include Logic C, C++, VB, and Java.

Graduation Requirements

General education	42.5–44.0
Major requirements	60.5
Total credit hours required	103.0–104.5

General education requirements (42.5-44.0 credit hrs.)

The general education requirements for this degree program exceed the minimum standard number of hours. For more information, contact Student Services.

Communications

ENGL 1010	English Composition I	4.5
ENGL 1020	English Composition II	4.5
SPCH 1110	Public Speaking	4.5

Natural sciences

Select one group from the following:

Group One

PHYS 110A	Principles of Physics IA	2.5
PHYS 110AL	Principles of Physics IA Lab	0.0
PHYS 110B	Principles of Physics IB	2.5
PHYS 110BL	Principles of Physics IB Lab	0.0
PHYS 110C	Principles of Physics IC	2.5
PHYS 110CL	Principles of Physics IC Lab	0.0

Group Two

BIOS 1010	General Biology	6.0
BIOS 1010L	General Biology Lab	0.0

Group Three

CHEM 1010	College Chemistry	6.0
CHEM 1010L	College Chemistry Lab	0.0

Group Four

SCIE 1300	Astronomy	4.5
SCIE 1310	Astronomy Laboratory	1.5

Group Five

GEOG 1150	Introduction to Physical Geography - Weather and Climate	6.0
	OR	
GEOG 1160	Introduction to Physical Geography - Landforms	6.0
	OR	
GEOG 1210	Introduction to Physical Geology	6.0

Quantitative/numeracy skills

MATH 1420	College Algebra	5.0
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MATH 1420: Additional prerequisite(s) may be required.

Social sciences

Select two courses, one from group one and one from group two:

Group One

ECON 1000	Macroeconomics	4.5
ECON 1100	Microeconomics	4.5
PSYC 1010	Introduction to Psychology	4.5
SOCI 1010	Introduction to Sociology	4.5
SOCI 2050	Current Social Problems	4.5

Group Two

SOCI 2060	Multicultural Issues	4.5
SOCI 2160	Marital and Family Relationships	4.5

Additional

HMRL 1010	Human Relations Skills	4.5
INFO 1001	Information Systems and Literacy	4.5

UNO additional general education requirements to be taken after transfer: one natural and physical science course; three humanities and fine arts courses; and one diversity/global course.

Major requirements for Computer Technology Transfer – Computer Science (60.5 credit hrs.)

INFO 1002	Introduction to Information Technology	4.5
INFO 1003	Problem Solving and Programming Logic	5.0
INFO 1023	Networking Essentials	4.5
INFO 1521	Java Programming I	4.5
INFO 1522	C++ Programming I	4.5
INFO 1531	Java Programming II	4.5
INFO 1532	C++ Programming II	4.5
INFO 2521	Intel Assembly Language I	4.5
INFO 2531	Intel Assembly Language II	4.5
MATH 2410	Analytic Geometry and Calculus I	7.5
MATH 2411	Calculus II	7.5

MATH 2410: Additional prerequisite(s) may be required.

Students should refer to <https://www.mccneb.edu/Prospective-Students/Transfer-Students/Articulation.aspx> for complete information on this transfer degree.

Computer Technology Transfer – Management Information Systems (CTMAS)

Award: Associate in science degree

Program location: Fort Omaha Campus, Sarpy Center, South Omaha Campus, Online

This degree provides students with the dual option of seeking entry-level programming positions and/or continuing their studies at a four-year institution. Currently, Bellevue University and the University of Nebraska at Omaha accept this degree. Areas of emphasis include Logic C, C++, VB, and Java.

Graduation Requirements

General education	39.5+
Major requirements	62.0
Total credit hours required	101.5+

General education requirements (39.5+)

The general education requirements for this degree program exceed the minimum standard number of hours. For more information, contact Student Services.

Communications

ENGL 1010	English Composition I	4.5
ENGL 1020	English Composition II	4.5
SPCH 1110	Public Speaking	4.5

Humanities

Select one course from the following:

ARTS 1000	Introduction to the Visual Arts	4.5
ENGL 2530	Ethnic Literature	4.5
HIST 1050	Introduction to Black History	4.5
HIST 1110	World Civilization from Prehistory to 1500	4.5
HIST 1120	World Civilization from 1500 to Present	4.5
HUMS 1000	Humanities through the Arts	4.5
HUMS 1100	Classical Humanities	4.5
HUMS 1120	The Humanities in the Medieval - Renaissance World	4.5
HUMS 1130	The Humanities in the Modern World	4.5
HUMS 1150	The Humanities in the Non-Western World	4.5
PHIL 2200	Introduction to Comparative Religion	4.5

Natural sciences

Select one group from the following:

Group One		
PHYS 110A	Principles of Physics IA	2.5
PHYS 110AL	Principles of Physics IA Lab	0.0
PHYS 110B	Principles of Physics IB	2.5
PHYS 110BL	Principles of Physics IB Lab	0.0
PHYS 110C	Principles of Physics IC	2.5
PHYS 110CL	Principles of Physics IC Lab	0.0

Group Two

BIOS 1010	General Biology	6.0
BIOS 1010L	General Biology Lab	0.0

Group Three

CHEM 1010	College Chemistry	6.0
CHEM 1010L	College Chemistry Lab	0.0

Group Four

SCIE 1300	Astronomy	4.5
SCIE 1310	Astronomy Laboratory	1.5

Group Five

BIOS 1250	Environmental Biology	4.5
OR		
GEOG 1150	Introduction to Physical Geography - Weather and Climate	6.0
OR		
GEOG 1160	Introduction to Physical Geography - Landforms	6.0
OR		
GEOG 1210	Introduction to Physical Geology	6.0

Quantitative/numeracy skills

MATH 1420	College Algebra	5.0
MATH 1420: Additional prerequisite(s) may be required.		

Social sciences

Select one course from the following:

ECON 1000	Macroeconomics	4.5
ECON 1100	Microeconomics	4.5
GEOG 1010	Fundamentals of Geography	4.5
GEOG 1050	Introduction to Human Geography	4.5
SOCI 2060	Multicultural Issues	4.5
SOCI 2160	Marital and Family Relationships	4.5

Additional

HMRL 1010	Human Relations Skills	4.5
INFO 1001	Information Systems and Literacy	4.5

Major requirements for Computer Technology Transfer – Management Information Systems (62.0 credit hrs.)

ACCT 1100	Accounting I	4.0
ACCT 1110	Accounting II	4.0
ACCT 1120	Accounting III	4.0
INFO 1002	Introduction to Information Technology	4.5
INFO 1003	Problem Solving and Programming Logic	5.0
INFO 1311	Web Page Creation	4.5
INFO 1521	Java Programming I	4.5
INFO 1522	C++ Programming I	4.5
INFO 1531	Java Programming II	4.5

INFO 1532	C++ Programming II ☞	4.5
INFO 1620	Introduction to Database Design ☞ ☹	4.5
INFO 2340	Internet Scripting ☞	4.5
INFO 2630	Structured Query Language (SQL) ☞	4.5

Students should refer to <https://www.mccneb.edu/Prospective-Students/Transfer-Students/Articulation.aspx> for complete information on this transfer degree.

General Studies

General Studies (GSAAS)

Award: Associate in applied science degree

Program location: Elkhorn Valley Campus, Fort Omaha Campus, South Omaha Campus

This degree focuses on career areas as well as general education. It offers students an associate degree program that allows some latitude in selection of courses in areas of interest. Students should work with an advisor or counselor in planning the coursework for this degree.

Graduation Requirements

General education	42.0–43.5
Major requirements	36.0
Electives	18.0
Total credit hours required	96.0–97.5

General education requirements (42.0 - 43.5 credit hrs.)

Students should be aware that additional college-level courses are required for most four-year programs. To satisfy general education requirements for most four-year degrees, select from the transfer options.

Communications

ENGL 1010	English Composition I ☞ ☹	4.5
ENGL 1020	English Composition II ☞ ☹	4.5
SPCH 1110	Public Speaking ☞ ☹	4.5

Social sciences

Social sciences	4.5
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See Social sciences course options (p. 42) and/or Transfer course options (p. 220)

Quantitative/numeracy skills

Mathematics or Financial Literacy	4.5
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See Quantitative/numeracy skills course options (p. 44) and/or Transfer course options (p. 220)

Natural sciences

Natural sciences	6.0-7.5
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See Natural sciences course options (p. 43) and/or Transfer course options (p. 220)

Humanities

Humanities	4.5
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See Humanities course options (p. 42) and/or Transfer course options (p. 220)

Additional

INFO 1001	Information Systems and Literacy ☞ ☹	4.5
HMRL 1010	Human Relations Skills ☞ ☹ OR	4.5
RDLS 1200	College Success Strategies ☞	4.5

Major requirements for General Studies (36.0 credit hrs.)

Complete a minimum of 36.0 credit hours of courses, selecting from a maximum of two prefixes. Students with specific areas of interest are able to combine course prefixes to meet these requirements. See section on areas of interest for major requirements (below).

Electives for General Studies (18.0 credit hrs.)

Select 18.0 credit hours.

Areas of interest for major requirements

Students can tailor a specific interest into an associate degree program by combining course prefixes to meet their General Studies major requirements. Listed below are the areas of interest and the acceptable course prefixes that can be considered as a single prefix:

Global-cultural:

For students interested in global/cultural, any combination of the following prefixes is considered as a single prefix: GEOG, HIST, HUMS, PHIL, POLS, and SOCI.

Management:

For students interested in management, any combination of the following prefixes is considered as a single prefix: ACCT, BSAD, ECON, ENTR, FINA, INSU, and REES.

Science/health:

For students interested in science/health, any combination of the following prefixes is considered as a single prefix: BIOS, CHEM, HLTH, PHYS, SCIE, EMSP, MDST, and FIST.

Visual arts:

For students interested in visual arts, any combination of the following prefixes is considered as a single prefix: ARTS, DIMA, PHOT, and VACA.

General Studies: Associate-to-Bachelor Agreements

General studies degree transfer agreements have been developed with certain four-year institutions.

Visit www.mccneb.edu/articulation for complete transfer course listings and requirements.

General Studies: Associate-to-Bachelor (A-to-B) agreements

Listed below are general studies degree transfer agreements developed with specific courses that transfer to a four-year institution. These are special agreements with the four-year institution, and all courses should be completed for maximum transfer. Completing an A-to-B Agreement does not guarantee admission into the four-year school.

Visit www.mccneb.edu/articulation for complete course listings and requirements.

Some of the A-to-B Agreements were developed with students taking courses from more than two prefixes and are only acceptable in the designated option.

General studies transfer agreements	Four-year institution
Pre-Criminal Justice (PUCJO)	University of Nebraska at Omaha
Pre-Gerontology	University of Nebraska at Omaha
Pre-Health Related Business (PSHBO)	Clarkson College
Pre-Secondary Education	
Industrial Technology Endorsement (PSITO)	Wayne State College
Skilled and Technical Sciences Endorsement (ITAS2)	University of Nebraska–Lincoln

Certificates of Achievement Leading to General Studies Degree

Business Management – Not-for-Profit Management (p. 79)

Entrepreneurship Generalist (p. 82)

Language Interpretation (p. 52)

Publication Writing and Design (p. 63)

Video/Audio Communications Arts – Screenwriting (p. 69)

Video/Audio Communications Arts – Sound Recording (p. 70)

Career Certificates Leading to General Studies Degree

Building Maintenance
(p. 168)

Business Start-Up (p. 82)

CDL-A Truck Driving (p. 163)

Customer Service Management (p. 80)

Customer Service Representative (p. 92)

Diesel/Automotive Parts Sales (p. 163)

Electrical Mechanical Systems (p. 168)

Global Perspectives (p. 51)

Immigration Laws, Policies, and Procedures (p. 88)

Masonry and Concrete Construction (p. 113)

Not-for-Profit Management (p. 81)

Plumbing Fundamentals (p. 119)

Professional Communication (p. 52)

Professional Skills (p. 81)

Spanish for Business (p. 81)

Spanish for Healthcare (p. 143)

TRANSFER INFORMATION

MCC provides many options to students who desire to transfer community college credit to four-year colleges and universities. All associate in arts and associate in science degrees at MCC require a minimum of 61.5 quarter hours (40.1 semester hours) of general education coursework.

Articulation agreements take the guesswork out of credit transfer. MCC has many Associate-to-Bachelor (A-to-B) Agreements with area four-year institutions. These agreements allow MCC students to transfer their entire associate degree toward a four-year college degree. In most instances, students start as a junior at the transfer institution.

Many area colleges and universities accept MCC courses but do not accept the entire associate degree.

Additional institutions accept MCC courses for credit, but formal agreements have not yet been established. For information about transferring to an institution not included on this list, students should contact the institution to which they wish to transfer.

Visit mccneb.edu/Prospective-Students/Transfer-Students/Articulation.aspx for more information about these transfer courses or A-to-B Agreements.

Degree: Associate in Arts

- Liberal Arts/Academic Transfer
- Liberal Arts/Academic Transfer - Creative Writing
- Liberal Arts/Academic Transfer - Language Studies
- Business Transfer

Degree: Associate in Applied Science

- General Studies
- Human Services Transfer

Degree: Associate in Science

- Liberal Arts/Academic Transfer
- Computer Technology Transfer - Computer Science
- Computer Technology Transfer - Management Information Systems

Frequently Asked Questions

Should I check with the college or university where I am planning to transfer?

Once students choose a specific degree program and four-year institution for transfer, they should schedule an appointment with an advisor or counselor at the four-year institution. Phone numbers are listed on each of the transfer guides. Websites are also a good resource when looking for contact information.

If I do not graduate with an MCC degree, will the program-specific courses transfer?

The Associate-to-Bachelor (A-to-B) Agreements require the completion of the entire associate degree. If students transfer before finishing the associate degree, the four-year institution determines what transfers on a course-by-course basis.

What if I decide to change to a different four-year school?

Although most four-year institutions have degree programs that accept the courses, there is no guarantee, and some credit hours may not transfer. Students should work with an advisor or counselor from both MCC and the new four-year institution to accommodate their change of plans.

Can I take additional courses beyond the degree?

Yes, although they may not transfer. Most institutions accept a maximum of 64.0 semester hours/96.0 quarter hours. Completing an associate degree meets this maximum. Students should work with an advisor or counselor from both MCC and the four-year institution to determine whether additional courses transfer.

Is there a time limit to complete an articulation agreement?

If there is a time limit, it is listed on the agreement document. Although transferring to a four-year institution immediately after graduation is not required, it is desirable. Degree plans and course requirements change, which can result in a loss of credit. It is best to transfer as soon as possible to maximize the transfer of credit.

How often do the articulation agreements change?

Agreements are reviewed annually with the publication of MCC's new catalog. MCC and the four-year institutions work closely throughout the year to keep up with program changes. Working with an advisor or counselor from both MCC and the four-year institution keeps students on the appropriate educational and career paths and informed of potential changes in the degree plan.

Associate degrees and certificates that prepare students for transfer to other institutions are subject to change annually. Students completing their MCC coursework within four years can choose to receive a transfer degree or certificate under the catalog in force when they entered MCC or the transfer agreement in force during the year of graduation from MCC. In either case, students enter the institution they are transferring to under the degree requirements in force in that school's catalog on the date they transfer.

Transfer Tips

- The two most important decisions transfer students must make are which four-year institution to attend and which bachelor's degree to work toward.
- Potential transfer students should work with both an academic advisor from MCC and from the four-year institution they plan to attend to ensure a smooth transfer.
- Successful transfer of credit(s) depends upon the major declared at the four-year institution. For example, courses that may successfully transfer into a psychology major may not transfer into an accounting major.
- The college or university receiving transfer courses makes the decision regarding award of transfer credit. Acceptance of credit is always up to the receiving institution.
- MCC courses that transfer as electives may or may not actually count toward a bachelor's degree. Elective credits may be used toward completion of four-year degree requirements only to the extent that the four-year degree requires elective hours.
- Developmental courses (courses below the 1000-level) are generally not transferable. In general, only courses in which students earn a C or higher can transfer for credit. Courses where D's or F's are earned are not usually transferable.
- Pass/fail credits may or may not transfer.
- Virtually all four-year colleges have minimum residency requirements. For instance, the University of Nebraska–Lincoln requires that students' last 30.0 semester hours be completed at the university.
- Credit earned through proficiency exams, clinical courses, cooperative education, work experience, or practicums may not qualify for transfer.
- Transfer credits are sometimes accepted on a contingency basis. For example, transfer students might be required to successfully complete a follow-up course before the transfer of credit is posted.
- Four-year institutions often establish limits on the number of credits that can be accepted in transfer. This may be fewer than the number of credits acquired in an associate degree program.
- General education courses (e.g., English and math) usually are transferable. Vocational, career education, or technical courses may or may not transfer. Many special agreements have been signed with four-year colleges that allow for the transfer of selected courses and associate degrees in certain vocational/technical/career areas toward completion of specified bachelor's degrees.
- Only course credit transfers to an institution, not grades. (However, for courses to be accepted, a C or higher must be earned in the course.); therefore, the grades earned at MCC are not calculated into the GPA at the four-year institution. Some institutions do look at the MCC GPA to determine graduating with honors. Grades earned at MCC do not replace a poor (D, F) grade already earned at the four-year institution.
- Quarter hours earned at MCC convert to semester hours at a ratio of 3.0 quarter hours to 2.0 semester hours. For example, a 4.5 quarter hour class transfers as 3.0 semester hours.

Quarter to Semester Hour Conversion Table

Quarter	Semester	Quarter	Semester	Quarter	Semester	Quarter	Semester
0.5	0.33	3.5	2.33	6.5	4.33	9.5	6.33
1.0	0.67	4.0	2.67	7.0	4.67	10.0	6.67
1.5	1.00	4.5	3.00	7.5	5.00	10.5	7.00
2.0	1.33	5.0	3.33	8.0	5.33	11.0	7.33
2.5	1.67	5.5	3.67	8.5	5.67	11.5	7.67
3.0	2.00	6.0	4.00	9.0	6.00	12.0	8.00

Transfer Course Options

Students interested in any of the transfer courses and degrees should work with both an academic advisor from MCC and from the school they wish to transfer to in order to select the best course transfer options.

Courses

Quantitative/Numeracy Skills

MATH 1310	Intermediate Algebra	4.5
MATH 1410	Statistics	4.5
MATH 1420	College Algebra	5.0
MATH 1430	Trigonometry	4.5
MATH 1930	Applied Calculus	4.5
MATH 2410	Analytic Geometry and Calculus I	7.5
MATH 2411	Calculus II	7.5
MATH 2412	Calculus III	6.0
MATH 2510	Differential Equations	4.5

Computer Sciences

INFO 1003	Problem Solving and Programming Logic	5.0
INFO 1521	Java Programming I	4.5
INFO 1522	C++ Programming I	4.5
INFO 1523	Visual Basic.NET I	4.5
INFO 1524	COBOL I	5.0
INFO 1531	Java Programming II	4.5
INFO 1534	COBOL II	5.0
INFO 1620	Introduction to Database Design	4.5
INFO 2630	Structured Query Language (SQL)	4.5

Cultural Studies

ENGL 2470	Introduction to Women's Literature	4.5
ENGL 2490	Introduction to Latin American Literature	4.5
ENGL 2530	Ethnic Literature	4.5
ENGL 2900	Special Topics in Literature	4.5
GEOG 1020	World Regional Geography	4.5
GEOG 1050	Introduction to Human Geography	4.5
HIST 1050	Introduction to Black History	4.5
HIST 1060	Black Women in the United States	4.5
HIST 1070	Traditional and Modern China	4.5
HIST 1080	Traditional and Modern Japan	4.5
HIST 1110	World Civilization from Prehistory to 1500	4.5
HIST 1120	World Civilization from 1500 to Present	4.5
HIST 2200	Latin American History	4.5
HUMS 1110	Origins of the Humanities	4.5
HUMS 1150	The Humanities in the Non-Western World	4.5
PHIL 2200	Introduction to Comparative Religion	4.5
POLS 2070	Contemporary Social and Political Issues	4.5

SOCI 1100	Native American Studies	4.5
SOCI 1250	Introduction to Anthropology	4.5
SOCI 2060	Multicultural Issues	4.5

GEOG 1050, HIST 1050, HIST 1110, HIST 1120, HUMS 1110, HUMS 1150, SOCI 2060: Course can only be used to satisfy one requirement. Students interested in any of the transfer courses and degrees should work with both an academic advisor from MCC and from the school they wish to transfer to in order to select the best course transfer options.

Social Sciences

ECON 1000	Macroeconomics	4.5
ECON 1100	Microeconomics	4.5
GEOG 1010	Fundamentals of Geography	4.5
GEOG 1020	World Regional Geography	4.5
GEOG 1050	Introduction to Human Geography	4.5
HIST 1010	United States History to 1877	4.5
HIST 1020	United States History from 1865 to Present	4.5
HIST 1050	Introduction to Black History	4.5
HIST 1060	Black Women in the United States	4.5
HIST 1070	Traditional and Modern China	4.5
HIST 1080	Traditional and Modern Japan	4.5
HIST 1110	World Civilization from Prehistory to 1500	4.5
HIST 1120	World Civilization from 1500 to Present	4.5
HIST 2050	Modern Europe Since 1789	4.5
HIST 2200	Latin American History	4.5
HIST 2220	U.S. and Global Military History	4.5
HMRL 1010	Human Relations Skills	4.5
POLS 2050	American National Government	4.5
POLS 2060	The Constitution	4.5
POLS 2070	Contemporary Social and Political Issues	4.5
PSYC 1010	Introduction to Psychology	4.5
PSYC 1110	Parenting and Family Problem Solving	4.5
PSYC 1120	Human Growth and Development	4.5
PSYC 1130	Cognitive Development	4.5
PSYC 2140	Behavior Modification and Principles of Learning	4.5
PSYC 2150	Survey of Human Sexuality	4.5
PSYC 2350	Fundamentals of Abnormal Psychology	4.5
PSYC 2450	Social Psychology	4.5
PSYC 2550	Popular Readings in Social Science	4.5
PSYC 2650	Research Methods	4.5
SOCI 1010	Introduction to Sociology	4.5
SOCI 1050	Sociology of Healthcare	4.5
SOCI 1100	Native American Studies	4.5
SOCI 1250	Introduction to Anthropology	4.5
SOCI 2050	Current Social Problems	4.5

SOCI 2060	Multicultural Issues ☞	4.5	HUMS 2310	Film History and Appreciation ☞	4.5
SOCI 2110	Introduction to Gerontology ☞	4.5	JAPN 1010	Beginning Japanese I	7.5
SOCI 2150	Survey of Human Sexuality ☞	4.5	JAPN 1020	Beginning Japanese II	7.5
SOCI 2160	Marital and Family Relationships ☞	4.5	JAPN 2010	Intermediate Japanese I	4.5
SOCI 2310	Criminology ☞	4.5	JAPN 2020	Intermediate Japanese II	4.5
SOCI 2311	Juvenile Justice ☞	4.5	JAPN 2030	Intermediate Japanese III	4.5
SOCI 2450	Social Psychology ☞	4.5	JAPN 2040	Intermediate Japanese IV	4.5
SOCI 2550	Popular Readings in Social Science ☞	4.5	MUSC 1010	Introduction to Music I	4.5
SOCI 2650	Research Methods ☞	4.5	MUSC 1020	Introduction to Music II	4.5
SOWK 1010	Introduction to Social Work ☞	4.5	MUSC 1050	Music Appreciation ☞	4.5
GEOG 1050, HIST 1050, HIST 1110, HIST 1120, HMRL 1010, SOCI 2060: Course can only be used to satisfy one requirement. Students interested in any of the transfer courses and degrees should work with both an academic advisor from MCC and from the school they wish to transfer to in order to select the best course transfer options.			MUSC 1110	Music Fundamentals I	4.5
Humanities			MUSC 1120	Music Fundamentals II	4.5
ARTS 1000	Introduction to the Visual Arts ☹	4.5	PHIL 1010	Introduction to Philosophy ☞	4.5
ARTS 1110	Art History-Ancient to Gothic ☞☹	4.5	PHIL 1030	Professional Ethics ☞	4.5
ARTS 1120	Art History-Renaissance to Modern ☞☹	4.5	PHIL 1100	Critical Reasoning ☞	4.5
CHIN 1110	Beginning Chinese I ☞	7.5	PHIL 2030	Introduction to Ethics ☞	4.5
DIMA 1411	History of Animation	4.5	PHIL 2200	Introduction to Comparative Religion ☞	4.5
ENGL 1310	Creative Writing	4.5	PHIL 2400	Philosophy and Literature	4.5
ENGL 2450	Introduction to Literature ☞	4.5	PHIL 2600	Contemporary Issues in Philosophy	4.5
ENGL 2460	Introduction to Short Stories	4.5	SLIS 1010	American Sign Language I ☞	6.0
ENGL 2470	Introduction to Women's Literature	4.5	SLIS 1020	American Sign Language II ☞	6.0
ENGL 2480	Introduction to Drama Literature I	4.5	SPAN 1110	Elementary Spanish I ☞☹	7.5
ENGL 2481	Introduction to Drama Literature II	4.5	SPAN 1120	Elementary Spanish II ☞☹	7.5
ENGL 2490	Introduction to Latin American Literature	4.5	SPAN 2110	Intermediate Spanish I ☞☹	4.5
ENGL 2510	American Literature I ☞	4.5	SPAN 2120	Intermediate Spanish II ☞	4.5
ENGL 2520	American Literature II	4.5	SPCH 1220	Communication in Small Groups	4.5
ENGL 2530	Ethnic Literature	4.5	SPCH 1300	Interpersonal Communication	4.5
ENGL 2610	British Literature I ☞	4.5	THEA 1000	Introduction to Theatre ☞	4.5
ENGL 2620	British Literature II	4.5	THEA 2010	Script Analysis	4.5
ENGL 2900	Special Topics in Literature	4.5	THEA 2020	Fundamentals of Acting I	4.5
ENGL 2901	Special Topics in Writing	4.5	THEA 2021	Fundamentals of Acting II	4.5
FREN 1110	Elementary French I	7.5	THEA 2030	Playwriting I	4.5
FREN 1120	Elementary French II	7.5	THEA 2031	Playwriting II	4.5
FREN 2110	Intermediate French I	4.5	HUMS 1110, HUMS 1120, and HUMS 1150: Course can only be used to satisfy one requirement. Students interested in any of the transfer courses and degrees should work with both an academic advisor from MCC and from the school they wish to transfer to in order to select the best course transfer options.		
FREN 2120	Intermediate French II	4.5	Natural Sciences		
GERM 1010	Elementary German I ☞	7.5	BIOS 1010	General Biology ☞☹	6.0
GERM 1020	Elementary German II ☞	7.5	BIOS 1010L	General Biology Lab	0.0
HUMS 1000	Humanities through the Arts ☹	4.5	BIOS 1111	Biology I	5.0
HUMS 1100	Classical Humanities ☞	4.5	BIOS 1111L	Biology I Lab	0.0
HUMS 1110	Origins of the Humanities ☞	4.5	BIOS 1121	Biology II	5.0
HUMS 1120	The Humanities in the Medieval - Renaissance World ☞	4.5	BIOS 1121L	Biology II Lab	0.0
HUMS 1130	The Humanities in the Modern World ☞	4.5	BIOS 1130	Biology III	5.0
HUMS 1150	The Humanities in the Non-Western World ☞	4.5	BIOS 1130L	Biology III Lab	0.0
			BIOS 1250	Environmental Biology ☞	4.5
			BIOS 1310	Survey of Human Anatomy and Physiology	5.0

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BIOS 1310L	Survey of Human Anatomy and Physiology Lab	0.0	PHYS 1010L	Applied Physics Lab	0.0
BIOS 1400	Introduction to Botany	4.5	PHYS 110A	Principles of Physics IA ☞	2.5
BIOS 1400L	Introduction to Botany Lab	0.0	PHYS 110AL	Principles of Physics IA Lab ☞	0.0
BIOS 2050	Genetics ☞	4.5	PHYS 110B	Principles of Physics IB ☞	2.5
BIOS 2150	Microbiology	6.0	PHYS 110BL	Principles of Physics IB Lab ☞	0.0
BIOS 2150L	Microbiology Lab	0.0	PHYS 110C	Principles of Physics IC ☞	2.5
BIOS 2310	Human Anatomy and Physiology I	6.0	PHYS 110CL	Principles of Physics IC Lab ☞	0.0
BIOS 2310L	Human Anatomy and Physiology I Lab	0.0	PHYS 111A	Principles of Physics IIA	2.5
BIOS 2320	Human Anatomy and Physiology II	6.0	PHYS 111AL	Principles of Physics IIA Lab	0.0
BIOS 2320L	Human Anatomy and Physiology II Lab	0.0	PHYS 111B	Principles of Physics IIB	2.5
CHEM 1010	College Chemistry ☞	6.0	PHYS 111BL	Principles of Physics IIB Lab	0.0
CHEM 1010L	College Chemistry Lab	0.0	PHYS 111C	Principles of Physics IIC	2.5
CHEM 1120	Chemistry for the Health Sciences I	3.0	PHYS 111CL	Principles of Physics IIC Lab	0.0
CHEM 1120L	Chemistry for the Health Careers Lab	0.0	PHYS 210A	General Physics IA	2.5
CHEM 1130	Chemistry for Health Sciences II	3.0	PHYS 210AL	General Physics IA Lab	0.0
CHEM 1130L	Chemistry for the Health Careers II Lab	0.0	PHYS 210B	General Physics IB	2.5
CHEM 1210	General Chemistry: Part I	2.0	PHYS 210BL	General Physics IB Lab	0.0
CHEM 1210L	General Chemistry: Part I Lab	0.0	PHYS 210C	General Physics IC	2.5
CHEM 1211	General Chemistry: Part II	4.0	PHYS 210CL	General Physics IC Lab	0.0
CHEM 1211L	General Chemistry: Part II Lab	0.0	PHYS 211A	General Physics IIA	2.5
CHEM 1212	General Chemistry I: Accelerated	6.0	PHYS 211AL	General Physics IIA Lab	0.0
CHEM 1212L	General Chemistry I: Accelerated Lab	0.0	PHYS 211B	General Physics IIB	2.5
CHEM 1220	General Chemistry II	6.0	PHYS 211BL	General Physics IIB Lab	0.0
CHEM 1220L	General Chemistry II Lab	0.0	PHYS 211C	General Physics IIC	2.5
CHEM 2310	Fundamentals of Organic Chemistry	6.0	PHYS 211CL	General Physics IIC Lab	0.0
CHEM 2310L	Fundamentals of Organic Chemistry Lab	0.0	SCIE 1010	Physical Science ☞	6.0
CHEM 232A	Organic Chemistry IA	2.5	SCIE 1010L	Physical Science Lab	0.0
CHEM 232AL	Organic Chemistry IA Lab	0.0	SCIE 1300	Astronomy ☞	4.5
CHEM 232B	Organic Chemistry IB	2.5	SCIE 1310	Astronomy Laboratory ☞	1.5
CHEM 232BL	Organic Chemistry IB Lab	0.0	SCIE 1400	Introduction to Meteorology	6.0
CHEM 232C	Organic Chemistry IC	2.5	SCIE 1400L	Introduction to Meteorology Lab	0.0
CHEM 232CL	Organic Chemistry IC Lab	0.0			
CHEM 233A	Organic Chemistry IIA	2.5			
CHEM 233AL	Organic Chemistry IIA Lab	0.0			
CHEM 233B	Organic Chemistry IIB	2.5			
CHEM 233BL	Organic Chemistry IIB Lab	0.0			
CHEM 233C	Organic Chemistry IIC	2.5			
CHEM 233CL	Organic Chemistry IIC Lab	0.0			
ENGR 1010	Introduction to Engineering Design	4.5			
ENGR 1020	MATLAB Programming	4.5			
ENGR 2010	Elements of Electrical Engineering I	4.5			
ENGR 2020	Engineering Statics	4.5			
GEOG 1150	Introduction to Physical Geography - Weather and Climate ☞	6.0			
GEOG 1160	Introduction to Physical Geography - Landforms ☞	6.0			
GEOG 1210	Introduction to Physical Geology ☞	6.0			
PHYS 1010	Applied Physics	4.5			

All courses in a sequence should be taken:

BIOS 1111/BIOS 1111L, BIOS 1121/BIOS 1121L and BIOS 1130/BIOS 1130L;

CHEM 1120/CHEM 1120L and CHEM 1130/CHEM 1130L;

CHEM 1210/CHEM 1210L and CHEM 1211/CHEM 1211L;

CHEM 1212/CHEM 1212L

Organic Chemistry, Principles of Physics, and General Physics are taught as a three-course sequence. All three courses must be successfully completed to transfer as a semester-length course.

ONLINE DEGREES AND CERTIFICATES

Looking for instruction at times convenient to you? Online classes at MCC provide the flexibility of setting your own weekly schedule. Study and learn at times that fit into your busy life. Online courses are held during regular quarter starting dates: September, December, March and June. Dedicated faculty members provide quality instruction through this learning option.

Associate Degrees

Business Management Generalist (BGAAS) (p. 74)
 Business Transfer (BSTAA) (p. 76)
 Computer Technology Transfer:
 Management Information Systems (CTMAS) (p. 187)
 Criminal Justice:
 Corrections (CJCNO) (p. 93)
 Law Enforcement (CJLEO) (p. 94)
 General Studies/Academic Transfer (GSAAS) (p. 216)
 Health Data and Information Management (HDIAS) (p. 145)
 Health Information Management Systems:
 Medical Coding and Billing (HIMC1) (p. 146)
 Medical Office Management (HIMO1) (p. 148)
 Health Information Technology Professional (HITAS) (p. 150)
 Information Technology:
 Data Center Operations (ITDC1) (p. 191)
 Database Management (ITDA1) (p. 192)
 Desktop Support Specialist (ITDS1) (p. 193)
 Programming for Database/Web (ITDWO) (p. 194)
 Server Administration (ITSAO) (p. 195)
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 Liberal Arts/Academic Transfer – Associate in Arts (LATAA) (p. 208) (p. 208)
 (p. 212) Associate in Science: Liberal Arts/Academic Transfer (LATAS) (p. 212)

Office Technology:

Administrative Assistant (OTAAO) (p. 89)
 Office Professional (OTOPO) (p. 90)
 (p. 202)
 Versatilist Information Technology (VITAS) (p. 202)
 (p. 202)

Certificates of Achievement

Business Management
 Financial Planning (BMPC1) (p. 77)
 Financial Studies (BMFCE) (p. 78)
 Management Specialist (BMSCE) (p. 79)
 Health Information Management Systems - Medical Office Assistant (HIACE) (p. 149)
 Information Technology Technician:
 Data Center Technician (ITCCO) (p. 198)
 Server Technician (ITSRO) (p. 199)
 Language Interpretation (LGICE) (p. 52)
 Office Technology - Microcomputer Office Applications (OTMCE) (p. 91)
 Versatilist Information Technology – Computer Programming (VCPCE) (p. 205)

Career Certificates/Special Certifications

Financial Studies (BMFCC) (p. 80)
 Full Stack Web Development (VFSCC) (p. 207)
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 Immigration Laws, Policies, and Procedures (IPPC) (p. 88)

COURSES

On the following pages are course descriptions for credit courses offered by MCC. Each course can be identified by a lettered subject and a course number followed by the title and a series of numbers. Those courses with a zero as the first digit of the course number are designated as developmental and may not be used to fulfill degree requirements.

BIOS 1010 - General Biology

5.0 - 3.0 - 6.0

Key:

course subject (BIOS)

course number (1010)

course title (General Biology)

course may be offered online (📺)

course may be offered in hybrid format (📺)

lecture/classroom hours per week (5.0 -)

lab/clinical hours per week (- 3.0 -)

credit hours (- 6.0)

Requisites for a course are detailed as follows:

- **Prerequisites** – A prerequisite - or its equivalent - must be met before a student can register for a course. A prerequisite may be a specific high school course, another MCC course, a demonstrated proficiency, or acceptance into a certain program. Students must meet the prerequisite in effect for the quarter in which they are taking the course. Prerequisites may be waived on the basis of proficiency testing and/or the recommendation of an appropriate faculty member or academic dean.
- **Corequisites** – Corequisites are required program courses that must be taken simultaneously, a grouping of courses that must all be taken within the same quarter. In some cases, previous completion of the required course is acceptable.
- **Recommended** - Certain courses, proficiencies, or conditions may be recommended for the student prior to or at the same time as the course. While these recommendations are suggested for student success in the course, they are not required.

Hybrid courses – A hybrid course is a coordinated approach to learning, using both online technology and classroom interaction with faculty and peers. MCC hybrid courses meet face-to-face 50 percent of the traditional quarter's campus meetings; the other 50 percent of campus meeting time is replaced with online study and learning activities.

ACCT - Accounting

ACCT 1050 - Bookkeeping 📺

3.0 - 0.0 - 3.0

This course includes an introduction to the accounting cycle, basic procedures in double-entry bookkeeping, and an examination of the parts of the income statement and balance sheet financial statements. Emphasis is placed on cash receipts, cash disbursements, accounts receivable, and accounts payable.

ACCT 1060 - Payroll Accounting 📺

4.5 - 0.0 - 4.5

Prerequisite: (1) ACCT 1050 or ACCT 1100 — must be completed prior to taking this course.

An in-depth study of various payroll systems, this course includes the study of related law and practices. Students practice preparing payrolls and computing deductions. Emphasis is placed on actual preparation of payroll projects, including payroll tax returns.

ACCT 1070 - Individual Income Tax Accounting

4.0 - 0.0 - 4.0

This course is an introductory survey of current individual income tax laws. Topics include basic filing requirements, includable income, adjustments, itemized deductions, and tax credits.

ACCT 1071 - Income Taxes in Business Practice 📺 📺

4.5 - 0.0 - 4.5

Students explore tax implications and applications in various business entities.

ACCT 1100 - Accounting I 📺 📺

4.0 - 1.0 - 4.0

This is the first of three accounting courses covering principles of accounting. It emphasizes the fundamental principles of accounting. Students are provided a balanced, comprehensive coverage of financial topics. Real-world illustrations are incorporated reflecting current relevant business practices. The course content acquaints students with the basic accounting cycle, linkage between the journal entry and ledger account, adjusting process, internal control, merchandising, inventories, and financial reporting. NOTE: Students should attempt to take ACCT 1100, ACCT 1110, and ACCT 1120 immediately after one another to facilitate understanding and learning. It is helpful to complete the math requirements early in the program of study.

ACCT 1110 - Accounting II 📺 📺

4.0 - 1.0 - 4.0

Prerequisite: (1) ACCT 1100 with a grade of C or better — must be completed prior to taking this course.

This is the second of three accounting courses. The course content includes short- and long-term assets, current liabilities, components of stakeholders' equity, the corporate income statement, bonds payable, statement of cash flows, and financial statement analysis. Real-world illustrations are incorporated reflecting current relevant business practices and applications of accounting principles. NOTE: Students should attempt to take

ACCT 1100, ACCT 1110, and ACCT 1120 immediately after one another to facilitate understanding and learning. It is helpful to complete the math requirements early in the program of study.

ACCT 1120 - Accounting III

4.0 - 1.0 - 4.0

Prerequisite: (1) ACCT 1110 — must be completed prior to taking this course.

This is the third of three accounting principles courses. The course content includes an introduction to management accounting, manufacturing operations, and cost accounting systems. Other topics covered include budgeting, cost-volume-profit analysis, performance evaluation using variances, differential analysis, product pricing, decision-making, and capital investment analysis. Applications of well-known companies are illustrated throughout the course. NOTE: Students should attempt to take ACCT 1100, ACCT 1110, and ACCT 1120 immediately after one another to facilitate understanding and learning. It is helpful to complete the math requirements early in the program of study.

ACCT 1210 - Accounting with QuickBooks

3.0 - 0.0 - 3.0

Recommended: Either high school bookkeeping classes or ACCT 1050 Bookkeeping — recommended prior to taking this course, but not required.

This course is an introduction to the QuickBooks software program. Students use the QuickBooks software to record transactions related to sales, sales invoicing, purchases, purchase invoicing, receipts, payments, and payroll. Students also use the software to generate financial statements and other financial reports. NOTE: It is helpful, though not required, for students taking ACCT 1210 Accounting with QuickBooks to have had either high school bookkeeping classes or have taken ACCT 1050 Bookkeeping.

ACCT 1215 - QuickBooks and Excel for Small Business

4.5 - 0.0 - 4.5

This course is an introduction to the application and integration of basic electronic record-keeping tools for accounting and decision making in small business.

ACCT 1220 - Spreadsheet Basics for Accounting and Business

3.0 - 0.0 - 3.0

Pre/Co Requisite: (1) ACCT 1050 — must be taken either prior to or at the same time as this course.

In this course, students learn how to use spreadsheets to effectively organize and manipulate business data. Emphasis is on basic spreadsheet organization, commands, and functions related to managerial, financial, and accounting applications.

ACCT 2120 - Intermediate Accounting I

4.0 - 0.0 - 4.0

Prerequisite: (1) ACCT 1110 — must be completed prior to taking this course.

Students engage in an advanced study of financial accounting. This course emphasizes basic accounting theory, importance of judgment and accounting research, review of the accounting

cycle, financial statement presentation, revenue recognition, and a study of compound interest and annuities. NOTE: ACCT 2120 may be taken concurrently with ACCT 1120.

ACCT 2130 - Intermediate Accounting II

4.5 - 0.0 - 4.5

Prerequisite: (1) ACCT 2120 — must be completed prior to taking this course.

Students engage in a continuation of accounting theory as related to current and non-current financial statement elements. Emphasis is on cash and receivables, inventory, tangible and intangible long-term assets, current and long-term liabilities, and stockholder's equity.

ACCT 2140 - Intermediate Accounting III

4.0 - 0.0 - 4.0

Prerequisite: (1) ACCT 2130 — must be completed prior to taking this course.

Students engage in a continuation of accounting theory and practice. Traditional and current subjects of controversy are examined. Emphasis is on income taxes, earnings per share, investments, leases, accounting changes, pensions and the statement of cash flows.

ACCT 2230 - Microcomputer Business Applications

4.0 - 0.0 - 4.0

Prerequisite: (1) INFO 1001 — must be completed prior to taking this course.

Pre/Co Requisite: (1) ACCT 1120 — must be taken either prior to or at the same time as this course.

Students use accounting and spreadsheet software representative of that in use by small- and medium-sized businesses. Microcomputers are used for general ledger, accounts receivable and payable, and payroll transactions. Students create spreadsheets to be used in the general areas of analysis, forecasting, problem-solving, and decision-making. NOTE: Students considering taking ACCT 2230 who have not taken INFO 1001 but have work or high school experience with spreadsheets (and have met the other prerequisite) may still be able to take this course by contacting program faculty. The corequisite ACCT 1120 can be taken concurrently or have previously been completed.

ACCT 2330 - Managerial Cost Accounting

4.0 - 0.0 - 4.0

Prerequisite: (1) ACCT 1120 — must be completed prior to taking this course.

This course emphasizes the role of the accountant or manager as decision-maker. The course involves a study of relevant costs for decision-making; contribution margin approach to decision-making; absorption costing vs. direct costing and effect on income; capital projects, selection, and subsequent evaluation; cost-volume-profit relationships; inventory planning and control; decision-making and allocation involving joint costs; and decentralization, performance measurement, and transfer pricing.

ACCT 2800 - Ethics in Accounting and Business **4.5 - 0.0 - 4.5**

Prerequisite: (1) 9.0 credit hours in either BSAD, ACCT, FINA, or ENTR — must be completed prior to taking this course.

Ethical and moral issues are common in the business and accounting world. The conflicting goals of sales, success, growth, the rights and safety of consumers, the fiduciary responsibility of owners, and personal goals and ambition frequently drive individuals and businesses to ethical crossroads. Understanding the issues of ethics helps individuals and businesses deal with complex situations. (Cross-listed as BSAD 2800)

ACCT 2900 - Special Topics in Accounting Variable

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This course is designed to permit instruction in special content areas that are not appropriately treated in other accounting courses.

ACCT 2940 - Business Plan Capstone**1.5 - 0.0 - 1.5**

Prerequisite: (1) Completion of 85+ quarter hours in the business management or accounting associate degree option — must be completed prior to taking this course.

The capstone course is an independent study course where students demonstrate competencies in the areas of management, finance, accounting, and report writing by developing a draft and finalized business plan on a student-faculty agreed upon business concept. Part of the requirement of this course is a comprehensive exam covering accounting, management, marketing, and general business topics. (Cross-listed as BSAD 2940)

ACCT 2981 - Internship in Accounting**0.0 - 18.0 - 4.5**

Prerequisite: (2) Completion of at least 24.0 credit hours of the program's major requirements at MCC and instructor approval — must be completed prior to taking this course.

The internship in the Accounting program is an advanced course and is expected to be taken in the second year of study. Students apply the principles, procedures, and rules learned in financial accounting, cost and managerial accounting, income tax accounting, or payroll accounting in an actual work environment. The work setting is in a public accounting office or the accounting department of a business or nonprofit organization. Students record the tasks performed in a notebook that the work supervisor and faculty sponsor review periodically to assure that appropriate competencies are developed or reinforced. Based on state guidelines, students must complete 40 hours of work for each credit hour in this course.

ARAB - Arabic**ARAB 1010 - Introduction to Arabic** **7.5 - 0.0 - 7.5**

This course focuses on how to pronounce the Arabic sounds and the Arabic letters. In addition, the course introduces students to common Arabic greetings in standard and colloquial Arabic, common phrases, basic vocabulary, and some Arabic cultural aspects. Interactive DVDs that accompany the textbook can be used outside the classroom to practice listening exercises and writing drills. The textbook also contains images of calligraphic writing to be used as a model to follow as students work through them.

ARCH - Architectural Design Technology**ARCH 1000 - Appreciation of Architecture** **4.5 - 0.0 - 4.5**

Students taking this course explore the art of architecture, the design process, the language of architecture, how methods and materials shape buildings, the relationship between structural types, the use of space, and how architecture reflects the culture for which it was built.

ARCH 1010 - Visual Literacy and Graphic Communication I**4.5 - 0.0 - 4.5**

This is a foundation course in visual communication in a black and white format. The hand drawing process employs both art and science to depict the built environment in a way that is pleasant and informative. Students in the course explore 2-D and 3-D visual communication using traditional and digital tools for each topic. Students are introduced to visual dialog strategies within the context of the built environment in historic and contemporary forms. Assignments focus on creative visual problem solving.

ARCH 1015 - Visual Literacy and Graphic Communication II**4.5 - 0.0 - 4.5**

Prerequisite: (1) ARCH 1010 or instructor approval — must be completed prior to taking this course.

Visual Literacy and Graphic Communication II is a foundation course in visual communication in a digital color format that builds on the digital and analog techniques from Visual Literacy and Graphic Communication I. This course provides professionals and students with a clear guide to understanding the digital representation process for a variety of design drawings. The course highlights specific techniques by examining their role in the digital media representation process through current and emerging methods available in current software. This course provides students and professionals with tangible tools to explore digital media, including Adobe Illustrator, Photoshop, 3ds Max, Sketchup, AutoCAD, and Revit. Students in this course explore 2-D and 3-D visual communication using fixed and mobile digital tools for each topic. Students continue to develop a personal form of expression for visual dialog strategies within the context of the built environment in historic and contemporary forms.

ARCH 1120 - Beginning REVIT (Building)**4.5 - 0.0 - 4.5**

Hands-on experience with the Autodesk software provided in this course introduces students to the basic functions of building information modeling (BIM). Concentration is on building parts (walls, floors, roofs, doors, windows), and construction documents are produced from 3-D models.

ARCH 1130 - Intermediate REVIT (Building)**4.5 - 0.0 - 4.5**

Prerequisite: (1) ARCH 1120 — must be completed prior to taking this course.

Hands-on experience with Autodesk REVIT Building software allows students to continue the work started in Beginning REVIT. Students concentrate on schedules, family components, production of construction documents, and rendering.

ARCH 1140 - Advanced REVIT Architecture**4.5 - 0.0 - 4.5**

Prerequisite: (1) ARCH 1130 — must be completed prior to taking this course.

Advanced REVIT architecture encourages students to advance their skill level beyond fundamental technical skills to an increased understanding of building information modeling in collaboration with other advanced users. The curriculum presents a set of advanced problems involving typical issues encountered in contract document production in a multi-user environment in the architecture, engineering, and construction industries. Students are encouraged to explore personal areas of interest within the course objectives.

ARCH 1150 - Advanced AutoCAD**4.5 - 0.0 - 4.5**

Prerequisite: (1) SCET 1120 — must be completed prior to taking this course.

This course offers students the opportunity to use and understand 2-D and 3-D information about critical building assembly details used in commercial projects to produce construction documents, design and develop custom details, coordinate specification information, and revise existing details to conform to current architecture engineering and construction industry standards. Students use hand drawn, 2-D digital and 3-D digital tools interactively to prepare clearly drawn graphic details, assemble accurate information for coordination with other parts of the building design, specify materials, and develop prototype details to address unique construction conditions. Students are encouraged to explore personal areas of interest within the course objectives.

ARCH 1200 - Wood-Frame Architecture**9.0 - 0.0 - 9.0**

Prerequisite: (2) ARCH 1000 and SCET 1120 — must be completed prior to taking this course.

Students investigate the process by which architects and drafters determine the form of a small wood-frame building and produce the set of drawings, models, and specifications used to build the building.

ARCH 2410 - Commercial Architecture**9.0 - 0.0 - 9.0**

Prerequisite: (1) ARCH 1200 — must be completed prior to taking this course.

Students design and graphically document several aspects of commercial architecture: steel and masonry structure, electrical, plumbing, and HVAC.

ARCH 2420 - Renovation Architecture**9.0 - 0.0 - 9.0**

Prerequisite: (1) ARCH 1200 — must be completed prior to taking this course.

Students encounter the problems involved in changing the usage of a building, including antique or dangerous materials, specification writing, ADA and other codes, and cost estimating.

ARCH 2520 - Beginning 3-D Studio Max**4.0 - 0.0 - 4.0**

Prerequisite: (1) SCET 1120 — must be completed prior to taking this course.

Hands-on experience with this 3-D modeling, rendering, and animation software introduces students to the creation of 3-D models, materials, lighting, and key frame animation.

ARCH 2530 - Intermediate 3-D Studio Max**4.0 - 0.0 - 4.0**

Prerequisite: (1) ARCH 2520 — must be completed prior to taking this course.

Students continue the work they began in ARCH 2520 by designing, developing, and polishing a project that demonstrates their ability to create 3-D models and animations.

ARCH 2600 - High-Rise Architecture**9.0 - 0.0 - 9.0**

Prerequisite: (1) ARCH 1200 — must be completed prior to taking this course.

Students focus on vertical buildings: structure, mechanical core, vertical transportation, egress, fire protection, and parking.

ARCH 2700 - Construction Detailing I**4.5 - 0.0 - 4.5**

Prerequisite: (2) ARCH 1200 and SCET 1120 — must be completed prior to taking this course.

Pre/Co Requisite: (1) ARCH 1130 — must be taken either prior to or at the same time as this course.

This course offers students the opportunity to use and understand information about critical building assembly details used to produce construction documents, design and develop custom details, coordinate specification information, and revise existing details to conform to current architecture engineering and construction industry standards. The assemblies considered are typical of residential construction. Students use traditional and digital tools to prepare clearly drawn graphic details, assemble accurate information for coordination with other parts of the building design, specify materials, and develop prototype details to address unique construction conditions. Students are encouraged to explore personal areas of interest within the course objectives.

ARCH 2710 - Construction Detailing II**4.5 - 0.0 - 4.5**

Prerequisite: (3) ARCH 1130, ARCH 2410, and SCET 1120 — must be completed prior to taking this course.

This course offers students the opportunity to use and understand information about critical building assembly details used to produce construction documents, design and develop custom details, coordinate specification information, and revise existing details to conform to current architecture engineering and construction industry standards. Assemblies considered are typical of commercial construction. Students use traditional and digital tools to prepare clearly drawn graphic details, assemble accurate information for coordination with other parts of the building design, specify materials, and develop prototype details to address unique construction conditions. Students are encouraged to explore personal areas of interest within the course objectives.

ARCH 2720 - Construction Detailing III**4.5 - 0.0 - 4.5**

Prerequisite: (4) ARCH 1130, ARCH 1200, ARCH 2410, and SCET 1120 — must be completed prior to taking this course.

This course offers students the opportunity to use and understand information about critical building assembly details used in the procurement, construction contract negotiations, construction administration, construction observation, and close-out phases of commercial projects to produce construction documents, design and develop custom details, coordinate specification information, and revise existing details to conform to current architecture engineering and construction industry standards. Students use traditional and digital tools to prepare clearly drawn graphic details, assemble accurate information for coordination with other parts of the building design, specify materials, and develop prototype details to address unique construction conditions. Students are encouraged to explore personal areas of interest within the course objectives.

ARCH 2900 - Special Topics in ARCH**Variable**

Prerequisite: (2) SCET 1120 and instructor approval — must be completed prior to taking this course.

This course permits instruction in special content areas not included in other courses in the Architectural Design Technology program.

ARTS - Art**ARTS 1000 - Introduction to the Visual Arts** **4.5 - 0.0 - 4.5**

The purpose of this art appreciation course is to foster a broad understanding of the visual arts. The course content deals with understanding why and how artists create and also the important role culture and history play in the purpose and meaning of art. It includes an overview of the creative process, changes in art over time, and the relationship of the arts and society.

ARTS 1010 - Elementary Drawing**2.5 - 6.0 - 4.5**

Elementary Drawing is a foundational course in objective drawing where students use various media, such as charcoal, graphite, conte, and ink. The course focuses on formal elements of line, shape, form, value, texture with the intent of developing dexterity, and perception. Subject matter mainly includes objects, still life, and spatial issues. Students learn about figure/ground relationships, relative position and proportion, linear perspective, and light effects on form and space. Assignments include working from observation, but also visualization and compositional drawing strategies with reference to historic and contemporary drawing issues. Students are encouraged to find personal solutions to set problems, while developing critique skills.

ARTS 1020 - 2-D Design**2.5 - 6.0 - 4.5**



The course 2-D Design is a foundational course that focuses on the elements and principles of design in order to prepare students for advanced study in the visual arts. Students are introduced to 2-D concepts and progress to more complicated problems involving color theory and various media. Emphasis is also placed on visual communication, idea building, and critical analysis in the context of historic and contemporary art and design.

ARTS 1030 - 3-D Design**2.5 - 6.0 - 4.5**

This course is an introduction to 3-D design, concentrating on the principles and elements of 3-D form and space. Traditional processes include construction, carving, assembling, and modeling. Computer 3-D modeling programs may be used.

ARTS 1050 - Creative Careers**4.5 - 0.0 - 4.5**

Creative Careers introduces students to a wide range of career options for visual arts professionals. The purpose of this course is to destroy the myth of the starving artist by investigating career fields that allow one to generate income through creative endeavors. Students interact with visual arts professionals on a regular basis through field trips and guest speakers.

ARTS 1110 - Art History-Ancient to Gothic  **4.5 - 0.0 - 4.5**

Recommended: ENGL 1020 level of reading and writing — recommended prior to taking this course, but not required.

This course surveys the major developments in painting, sculpture, and architecture from Paleolithic cave paintings through the European Middle Ages with an introduction to the arts of Asia. Students gain an understanding of formal analysis of visual communication and the use of visual arts in social and historical contexts.

ARTS 1120 - Art History-Renaissance to Modern  **4.5 - 0.0 - 4.5**

Recommended: ENGL 1020 level of reading and writing — recommended prior to taking this course, but not required.

This course surveys the major developments in painting, sculpture, and architecture from the European Renaissance into the modern era, introducing the arts of Africa and the native peoples of the Americas. Students gain an understanding of the formal analysis of visual communication and the use of visual arts in social and historical contexts.

ARTS 2010 - Life Drawing
2.5 - 6.0 - 4.5

Prerequisite: (1) ARTS 1010 — must be completed prior to taking this course.

Recommended: ARTS 2110 Intermediate Drawing — recommended prior to taking this course, but not required.

This drawing class emphasizes drawing the human form using a variety of media. Students draw from the model and study the human figure in action and in still poses. The course includes rapid sketching, portraiture, long poses, and memory work using primarily charcoal, Conte crayon, ink, and pastels.

ARTS 2020 - Elementary Painting
2.5 - 6.0 - 4.5

Prerequisite: (2) ARTS 1010 and ARTS 1020 — must be completed prior to taking this course.

Recommended: ARTS 2010 or ARTS 2110 — recommended prior to taking this course, but not required.

This course introduces students to fundamental painting concepts and techniques. The emphasis is on studio practices, color, paint manipulation, and visual perception. Students explore a variety of subject matter, formal issues, and expression within the context of historical and contemporary painting.

ARTS 2025 - Watercolor
2.5 - 6.0 - 4.5

Prerequisite: (1) ARTS 1010 or ARTS 1020 — must be completed prior to taking this course.

This course introduces water media to beginning students. Students explore color, composition, and a variety of techniques, such as wet-in-wet, dry brush, and mixed media. Students develop an individual approach to painting with an emphasis on technique. The course also covers a variety of subject matter to include objective reality and subjective imagination.

ARTS 2030 - Elementary Sculpture
2.5 - 6.0 - 4.5

Prerequisite: (1) ARTS 1030 — must be completed prior to taking this course.

This beginning sculpture course emphasizes hands-on studio work that results in finished pieces of sculpture. Most of the activity revolves around researching, designing, constructing, and installing sculpture. Students may work with traditional media of clay, plaster, wood, and metal as well as the expanding contemporary media of installation, video, performance, Internet, and electronics.

ARTS 2040 - Elementary Printmaking
2.5 - 6.0 - 4.5

Prerequisite: (2) ARTS 1010 and ARTS 1020 — must be completed prior to taking this course.

Elementary Printmaking teaches the theory and practice of traditional printmaking. Students create multiple printed images on paper, fabric, and other surfaces. This course provides an introduction to relief, intaglio, and screen print processes. Photographic and digital print processes, pronto plate lithography, and monoprinting are also explored.

ARTS 2050 - Elementary Ceramics
2.5 - 6.0 - 4.5

This course is an introduction to basic principles, concepts, history, and skills of studio ceramics that also surveys historical and contemporary approaches and concerns. Students fabricate a variety of projects, including vessel-making (hand-built and wheel-thrown) and sculptural techniques. They also observe various firing and finishing processes. Basic health and safety issues are addressed.

ARTS 2060 - Elementary Jewelry
2.5 - 6.0 - 4.5

This course introduces students to the art of jewelry design. Students become familiar with jewelry design from the past to contemporary trends. Various techniques, including etching, soldering, casting, piercing, and stone setting, are taught. Students become aware of how to operate tools and machinery in jewelry construction. Emphasis is on design principles including contrast, emphasis, repetition (pattern), and balance. Critical thinking, aesthetics, and craftsmanship are the core of jewelry design.

ARTS 2110 - Intermediate Drawing
2.5 - 6.0 - 4.5

Prerequisite: (1) ARTS 1010 — must be completed prior to taking this course.

Intermediate Drawing continues the study of the skills acquired in Elementary Drawing with an emphasis on the use of color and mixed media. Exposure to digital media drawing tools is encouraged but optional. Subject matter includes objects, still life, spatial issues and may include the figure. Emphasis is placed on formal composition, visual communication, and creativity as well as observational drawing. Modern and contemporary drawing strategies are also explored. Critiques and group discussions address form and content as well as methods of visual communication. Students continue to be encouraged to find personal solutions to drawing problems and to develop at least one project of their own design.

ARTS 2120 - Intermediate Painting
2.5 - 6.0 - 4.5

Prerequisite: (1) ARTS 2020 — must be completed prior to taking this course.

This studio course builds on the technical skills and concepts learned in Elementary Painting. Emphasis is on expanding color and paint manipulation skills with more emphasis on content. Exposure to mixed media and digital media drawing tools is encouraged but optional. Subject matter may include objects, still life, spatial issues, the figure and non-objective abstraction. Modern and contemporary painting strategies are explored and some projects may be theme based. The purpose of this course is to create an environment where student painters can

synthesize ideas from prior learning and problem-solve in ways that more closely resemble the methods of professional studio painters. Critiques and group discussions address form and content as they relate to visual communication. Students are encouraged to find personal solutions to painting problems and to develop at least one project of their own design.

ARTS 2130 - Intermediate Sculpture
2.5 - 6.0 - 4.5

Prerequisite: (1) ARTS 2030 — must be completed prior to taking this course.

This hands-on studio course is a continuation of ARTS 2030. A wider range of choices are left to the individual within a structured environment of criticism and instruction. Students are encouraged to explore personal areas of interest. They are required to develop a familiarity with the history of sculpture and master chosen sculpture techniques.

ARTS 2140 - Intermediate Printmaking
2.5 - 6.0 - 4.5

Prerequisite: (1) ARTS 2040 — must be completed prior to taking this course.

This course builds on the technical skills and concepts learned in ARTS 2040. Students focus on expanding their understanding of intaglio, relief, screen printing, monoprinting and/or plate lithography to create prints that are both technically and conceptually complex. The instructor assists each member of the class in developing an individual body of printed work that reflects their personal and technical interests. Students continue to develop an understanding of historical and contemporary printmaking as well as equipment maintenance and shop upkeep.

ARTS 2150 - Intermediate Ceramics
2.5 - 6.0 - 4.5

Prerequisite: (1) ARTS 2050 — must be completed prior to taking this course.

This course continues and deepens the exploration of skills, concepts, and history of studio ceramics begun in ARTS 2050. Students are coached in problem-seeking and problem-solving and encouraged to identify and negotiate the path(s) to creation they wish to take forward. In addition to learning to plan and fabricate more complex forms, students participate in loading and firing electric and gas (when available) kilns, discuss material and equipment sourcing, and become aware of opportunities for continuing their studio practice in and out of the academic setting.

ARTS 2160 - Intermediate Jewelry
2.5 - 6.0 - 4.5

Prerequisite: (1) ARTS 2060 — must be completed prior to taking this course.

This course is designed for students who have mastered the techniques and processes taught in Elementary Jewelry. It stresses creative solutions to more advanced design problems.

ARTS 2220 - Art Gallery Management
2.5 - 6.0 - 4.5

This course introduces gallery management, including planning, preparing, installing, and publicizing exhibitions. Students gain

practical experience at MCC's Elkhorn Valley Campus Gallery of Art and Design. Periodic field trips to other galleries are required.

ARTS 2230 - Native American Art
4.5 - 0.0 - 4.5

This course examines the material culture of various indigenous peoples of North and South America. Special attention is given to Northern Plains Indians and Mesoamerican cultures. Students gain an understanding of the formal analysis of art and the use of visual communication in social and historical contexts.

ARTS 2560 - Portfolio Development and Professional Practice
2.5 - 6.0 - 4.5

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This course prepares students to build a comprehensive, professional presentation of their work using skills and concepts developed in earlier visual arts coursework. In addition, the course covers legal, financial, and ethical issues for the self-employed artist and for the artist embarking on a job search.

ARTS 2900 - Special Topics in Art
Variable

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This course permits instruction in special content areas not included in other Art courses.

ARTS 2981 - Internship
Variable

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

Students apply the principles learned in arts entrepreneurship in a workplace setting. The work setting can be public, private, or nonprofit as long as it is appropriate to arts entrepreneurship. Based on state guidelines, students must complete 40 hours of work for each credit hour earned in this course.

AUTB - Auto Collision Technology

AUTB 1040 - Auto Collision Repair Welding
2.0 - 3.0 - 3.0

Students learn techniques of oxy-acetylene cutting and welding for automotive applications. Students study and practice the theory and use of metal inert gas (MIG) welding, the plasma-cutting torch, and resistance welding in the repair of high-strength steel structural and nonstructural body components. In addition, this course provides practice in advanced automotive welding skills, including various types of position welds.

AUTB 1100 - Structural Repair I
2.0 - 3.0 - 3.0

Students learn to analyze various types of vehicle damage, interpret dimension specification sheets, and select and set up various types of measuring systems used for damage analysis.

AUTB 1110 - Structural Repair II**2.0 - 3.0 - 3.0**

Prerequisite: (1) AUTB 1100 — must be completed prior to taking this course.

Students learn the techniques of anchoring and pulling a damaged vehicle frame. Students work with high-strength steel and learn full and partial panel replacement.

AUTB 1200 - Nonstructural Repair I**4.0 - 6.0 - 6.0**

This course provides the fundamentals of shop safety, tool application, damage repair preparation, metal straightening techniques, and the use of body fillers in the repair of collision-damaged vehicles. NOTE: For this course, there is an additional \$30.00 lab fee and \$50.00 one-time fee for the I-CAR intro curriculum.

AUTB 1210 - Nonstructural Repair II**4.0 - 6.0 - 6.0**

Prerequisite: (1) AUTB 1200 — must be completed prior to taking this course.

This course continues to build skills acquired in the basic course. Students learn the techniques of door skin replacement and how to work with trim and hardware. Other related subjects are covered.

AUTB 1220 - Nonstructural Repair III**4.0 - 6.0 - 6.0**

Prerequisite: (2) AUTB 1210 or equivalent and AUTB 1040 — must be completed prior to taking this course.

This course focuses on evaluating major body damage and determining the necessary repairs. The complete job is stressed, from body repair to final refinishing.

AUTB 1300 - Street Rod/Restoration I**2.0 - 3.0 - 3.0**

Constructing or restoring a good street rod requires starting with a good classic auto and a good design. This course provides students with the skills needed to do this by providing the fundamentals in research and planning needed to build a street rod or restore a classic car.

AUTB 2120 - Structural Repair III**2.0 - 3.0 - 3.0**

Prerequisite: (1) AUTB 1110 or equivalent — must be completed prior to taking this course.

Students analyze the damaged vehicle in-depth. They practice major damage repair including alignment and straightening of unitized bodies. Students learn the alignment of door and window openings.

AUTB 2230 - Nonstructural Repair IV**4.0 - 6.0 - 6.0**

Prerequisite: (1) AUTB 1220 — must be completed prior to taking this course.

This class requires students to repair and refinish collision damage equal to 30 flat-rate hours. It stresses MIG welding and suspension damage.

AUTB 2240 - Nonstructural Repair V**4.0 - 6.0 - 6.0**

Prerequisite: (2) AUTB 2230 and 45.0 credits of AUTB courses — must be completed prior to taking this course.

In this class, students are required to repair collision damage equal to 40 flat-rate hours. It covers restraint systems and glass installation.

AUTB 2241 - Nonstructural Repair VI**4.0 - 6.0 - 6.0**

Prerequisite: (1) AUTB 2240 — must be completed prior to taking this course.

This class requires students to complete 60 flat-rate hours of collision repairs. It covers frame and suspension alignment, electrical systems, heating, and air conditioning. NOTE: For this course, there is an additional fee of \$100.00 for the I-CAR exit exam.

AUTB 2300 - Automotive Refinishing I**2.0 - 3.0 - 3.0**

Students are introduced to EPA, personal health, and safety equipment regulations. It covers introductions to finish systems, metal prep, sealers and primers, and masking techniques. NOTE: For this course, there is an additional \$30.00 lab fee.

AUTB 2310 - Automotive Refinishing II**4.0 - 6.0 - 6.0**

Prerequisite: (1) AUTB 2300 — must be completed prior to taking this course.

This course is a continuation of Automotive Refinishing I with emphasis placed on solving paint application problems. Students practice paint mixing, matching and application, finish defects, and causes and cures.

AUTB 2340 - Automotive Custom Painting**2.0 - 3.0 - 3.0**

Prerequisite: (1) AUTB 2310 or any one of the following: Associate in Auto Collision Technology; ASE-certified refinish technician; or five years documented work as a refinish technician — must be completed prior to taking this course.

This course gives advanced students insight and experience in the area of custom painting of automobiles, motorcycles, street rods, and other vehicles. It covers masking, paint types, pin striping, design layout, stencils, and mixing custom colors.

AUTB 2450 - Collision Estimating I**2.0 - 3.0 - 3.0**

Students learn the systematic approach to analyzing collision damage and creating a damage report manually. It covers different types of damage, plan for repairs, repair or replace decisions, and use of crash guides.

AUTB 2460 - Collision Estimating II**2.0 - 3.0 - 3.0**

Prerequisite: (1) AUTB 2450 — must be completed prior to taking this course.

Students learn how estimating affects shop sales, production, staffing, facility and profitability in the collision repair field.

Students practice documenting collision damage in the repair shop.

AUTB 2550 - Electrical and Mechanical Systems
2.0 - 3.0 - 3.0

This course introduces mechanical and electrical systems of the automobile. It covers steering, brakes, drive line, air bags, and electrical components.

AUTB 2900 - Special Topics in AUTB
Variable

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This course provides the opportunity for other instruction in special content areas not included in other auto collision courses.

AUTB 2981 - Auto Collision Internship
Variable

Prerequisite: (2) AUTB 2230 and instructor approval — must be completed prior to taking this course.

The internship program provides students with the opportunity to apply their knowledge, learn new techniques, and get on-the-job training at an approved work site. To develop an internship to meet their academic and career goals, interested students must contact program faculty. Based on state guidelines, students must complete 40 hours of work for each credit hour in this course.

AUTT - Automotive Technology

AUTT 1110 - Automotive 1: Express Lane
8.0 - 12.0 - 12.0

Prerequisite: (1) Valid driver's license — must be completed prior to taking this course.

Recommended: INFO 1001 for those with limited computer skills and First Year Experience (FYE) for those new to college — recommended either prior to or at the same time as this course, but not required.

Students learn many of the basic elements of the auto repair trade including safety, chemicals, basic tool use, tire repair, TPMS systems, and introduction to electrical repair. Soft skills, such as attitude, ethics, professionalism, and on-the-job communication are encouraged. AUTT 1110, AUTT 1120, AUTT 1130, AUTT 2110, AUTT 2120, and AUTT 2130 are a sequence of courses in which students practice entry level skills by working in teams, using online resources, participating in class and individualized hands-on lab training utilizing live work, and demonstrating an individual mastery of designated skills, using modern industry standard equipment, before moving on to the next skill set. All automotive classes are hybrid format with 25% of the course work done online.

AUTT 1120 - Automotive 2: Introduction to Maintenance
8.0 - 12.0 - 12.0

Prerequisite: (1) AUTT 1110 with a grade of C or better; or instructor approval — must be completed prior to taking this course.

Recommended: (1) Math 1240 — recommended either prior to or at the same time as this course, but not required.

Skills students master include an understanding of basic theory and operation of engines, transmissions, and drivetrains including basic ignition systems, hydraulic principles, and related industry-established maintenance. Students perform brake rotor and drum resurfacing, study brake system components, and utilize a variety of testing equipment.

AUTT 1130 - Automotive 3: Automotive Maintenance
8.0 - 12.0 - 12.0

Prerequisite: (2) AUTT 1110 and AUTT 1120 with a grade of C or better in both; or instructor approval — must be completed prior to taking this course.

Recommended: (2) AUTT 1110 and AUTT 1120 with a grade of C or better in both; or instructor approval — recommended prior to taking this course, but not required.

Skills students master include automotive computers and the relationship with sensor inputs and actuator outputs, minor engine repair, and the operation, diagnosis, and repair of automotive heating and air conditioning, front and rear suspension, and manual and power steering systems.

AUTT 2110 - Automotive 4: Engine Repair
8.0 - 12.0 - 12.0

Prerequisite: (3) AUTT 1110, AUTT 1120, and AUTT 1130 with a grade of C or better in each; or instructor approval — must be completed prior to taking this course.

Pre/Co Requisite: (1) MATH 1240 — must be taken either prior to or at the same time as this course.

Skills students master include engine RR, engine overhaul, engine sub-component inspection and repair procedures, engine and air conditioning diagnosis application learned from previous classes, and air conditioning component replacement and repair procedures.

AUTT 2120 - Automotive 5: Driveline Repair
8.0 - 12.0 - 12.0

Prerequisite: (4) AUTT 1110, AUTT 1120, AUTT 1130, and AUTT 2110 with a grade of C or better in each; or instructor approval — must be completed prior to taking this course.

Pre/Co Requisite: (1) MATH 1240 — must be taken either prior to or at the same time as this course.

Skills students master include diagnosis and repair of manual and automatic transmissions, clutches, differentials, drive shafts, axle shafts and driveline vibration causes and controls.

AUTT 2130 - Automotive 6: Diagnostics
8.0 - 12.0 - 12.0

Prerequisite: (5) AUTT 1110, AUTT 1120, AUTT 1130, AUTT 2110, and AUTT 2120 with a grade of C or better in each; or instructor approval — must be completed prior to taking this course.

Pre/Co Requisite: (1) Graduation tool set — must be taken either prior to or at the same time as this course.

Skills students master include diagnosis of electrical systems and engine performance-related problems.

AUTT 2900 - Special Topics in AUTT**Variable**

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This course is designed to permit instruction in special content areas not included in other courses in the Automotive Technology program.

AUTT 2981 - On-the-Job Training/Work Experience**0.0 - 32.0 - 8.0**

Prerequisite: (7) All AUTT classes with minimum grades of C; completion of a minimum of 24.0 credits of AUTT coursework; 2.0 or higher GPA; instructor approval; an approved work site; internship and graduation tool sets; and a valid driver's license — must be completed prior to taking this course.

Students apply their knowledge, learn new techniques, and receive on-the-job training at an automotive dealer or independent repair facility. Individualized, hands-on laboratory training utilizing live work is included in this course. Students must possess all tools on the internship and graduation tool list and have an acceptable completion score on the S/P2 Safety Course for Mechanical Safety and Mechanical Pollution Prevention. NOTE: Approved worksites include any site where students can apply the skills learned in the six automotive courses, or the course may be completed at the South Omaha Campus for those who qualify. Special consideration for other worksites is subject to instructor's approval.

AUTT 2982 - OJT/Work Experience I**0.0 - 3.0 - 1.0**

Prerequisite: (4) A minimum of 12 credit hours of AUTT courses completed with a 2.0 grade point average or better in those courses; program director approval; current acceptable completion score on the S/P2 safety training; and an approved work site — must be completed prior to taking this course.

This is the first in a series of eight internships needed for the student who wants to complete the required internship in a part-time work environment. Students apply their knowledge, learn new techniques, and receive on-the-job training at an automotive dealer or independent repair facility. Individualized, hands-on laboratory training utilizing live work is included in this course. For this series of eight internships (AUTT 2982 through AUTT 2989), students must possess all tools required by the employer and be working towards completing the purchase of the internship and graduation tool sets by the start of the eighth internship, as well as have an acceptable completion score on the S/P2 Safety Course for Mechanical Safety and Mechanical Pollution Prevention. NOTE: Approved worksites include any site where students can apply the skills learned in the six automotive courses, or the course may be completed at the South Omaha Campus for those who qualify. Special consideration for other worksites is subject to instructor's approval.

AUTT 2983 - OJT/Work Experience II**0.0 - 3.0 - 1.0**

Prerequisite: (4) AUTT 2982; a 2.0 grade point average or better in AUTT courses; program director approval; current acceptable completion score on the S/P2 safety training; and an approved work site — must be completed prior to taking this course.

This is the second in a series of eight internships needed for the student who wants to complete the required internship in a part-time work environment. Students apply their knowledge, learn new techniques, and receive on-the-job training at an automotive dealer or independent repair facility. Individualized, hands-on laboratory training utilizing live work is included in this course.

AUTT 2984 - OJT/Work Experience III**0.0 - 3.0 - 1.0**

Prerequisite: (4) AUTT 2983; a 2.0 grade point average or better in AUTT courses; program director approval; current acceptable completion score on the S/P2 safety training; and an approved work site — must be completed prior to taking this course.

This is the third in a series of eight internships needed for the student who wants to complete the required internship in a part-time work environment. Students apply their knowledge, learn new techniques, and receive on-the-job training at an automotive dealer or independent repair facility. Individualized, hands-on laboratory training utilizing live work is included in this course.

AUTT 2985 - OJT/Work Experience IV**0.0 - 3.0 - 1.0**

Prerequisite: (4) AUTT 2984; a 2.0 grade point average or better in AUTT courses; program director approval; current acceptable completion score on the S/P2 safety training; and an approved work site — must be completed prior to taking this course.

This is the fourth in a series of eight internships needed for the student who wants to complete the required internship in a part-time work environment. Students apply their knowledge, learn new techniques, and receive on-the-job training at an automotive dealer or independent repair facility. Individualized, hands-on laboratory training utilizing live work is included in this course.

AUTT 2986 - OJT/Work Experience V**0.0 - 3.0 - 1.0**

Prerequisite: (4) AUTT 2985; a 2.0 grade point average or better in AUTT courses; program director approval; current acceptable completion score on the S/P2 safety training; and an approved work site — must be completed prior to taking this course.

This is the fifth in a series of eight internships needed for the student who wants to complete the required internship in a part-time work environment. Students apply their knowledge, learn new techniques, and receive on-the-job training at an automotive dealer or independent repair facility. Individualized, hands-on laboratory training utilizing live work is included in this course.

AUTT 2987 - OJT/Work Experience VI**0.0 - 3.0 - 1.0**

Prerequisite: (4) AUTT 2986; a 2.0 grade point average or better in AUTT courses; program director approval; current acceptable completion score on the S/P2 safety training; and an approved work site — must be completed prior to taking this course.

This is the sixth in a series of eight internships needed for the student who wants to complete the required internship in a part-time work environment. Students apply their knowledge, learn new techniques, and receive on-the-job training at an automotive dealer or independent repair facility. Individualized, hands-on laboratory training utilizing live work is included in this course.

AUTT 2988 - OJT/Work Experience VII**0.0 - 3.0 - 1.0**

Prerequisite: (4) AUTT 2987; a 2.0 grade point average or better in AUTT courses; program director approval; current acceptable completion score on the S/P2 safety training; and an approved work site — must be completed prior to taking this course.

This is the seventh in a series of eight internships needed for the student who wants to complete the required internship in a part-time work environment. Students apply their knowledge, learn new techniques, and receive on-the-job training at an automotive dealer or independent repair facility. Individualized, hands-on laboratory training utilizing live work is included in this course.

AUTT 2989 - OJT/Work Experience VIII**0.0 - 3.0 - 1.0**

Prerequisite: (5) AUTT 2988; a 2.0 grade point average or better in AUTT courses; program director approval; current acceptable completion score on the S/P2 safety training; internship and graduation tool sets; and an approved work site — must be completed prior to taking this course.

This is the last in a series of eight internships for the student who wants to complete the required internship in a part-time work environment. Students apply their knowledge, learn new techniques, and get on-the-job training at an automotive dealer or independent garage. Individualized hands-on laboratory training utilizing live work is included in this course.

BIOS - Biology**BIOS 1010 - General Biology**  **5.0 - 3.0 - 6.0**

Corequisite: (1) BIOS 1010L — must be taken at the same time as this course.

Students registering for BIOS 1010 must complete the laboratory component of the course: students taking BIOS 1010 on-campus must register for either an on-campus or online section of BIOS 1010L, while students taking BIOS 1010 online or in the hybrid formats do not need to sign up for a separate lab course because the lab is already included. Developing a good understanding of the process of life requires students to have a broad background in the basics of biology. BIOS 1010 provides this background by emphasizing ecology, molecular biology, cell structure and function, genetics, and evolution.

BIOS 1010L - General Biology Lab**0.0 - 0.0 - 0.0**

Corequisite: (1) BIOS 1010 — must be taken at the same time as this course.

This course is the laboratory component to accompany BIOS 1010 when taken on campus. Students taking BIOS 1010 online or in the hybrid format should not sign up for this course as lab is included in those formats. Laboratory activities include ecology, molecular biology, cell structure and function, genetics, and evolution to coincide with the lecture portion of the course.

BIOS 1111 - Biology I**4.0 - 3.0 - 5.0**

Prerequisite: (1) College-level reading, writing, and math proficiency — must be completed prior to taking this course.

Corequisite: (1) BIOS 1111L — must be taken at the same time as this course.

This general biology course is taught in a three-course sequence: BIOS 1111, BIOS 1121, and BIOS 1130. All three courses must be successfully completed to transfer as a two-semester general biology course. In the first course in the sequence, students study the cellular, molecular, and genetic bases for life process. Students registering for this course must also register for BIOS 1111L, which is the laboratory component of the course.

BIOS 1111L - Biology I Lab**0.0 - 0.0 - 0.0**

Prerequisite: (1) College-level reading, writing, and math proficiency — must be completed prior to taking this course.

Corequisite: (1) BIOS 1111 — must be taken at the same time as this course.

This course is the laboratory component to accompany BIOS 1111. Students study the cellular, molecular, and genetic bases for life process. Students registering for this course must also register for BIOS 1111, which is the lecture component of the course.

BIOS 1121 - Biology II**4.0 - 3.0 - 5.0**

Prerequisite: (2) BIOS 1111 and college-level reading, writing, and math proficiency — must be completed prior to taking this course.

Corequisite: (1) BIOS 1121L — must be taken at the same time as this course.

This general biology course is taught as a three-course sequence: BIOS 1111, BIOS 1121, and BIOS 1130. All three courses must be successfully completed to transfer as a two-semester general biology course. In this second course in the sequence, students study ecology and evolutionary biology. Students registering for this course must also register for BIOS 1121L, which is the laboratory component of the course.

BIOS 1121L - Biology II Lab**0.0 - 0.0 - 0.0**

Prerequisite: (2) BIOS 1111; and college-level reading, writing, and math proficiency — must be completed prior to taking this course.

Corequisite: (1) BIOS 1121 — must be taken at the same time as this course.

This is the laboratory component to accompany BIOS 1121. Students study the cellular, molecular, and genetic bases for life process. Students registering for this course must also register for BIOS 1121, which is the lecture component of the course.

BIOS 1130 - Biology III**4.0 - 3.0 - 5.0**

Prerequisite: (2) BIOS 1121; and college-level reading, writing, and math proficiency — must be completed prior to taking this course.

Corequisite: (1) BIOS 1130L — must be taken at the same time as this course.

The last in a three-course sequence, this course emphasizes structure and function of plant and animal organ systems. Students registering for this course must also register for BIOS 1130L, which is the laboratory component of the course.

BIOS 1130L - Biology III Lab
0.0 - 0.0 - 0.0

Prerequisite: (2) BIOS 1121; and college-level reading, writing, and math proficiency — must be completed prior to taking this course.

Corequisite: (1) BIOS 1130 — must be taken at the same time as this course.

This course is the laboratory component to accompany BIOS 1130. This course emphasizes the structure and function of plant and animal organ systems. Students registering for this course must also register for BIOS 1130, which is the lecture component of the course.

BIOS 1250 - Environmental Biology 
4.5 - 0.0 - 4.5

Environmental Biology focuses on ecological issues and assists students in identifying the causes, proposing solutions, and developing/critiquing environmental action plans. Course topics include ecosystems, energy, populations, resources, pollution, sustainability, and stewardship.

BIOS 1310 - Survey of Human Anatomy and Physiology
4.0 - 3.0 - 5.0

Corequisite: (1) BIOS 1310L — must be taken at the same time as this course.

This survey course includes all systems of the human body, emphasizing the relationship between structure and function. It is intended for certificate-seeking students in MCC programs; transfer elsewhere as anatomy/physiology credit is not assured. Students registering for this course must also register for BIOS 1310L, which is the laboratory component of the course.

BIOS 1310L - Survey of Human Anatomy and Physiology Lab
0.0 - 0.0 - 0.0

Corequisite: (1) BIOS 1310 — must be taken at the same time as this course.

This course is the laboratory component to accompany BIOS 1310. The laboratory activities include all the systems of the human body, emphasizing the relationship between structure and function. It is intended for certificate-seeking students in MCC programs; transfer elsewhere as anatomy/physiology credit is not assured. Students registering for this course must also register for BIOS 1310, which is the lecture component of the course.

BIOS 1400 - Introduction to Botany
3.5 - 3.0 - 4.5

Prerequisite: (2) HLSM 1010 or BIOS 1010 or MCC biology placement exam; and college-level reading, writing, and math proficiency — must be completed prior to taking this course.

Corequisite: (1) BIOS 1400L — must be taken at the same time as this course.

This is an introductory botany course covering studies plant morphology and physiology of herbaceous and woody plant divisions within the plant kingdom as well as other related plant-like organisms (algae and fungi). Topics covered include plant structure and function, plant growth, transpiration, photosynthesis, evolution, and reproductive life cycles. The course concludes with the diversity of flowers and plant life. Students registering for this course must also register for BIOS 1400L, which is the laboratory component of the course.

BIOS 1400L - Introduction to Botany Lab
0.0 - 0.0 - 0.0

Prerequisite: (2) HLSM 1010 or BIOS 1010 or MCC biology placement exam; and college-level reading, writing, and math proficiency — must be completed prior to taking this course.

Corequisite: (1) BIOS 1400 — must be taken at the same time as this course.

Laboratory work includes microscopic examination of cells and tissues of typical plants, experiments in photosynthesis and transpiration, observation of the plant life cycle through gametophyte and sporophyte stages, and an introduction to plant identification techniques. Students registering for this course must also register for BIOS 1400, which is the lecture component of the course.

BIOS 1500 - Introduction to Bioprocessing
3.5 - 3.0 - 4.5

Prerequisite: (2) College-level reading, writing, and math proficiency; and high school biology with a grade of B or better, BIOS 1010, or equivalent — must be completed prior to taking this course.

Corequisite: (1) BIOS 1500L — must be taken at the same time as this course.

Topics include: career exploration, history and applications of DNA and RNA technology, fermentation, enzymes, growth requirements for microbes, sterile techniques, waste water treatment, bioseparation and laboratory safety. Students registering for this course must also register for BIOS 1500L, which is the laboratory component of the course.

BIOS 1500L - Introduction to Bioprocessing Lab
0.0 - 0.0 - 0.0

Prerequisite: (2) High school biology with a grade of B or better or BIOS 1010 or equivalent; college-level reading, writing, and math proficiency — must be completed prior to taking this course.

Corequisite: (1) BIOS 1500 — must be taken at the same time as this course.

This is the laboratory component to accompany BIOS 1500. Topics include applications of DNA and RNA technology, fermentation, enzymes, growth requirements for microbes, sterile techniques, waste water treatment, bioseparation and laboratory safety. Field trips that illustrate the basic techniques of bioprocessing may also be included. Students registering for this course must also register for BIOS 1500, which is the lecture component of the course.

BIOS 2050 - Genetics **4.5 - 0.0 - 4.5**

Prerequisite: (2) College-level reading, writing, and math proficiency; and BIOS 1010 or equivalent — must be completed prior to taking this course.

Understanding many of the advances taking place in biology and medicine requires a good understanding of genetics. This course discusses both classical and modern genetics.

BIOS 2150 - Microbiology**5.0 - 3.0 - 6.0**

Prerequisite: (2) BIOS 1010; and college-level reading, writing, and math proficiency — must be completed prior to taking this course.

Corequisite: (1) BIOS 2150L — must be taken at the same time as this course.

Recommended: Courses in anatomy and physiology if required in program of study — recommended prior to taking this course, but not required.

This course includes a study of the structure, physiology, ecology, and human health implications of microorganisms. Students registering for this course must also register for BIOS 2150L, which is the laboratory component of the course.

BIOS 2150L - Microbiology Lab**0.0 - 0.0 - 0.0**

Prerequisite: (2) BIOS 1010; and college-level reading, writing, and math proficiency — must be completed prior to taking this course.

Corequisite: (1) BIOS 2150 — must be taken at the same time as this course.

This is the laboratory component to accompany BIOS 2150. Laboratory activities include the structure, physiology, ecology, and human health implications of microorganisms. Sterile technique, culturing and transfer of microbes, and controlling the growth of microbes are also included. Students registering for this course must also register for BIOS 2150, which is the lecture component of the course.

BIOS 2310 - Human Anatomy and Physiology I**5.0 - 3.0 - 6.0**

Prerequisite: (2) College-level reading, writing, and math proficiency; and BIOS 1010 or equivalent — must be completed prior to taking this course.

Corequisite: (1) BIOS 2310L — must be taken at the same time as this course.

Pre/Co Requisite: (1) CHEM 1010; or CHEM 1210 and CHEM 1211; or CHEM 1212 — must be taken either prior to or at the same time as this course.

This course presents an in-depth study of human anatomy and physiology by examining cell function, tissues, and the skeletal, muscular, and nervous systems. Students registering for this course must also register for BIOS 2310L, which is the laboratory component of the course. NOTE: CHEM 1010, CHEM 1211, or CHEM 1212 must be successfully completed prior to taking BIOS 2320 Anatomy and Physiology II.

BIOS 2310L - Human Anatomy and Physiology I Lab**0.0 - 0.0 - 0.0**

Prerequisite: (2) BIOS 1010 or equivalent; and college-level reading, writing, and math proficiency — must be completed prior to taking this course.

Corequisite: (1) BIOS 2310 — must be taken at the same time as this course.

Pre/Co Requisite: (1) CHEM 1010; CHEM 1210 and CHEM 1211; or CHEM 1212 — must be taken either prior to or at the same time as this course.

This is the laboratory component to accompany BIOS 2310. Laboratory activities include the structure and function of cell, body tissue, and skeletal, muscular, and nervous systems. Students registering for this course must also register for BIOS 2310, which is the lecture component of the course.

BIOS 2320 - Human Anatomy and Physiology II**5.0 - 3.0 - 6.0**

Prerequisite: (2) College-level reading, writing, and math proficiency; and BIOS 2310 — must be completed prior to taking this course.

Corequisite: (1) BIOS 2320L — must be taken at the same time as this course.

As a continuation of BIOS 2310, this course studies the structure and function of the circulatory, respiratory, digestive, excretory, endocrine, and reproductive systems. Students registering for this course must also register for BIOS 2320L, which is the laboratory component of the course. NOTE: If students' programs require both BIOS 2310 and BIOS 2320, the chemistry prerequisite must be met prior to taking BIOS 2320.

BIOS 2320L - Human Anatomy and Physiology II Lab**0.0 - 0.0 - 0.0**

Prerequisite: (2) College-level reading, writing, and math proficiency; and BIOS 2310 — must be completed prior to taking this course.

Corequisite: (1) BIOS 2320 — must be taken at the same time as this course.

This is the laboratory component to accompany BIOS 2320. Laboratory activities include the structure and function of the circulatory, respiratory, digestive, excretory, endocrine, and reproductive systems. Students registering for the course must also register for BIOS 2320, which is the lecture component for this course.

BIOS 2900 - Special Topics in Biology**Variable**

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This course allows for instruction in special content areas not included in other biology courses.

BSAD - Business Management

BSAD 1000 - Introduction to Business

4.5 - 0.0 - 4.5

This course provides a survey of the structure and functions of the American business system together with an overview of business organization, finance, managerial control, production and distribution, personnel, the interdependence of business and government, and consumer business relations.

BSAD 1010 - Principles of Marketing

4.5 - 0.0 - 4.5

Prerequisite: (1) BSAD 1000 or equivalent — must be completed prior to taking this course.

This course features a survey of the distributive fields, their functions, and interrelationships. The course covers the concept and strategies of the marketing mix; the application of marketing concepts in both consumer and business to business environments; and controversial marketing topics, including ethical challenges of advertising.

BSAD 1100 - Business Law I

4.5 - 0.0 - 4.5

The course offers an introduction to ordinary legal aspects of business transactions involving such topics as legal rights and duties, law of contracts, law of sales, and law of property. It gives a general understanding and development of basic legal logic in business situations through the use of principles, cases, and information useful in determining the need for professional counsel.

BSAD 1110 - Business Law II

4.5 - 0.0 - 4.5

Prerequisite: (1) BSAD 1100 — must be completed prior to taking this course.

This is a continuation of Business Law I. The course offers study in negotiable instruments, agency and employment, business organizations, suretyship, secured transactions, and bankruptcy.

BSAD 1200 - Principles of Selling

4.5 - 0.0 - 4.5

Recommended: BSAD 1010 or equivalent — recommended prior to taking this course, but not required.

This course covers fundamentals of selling, from the determination of customer needs to the close of the sale. The course explores such factors as customer problems, merchandising knowledge, and personality traits of successful salespersons.

BSAD 1201 - Advertising and Sales Promotion

4.5 - 0.0 - 4.5

Recommended: BSAD 1010 or equivalent — recommended prior to taking this course, but not required.

This is an introductory course dealing with the theory, practice, and techniques of advertising. It considers the role of advertising and sales promotion in the economy. The course includes a general survey of the kinds and purposes of media, the psychological implication of typical appeals, and limited practice in promotional programming. Students coordinate advertising,

display, and publicity in the context of a realistic sales promotion program.

BSAD 1202 - Direct Marketing Methods

4.5 - 0.0 - 4.5

Recommended: BSAD 1010 or equivalent — recommended prior to taking this course, but not required.

This course offers a practical presentation of direct marketing methods and techniques covering telemarketing, direct mail, television, newspaper, and magazines. Topics include creating and producing direct marketing messages, media analysis and selection, and operational management. This course is a practical, hands-on experience for business managers and marketers and a skill developer for the direct marketing professional. This course is only offered during Fall quarter.

BSAD 1210 - Retailing

4.5 - 0.0 - 4.5

Prerequisite: (1) BSAD 1010 or equivalent — must be completed prior to taking this course.

This course acquaints students with the fundamentals of retail store organization and management, including store location, layout, buying, pricing operation, advertising, display, and analysis associated with merchandise handling. When appropriate, area retailers are invited to discuss the actual application of various retailing activities (e.g., buying, advertising, and inventory control).

BSAD 1250 - Introduction to Not-for-Profit Management

4.5 - 0.0 - 4.5

This course is an overview of nonprofit organization and management, emphasizing the role of the not-for-profit sector in community service and development. Topics include finance and budgeting (accessing public and private sector grant monies), management and personnel, ethics, scope of services (education, health, arts and culture, youth, community, environmental, and human services), and the interdependence of business, government, and the nonprofit sector.

BSAD 1300 - Introduction to Quality Management

4.5 - 0.0 - 4.5

This course explores the origin and philosophy of quality management and the considerations that go with adopting such a philosophy. This concept, that quality products and services best determine the success of an organization, is a blending of the old and the new, foreign and domestic. Students are introduced to the history of quality management and the pivotal individuals involved in the development of the philosophy. The course introduces the ramifications of adopting a quality management philosophy and how it impacts management and the individual worker.

BSAD 1600 - Principles of Supervision

4.5 - 0.0 - 4.5

This course gives emphasis to the first-line supervisor's needs for a working understanding of the functions of management, teamwork, cultural diversity, and practical aspects of motivation. This course also emphasizes developing an ability to constructively self-evaluate with a view toward developing

attitudes, habits, and skills that lead to effective and personally rewarding supervisory skills.

BSAD 2100 - Principles of Management ☞
4.5 - 0.0 - 4.5

This is an introduction to the theory and practice of management of the organization. Students study various schools of management theory and devote special attention to the process of planning, decision-making, organizing, leading, and controlling the organization.

BSAD 2300 - Quality Management: Statistical Process Control
4.5 - 0.0 - 4.5

Foreign competition has had a severe impact on the U.S. economy and has created a need for business to improve the quality of goods and services and the productivity of the workforce in order to regain its competitive position. This course presents the management principles and statistical methods that have been adopted successfully by many foreign firms. This course emphasizes management's responsibility to make system changes to improve quality and productivity; include obligations relative to customer satisfaction; design and develop products and services; and use statistical methods for management, control, and improvement. Students select and implement a project using the techniques of statistical process control and learn strategies for evaluation and continued improvement of the product or service.

BSAD 2400 - Business Logistics
4.5 - 0.0 - 4.5

Business logistics is a study of the acquisition, storage, use, packaging, transportation, and distribution of materials and products. Topics covered include management of materials and physical distribution; transportation choices, regulation, and rates; traffic management; product storage, warehousing, handling, and packaging; inventory management, acquisition, and production scheduling; order entry and processing; logistics systems design and operation; and international logistics.

BSAD 2410 - Purchasing and Materials Management
4.5 - 0.0 - 4.5

This course acquaints students with the theory and applications of purchasing and materials management concepts. The course content includes purchasing organization and administration, quality management, supplier relations, negotiations, legal considerations, logistics, international and governmental procurement, and strategic incentives.

BSAD 2420 - Production and Operations Management
4.5 - 0.0 - 4.5

This course is an overview of the fundamentals of production and operations management used in service and manufacturing organizations. Students study the application of effective production and operations management techniques; the measurement of productivity and customer service; the planning and management of materials, manpower, and capacity; and the concepts of quality and project management.

BSAD 2600 - Human Resources Management ☞
4.5 - 0.0 - 4.5

The course is a study of the principles and techniques of personnel management, including an examination of managerial practices in the selection, development, and motivation of employees; factors underlying employee participation in policy formulation; the effect of the work environment; administration of wages, salaries, and benefits; and the evaluation of personnel programs.

BSAD 2610 - Labor and Management Relations
4.5 - 0.0 - 4.5

The course includes a study of the history of the union movement and its present consequences for U.S. labor and management. Topics include the collective bargaining process, typical grievance procedures, applicable laws and regulations, mediation and arbitration, union organizing processes and limitations, and adversarial versus cooperative union and management relationships.

BSAD 2630 - Human Resource Development ☞
4.5 - 0.0 - 4.5

Prerequisite: (1) BSAD 2600 or current membership in HRAM/SHRM — must be completed prior to taking this course.

This course emphasizes the application of theory of training and development to assessment of needs, gap analysis, various types of training programs, and training program implementation and evaluation. It also addresses how to align training and development with organizational goals.

BSAD 2700 - Introduction to International Business and Global Entrepreneurship
4.5 - 0.0 - 4.5

This course presents a broad overview of the fundamentals of international business and global entrepreneurship. Unique issues include world-wide integration of financial markets, adaption of products and services, and the globalization of economic, political, legal, and cultural systems. The course also introduces students to topics related to international trade, rise of emerging markets, strategies for foreign market entry, and resources available to support entrepreneurial growth abroad.

BSAD 2710 - Import and Export Operations
4.5 - 0.0 - 4.5


This course introduces students to the advantages and disadvantages of international trade. Topics include political and cultural considerations in advertising and packaging products for global distribution and shipping, as well as transportation procedures to include regulation, rates, storage, and traffic management considerations. Students receive hands-on experience in simulated global trade operations.

BSAD 2720 - International Marketing Management ☞
4.5 - 0.0 - 4.5

Prerequisite: (1) BSAD 1010 — must be completed prior to taking this course.

Global marketing has become the norm rather than the exception for most businesses. The emergence of the networked economy and electronic business activities has allowed more firms to have

a global presence. This course presents a global marketing vision through the eyes of the marketing manager. Students demonstrate a global mindset and acquire knowledge of a broad cultural understanding on global strategic thinking and of the global marketing environment. This course emphasizes analyzing, developing, and designing global marketing strategies and programs with references drawn from well-known companies in Europe, Asia, and the Americas that explore global marketing issues.

BSAD 2800 - Ethics in Accounting and Business 
4.5 - 0.0 - 4.5

Prerequisite: (1) 9.0 credit hours in either BSAD, ACCT, FINA, or ENTR — must be completed prior to taking this course.

Ethical and moral issues are common in the business and accounting world. The conflicting goals of sales, success, growth, the rights and safety of consumers, the fiduciary responsibility of owners, and personal goals and ambition frequently drive individuals and businesses to ethical crossroads. Understanding the issues of ethics helps individuals and businesses deal with complex situations. (Cross-listed as ACCT 2800)

BSAD 2900 - Special Topics in Management Variable

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This course is designed to permit instruction in special content areas not included in other business management courses.

BSAD 2940 - Business Plan Capstone
1.5 - 0.0 - 1.5

Prerequisite: (1) Completion of 85.0+ quarter hours in the business management or accounting associate degree option — must be completed prior to taking this course.

The capstone course is an independent study course where students demonstrate competencies in the areas of management, finance, accounting, and report writing by developing a draft and finalized business plan on a student-faculty agreed upon business concept. Part of the requirement of this course is a comprehensive exam covering accounting, management, marketing, and general business topics. (Cross-listed as ACCT 2940)

BSAD 2981 - Internship in Business
0.0 - 18.0 - 4.5

Prerequisite: (2) Completion of at least 24.0 credit hours of the program's major requirements and instructor approval — must be completed prior to taking this course.

The internship in the Business program is an advanced course and is expected to be taken in the second year of study. Students apply the principles, procedures, and rules learned in Introduction to Business, Principles of Management, and courses from a specific business management degree option. The work setting can be a public, private, or nonprofit organization appropriate to the degree option being pursued. Students record the tasks performed in their notebooks, which the various work supervisors and faculty sponsors review periodically to assure that appropriate competencies are developed or reinforced. Based on

state guidelines, students must complete 40 hours of work for each credit hour in this course.

CFOT - Critical Facilities Operations Technology

CFOT 1000 - Introduction to Critical Facilities  
4.5 - 0.0 - 4.5

This course provides students with an overview of the function, design, and operation of critical facilities. Students identify the purpose and nature of critical facilities, the functions of various critical systems, and the role of technicians/operators in maintaining, troubleshooting, and optimizing the performance of the interrelated critical systems.

CFOT 2980 - Critical Facilities Capstone
4.0 - 0.0 - 4.0

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This course gives students the opportunity to integrate the skills and knowledge acquired throughout the Critical Facilities Operations program. Students complete a specific hands-on project. This course is the final course students should take for the Critical Facilities Operations program.

CHEM - Chemistry

CHEM 1010 - College Chemistry 
5.0 - 3.0 - 6.0

Prerequisite: (2) MATH 0931 or MATH 0960; and college-level reading, writing, and math proficiency — must be completed prior to taking this course.

Corequisite: (1) CHEM 1010L — must be taken at the same time as this course.

CHEM 1010 covers the principles relevant to a basic understanding of chemistry. The topics include atomic structure, chemical bonding, stoichiometry, gas laws, solutions, acid/base chemistry, and equilibria. Students registering for this course must also register for CHEM 1010L, which is the laboratory component of the course. For those students taking either online or in the hybrid format, the lab is included in the course.

CHEM 1010L - College Chemistry Lab
0.0 - 0.0 - 0.0

Prerequisite: (2) MATH 0931 or MATH 0960; and college-level reading, writing, and math proficiency — must be completed prior to taking this course.

Corequisite: (1) CHEM 1010 — must be taken at the same time as this course.

CHEM 1010L is the laboratory component to accompany CHEM 1010 on campus. Laboratory activities include atomic structure, chemical bonding, stoichiometry, gas laws, solutions, acid/base chemistry, and equilibria. Students registering for this course must also register for CHEM 1010, which is the lecture component of the course. For those students taking either online or in the hybrid format, the lab is included in the course.

CHEM 1120 - Chemistry for the Health Sciences I
2.5 - 1.5 - 3.0

Prerequisite: (3) Within two years prior to beginning the course, either successful completion of MATH 0931 or MATH 0960; CHEM 1010 or CHEM 1211 or CHEM 1212; and college-level reading, writing, and math proficiency — must be completed prior to taking this course.

Corequisite: (1) CHEM 1120L — must be taken at the same time as this course.

CHEM 1120 provides students pursuing a career in a health area fundamental knowledge of those areas of chemistry that relate to physiological principles. The topics covered include solutions; acids/bases/buffers; nuclear chemistry; equilibrium; and an introduction to organic chemistry. CHEM 1120 will be taught during the first part of the quarter to be followed immediately by CHEM 1130. Both CHEM 1120/1130 must be completed for transfer as a four-semester credit chemistry course for baccalaureate work. Students registering for this course must also register for CHEM 1120L, which is the laboratory component of the course.

CHEM 1120L - Chemistry for the Health Careers Lab
0.0 - 0.0 - 0.0

Prerequisite: (3) Within two years prior to beginning the course, either successful completion of MATH 0931 or MATH 0960; and CHEM 1010/CHEM 1010L or CHEM 1211/CHEM 1211L or CHEM 1212/CHEM 1212L; and college-level reading, writing, and math proficiency — must be completed prior to taking this course.

Corequisite: (1) CHEM 1120 — must be taken at the same time as this course.

This is the laboratory component of CHEM 1120. Laboratory activities will focus on the properties of solutions; acids/bases/buffers; nuclear chemistry; equilibrium; and an introduction to organic chemistry. Students registering for this course must also register for CHEM 1120, which is the lecture component of the course.

CHEM 1130 - Chemistry for Health Sciences II
2.0 - 3.0 - 3.0

Prerequisite: (2) College-level reading, writing, and math proficiency; and CHEM 1120 or CHEM 1211 or CHEM 1212 — must be completed prior to taking this course.

Corequisite: (1) CHEM 1130L — must be taken at the same time as this course.

CHEM 1130 is a continuation of CHEM 1120, and parallels the chemistry of organic molecules to biochemical functions. The course presents topics as a parallel between organic compounds and similar biochemical molecules, pairing such groups as the oxygen containing organic molecules with carbohydrates, carboxylic acids with lipids, and amines with amino acids and proteins. CHEM 1130 begins during the second part of the quarter, immediately following the completion of CHEM 1120. Both CHEM 1120 and 1130 must be completed to satisfy the requirements for transfer as a four-semester credit course for baccalaureate work. Students registering for this course must also register for CHEM 1130L, which is the laboratory component of the course.

CHEM 1130L - Chemistry for the Health Careers II Lab
0.0 - 0.0 - 0.0

Prerequisite: (2) CHEM 1120, CHEM 1211, or CHEM 1212; and college-level reading, writing, and math proficiency — must be completed prior to taking this course.

Corequisite: (1) CHEM 1130 — must be taken at the same time as this course.

CHEM 1130L is the laboratory component to accompany CHEM 1130. Laboratory activities introduce students to organic chemistry, and then focus on biological molecules, including carbohydrates, proteins, amino acids, and enzymes. Students registering for this course must also register for CHEM 1130, which is the lecture component of the course.

CHEM 1210 - General Chemistry: Part I
1.5 - 1.5 - 2.0

Prerequisite: (3) College-level reading, writing, and math proficiency; CHEM 1010/CHEM 1010 or a strong high school chemistry course; and chemistry readiness assessment testing (the Toledo Assessment Exam) — must be completed prior to taking this course.

Corequisite: (1) CHEM 1210L — must be taken at the same time as this course.

Pre/Co Requisite: (1) MATH 1310 — must be taken either prior to or at the same time as this course.

CHEM 1210 is the first part of General Chemistry I. Both CHEM 1210 and CHEM 1211 must be successfully completed to transfer as a semester-length course. Topics included in the first portion are measurement, naming compounds, writing chemical equations, atomic structure, the essentials of bonding, and the periodic table. Students registering for this course must also register for CHEM 1210L, which is the laboratory component of the course.

CHEM 1210L - General Chemistry: Part I Lab
0.0 - 0.0 - 0.0

Prerequisite: (4) MATH 0931 or MATH 0960; high school chemistry; chemistry readiness assessment testing (Toledo Assessment Exam); and college-level reading, writing, and math proficiency — must be completed prior to taking this course.

Corequisite: (1) CHEM 1210 — must be taken at the same time as this course.

Pre/Co Requisite: (1) MATH 1310 — must be taken either prior to or at the same time as this course.

This is the laboratory portion of Part 1 with activities focused on measurement, naming compounds, writing chemical equations, atomic structure, the essentials of bonding, and the periodic table. Students registering for this course must also register for CHEM 1210, which is the lecture component for the course.

CHEM 1211 - General Chemistry: Part II
3.0 - 3.0 - 4.0

Prerequisite: (3) College-level reading, writing, and math proficiency; CHEM 1210; and MATH 1310 — must be completed prior to taking this course.

Corequisite: (1) CHEM 1211L — must be taken at the same time as this course.

Pre/Co Requisite: (1) MATH 1420 — must be taken either prior to or at the same time as this course.

CHEM 1211 is a continuation of CHEM 1210. Both CHEM 1210 and 1211 must be successfully completed to transfer as a semester-length course. Topics in the second portion include modern bonding theories; VSEPR theory; thermochemistry; and the chemistry of solids, liquids, and gases. Students registering for this course must also register for CHEM 1211L, which is the laboratory component of the course.

CHEM 1211L - General Chemistry: Part II Lab
0.0 - 0.0 - 0.0

Prerequisite: (3) CHEM 1210; MATH 1310; and college-level reading, writing, and math proficiency — must be completed prior to taking this course.

Pre/Co Requisite: (2) CHEM 1211 and MATH 1420 — must be taken either prior to or at the same time as this course.

This is the lab component of CHEM 1211. Lab activities cover such topics as bonding theories; VSEPR theory; stoichiometry; solution chemistry; thermochemistry; and the chemistry of solids, liquids, and gases. Students registering for this course must also register for CHEM 1211, which is the lecture component of the course.

CHEM 1212 - General Chemistry I: Accelerated
4.5 - 4.5 - 6.0

Prerequisite: (4) College-level reading, writing, and math proficiency; CHEM 1010 or strong high school chemistry course; chemistry readiness (Toledo) assessment testing; and MATH 1310 — must be completed prior to taking this course.

Corequisite: (1) CHEM 1212L — must be taken at the same time as this course.

Pre/Co Requisite: (1) MATH 1420 — must be taken either prior to or at the same time as this course.

CHEM 1212 an accelerated General Chemistry I course for students who have some knowledge of chemistry as indicated by assessment testing. Topics include naming; atomic structure; chemical reactions; essentials of bonding; periodic properties; VSEPR theory; modern bonding theories; stoichiometry; thermochemistry; and the chemistry of solids, liquids, and gases. Students registering for this course must also register for CHEM 1212L, which is the laboratory component of the course.

CHEM 1212L - General Chemistry I: Accelerated Lab
0.0 - 0.0 - 0.0

Prerequisite: (4) CHEM 1010 or strong high school chemistry course; MATH 1310; chemistry readiness (Toledo) assessment testing; and college-level reading, writing, and math proficiency — must be completed prior to taking this course.

Corequisite: (1) CHEM 1212 — must be taken at the same time as this course.

Pre/Co Requisite: (1) MATH 1420 — must be taken either prior to or at the same time as this course.

This is the laboratory component of the General Chemistry I: Accelerated course. Laboratory activities focus on measurement and data collection; atomic structure; chemical reactions; essentials of bonding; periodic properties; VSEPR theory; modern bonding theories; stoichiometry; thermochemistry; and

the chemistry solids, liquids, and gases. Students registering for this course must also register for CHEM 1212, which is the lecture component of the course.

CHEM 1220 - General Chemistry II
4.5 - 4.5 - 6.0

Prerequisite: (3) College-level reading, writing, and math proficiency; CHEM 1211 or CHEM 1212 with a grade of C or better within the past four years; and MATH 1420 — must be completed prior to taking this course.

Corequisite: (1) CHEM 1220L — must be taken at the same time as this course.

CHEM 1220 is half of a one-year general chemistry program. Topics covered include solutions, equilibrium, acid-base reactions, thermodynamics, electrochemistry, kinetics, nuclear chemistry, and the chemistry of various specific substances (e.g., metal, non-metals, coordination compounds, etc.). Students registering for this course must also register for CHEM 1220L, which is the laboratory component of the course.

CHEM 1220L - General Chemistry II Lab
0.0 - 0.0 - 0.0

Prerequisite: (3) CHEM 1211 or CHEM 1212 with a grade of C or better within the last four years; MATH 1420; and college-level reading, writing, and math proficiency — must be completed prior to taking this course.

Corequisite: (1) CHEM 1220 — must be taken at the same time as this course.

This is the lab component for General Chemistry II. The lab activities focus on solutions, equilibrium, acid-base reactions, thermodynamics, electrochemistry, kinetics, nuclear chemistry, and the chemistry of various specific substances (e.g. metal, non-metals, coordination compounds, etc.). Students registering for this course must also register for CHEM 1220, which is the lecture component of the course.

CHEM 1510 - Chemistry for Bioindustry I
2.5 - 1.5 - 3.0

Prerequisite: (2) College-level reading, writing, and math proficiency; and CHEM 1010, CHEM 1211, or CHEM 1212 — must be completed prior to taking this course.

Corequisite: (1) CHEM 1510L — must be taken at the same time as this course.

This course gives students entering a biotech career fundamental knowledge of those areas of chemistry that relate to bioindustrial principles. This course covers solids, liquids, and solutions; acids, bases, and buffers; rate; equilibrium; and an introduction to organic chemistry. The course material is presented in lecture form to introduce the topics and information, and the concepts are reinforced through laboratory experiments in CHEM 1510L. CHEM 1510 is taught during the first part of the quarter to be followed immediately by CHEM 1520. Both CHEM 1510 and 1520 must be completed for transfer as a four-semester credit chemistry course for baccalaureate work. Students registering for this course must also register for CHEM 1510L, which is the laboratory component of the course.

CHEM 1510L - Chemistry for Bioindustry I Lab**0.0 - 0.0 - 0.0**

Prerequisite: (2) CHEM 1010/CHEM 1010L; CHEM 1211/CHEM 1211L; or CHEM 1212/CHEM 1212L; and college-level reading, writing, and math proficiency — must be completed prior to taking this course.

Corequisite: (1) CHEM 1510 — must be taken at the same time as this course.

This is the laboratory component of CHEM 1510. The laboratory activities focus on the properties of solids, liquids, and solutions; acids, bases, and buffers; rate; equilibrium; and an introduction to organic chemistry. CHEM 1510/1510L is taught during the first part of the quarter to be followed immediately by CHEM 1520/1520L. Both CHEM 1510/CHEM 1510L and 1520/1520L must be completed for transfer as a four-semester credit chemistry course for baccalaureate work. Students registering for this course must also register for CHEM 1510, which is the lecture component of the course.

CHEM 1520 - Chemistry for Bioindustry II**2.0 - 3.0 - 3.0**

Prerequisite: (2) College-level reading, writing, and math proficiency; and CHEM 1510 — must be completed prior to taking this course.

Corequisite: (1) CHEM 1520L — must be taken at the same time as this course.

As a continuation of CHEM 1510, this course continues with a study of those areas of chemistry that relate to bioindustrial principles. This course parallels the chemistry of organic molecules to biochemical functions. It introduces the 3-D nature of carbon molecules and the relationship between shape and physiological activity. The course covers topics that parallel organic compounds with biochemical molecules, pairing such groups as the oxygen-containing organic molecules with carbohydrates, carboxylic acids with lipids, and amines with amino acids and proteins. CHEM 1520 begins during the second part of the quarter, immediately following the completion of CHEM 1510. Both CHEM 1510 and 1520 must be completed to satisfy the requirements for transfer as a four-semester credit course for baccalaureate work. Students registering for this course must also register for CHEM 1520L, which is the laboratory component of the course.

CHEM 1520L - Chemistry for Bioindustry II Lab**0.0 - 0.0 - 0.0**

Prerequisite: (2) CHEM 1510/1510L; and college-level reading, writing, and math proficiency — must be completed prior to taking this course.

Corequisite: (1) CHEM 1520 — must be taken at the same time as this course.

This is the lab component of CHEM 1520. The lab activities focus on the 3-D nature of carbon molecules and the relationship between shape and physiological activity as well as the chemical and biochemical properties of the oxygen-containing organic molecules with carbohydrates, carboxylic acids with lipids, and amines with amino acids and proteins. CHEM 1520L begins during the second part of the quarter, immediately following the completion of CHEM 1510/1510L. Both CHEM 1510/1510L and

CHEM 1520/1520L must be completed to satisfy the requirements for transfer as a four-semester credit course for baccalaureate work. Students registering for this course must also register for CHEM 1520, which is the lecture component of the course.

CHEM 232A - Organic Chemistry IA**2.0 - 1.5 - 2.5**

Prerequisite: (2) College-level reading, writing, and math proficiency; and CHEM 1220 (or an equivalent general chemistry course) with a grade of C or better within the past four years — must be completed prior to taking this course.

Corequisite: (1) CHEM 232AL — must be taken at the same time as this course.

Organic Chemistry I is taught in three modules (CHEM 232A, 232B and 232C), all of which must be successfully completed for academic transfer as a semester length course. Topics in this first section include the structure and properties of carbon compounds, the classification of organic molecules by functional groups, acid-based chemistry as it relates to organic chemistry and the structure, properties, stereochemistry and reactions of alkanes. Students registering for this course must also register for CHEM 232AL, which is the laboratory component of the course.

CHEM 232AL - Organic Chemistry IA Lab**0.0 - 0.0 - 0.0**

Prerequisite: (2) CHEM 1220/CHEM 1220L (or an equivalent general chemistry course) with a grade of C or better within the past four years; college-level reading, writing, and math proficiency — must be completed prior to taking this course.

Corequisite: (1) CHEM 232A — must be taken at the same time as this course.

CHEM 232AL is the laboratory component of the first module of Organic Chemistry I. The activities in this section focus on an introduction to organic laboratory techniques and a review of acid/base chemistry. Students registering for this course must also register for CHEM 232A, which is the lecture component of the course.

CHEM 232B - Organic Chemistry IB**2.0 - 1.5 - 2.5**

Prerequisite: (2) College-level reading, writing, and math proficiency; and CHEM 232A — must be completed prior to taking this course.

Corequisite: (1) CHEM 232BL — must be taken at the same time as this course.

CHEM 232B is the second section in the sequence. Topics in this section include an introduction to chemical reactions, the stereochemistry of organic molecules, and the structure and physical and chemical properties of alkanes and alkynes. Students registering for this course must also register for CHEM 232BL, which is the laboratory component of the course.

CHEM 232BL - Organic Chemistry IB Lab**0.0 - 0.0 - 0.0**

Prerequisite: (2) CHEM 232A; and college-level reading, writing, and math proficiency — must be completed prior to taking this course.

Pre/Co Requisite: (1) CHEM 232B — must be taken either prior to or at the same time as this course.

This is the laboratory component of the second module of Organic Chemistry I. The lab course is offered as three modules, all of which must be completed to transfer as a semester-length course. The activities focus on the structure, properties, and reactions of alkenes and alkynes, including mechanism and stereochemistry. Students registering for this course must also register for CHEM 232B, which is the lecture component of the course.

CHEM 232C - Organic Chemistry IC
2.0 - 1.5 - 2.5

Prerequisite: (2) College-level reading, writing, and math proficiency; and CHEM 232B — must be completed prior to taking this course.

Corequisite: (1) CHEM 232CL — must be taken at the same time as this course.

CHEM 232C is the third section in the sequence. The topics in this section include the study of the structure, properties and reactions of alkenes and alkynes including stereochemical considerations and mechanisms. Students registering for this course must also register for CHEM 232CL, which is the laboratory component of the course.

CHEM 232CL - Organic Chemistry IC Lab
0.0 - 0.0 - 0.0

Prerequisite: (2) CHEM 232B; and college-level reading, writing, and math proficiency — must be completed prior to taking this course.

Corequisite: (1) CHEM 232C — must be taken at the same time as this course.

This is the laboratory component of the third module of Organic Chemistry I. The lab course is offered as three modules, all of which must be completed to transfer as a semester-length course. The lab activities focus on the structure, properties, and reactions of halogenated carbon compounds, alcohols, and thiols, including mechanism and stereochemistry. Students registering for the course must also register for CHEM 232C, which is the lecture component of the course.

CHEM 233A - Organic Chemistry IIA
2.0 - 1.5 - 2.5

Prerequisite: (2) College-level reading, writing, and math proficiency; and CHEM 232C (or an equivalent organic chemistry course) with a grade of C or better within the past four years — must be completed prior to taking this course.

Corequisite: (1) CHEM 233AL — must be taken at the same time as this course.

Organic Chemistry II is taught in three modules (CHEM 233A, 233B, and 233C), all of which must be completed for academic transfer as a one semester-length course. Topics in this first section include oxygen and sulfur containing organic molecules including alcohols and thiols, ethers, sulfides, and epoxides as well as an introduction to chemistry of conjugated pi systems. Students registering for this course must also register for CHEM 233AL, which is the laboratory component of the course.

CHEM 233AL - Organic Chemistry IIA Lab
0.0 - 0.0 - 0.0

Prerequisite: (2) CHEM 232C/CHEM 232CL (or an equivalent organic chemistry course) with a grade of C or better within the past four years; and college-level reading, writing, and math proficiency — must be completed prior to taking this course.

Corequisite: (1) CHEM 233A — must be taken at the same time as this course.

This is the laboratory component of the first module of Organic Chemistry II. The lab course is offered as three modules, all of which must be completed to transfer as a semester-length course. The lab activities focus on spectroscopy, organometallics, and the structure, properties and reactions of ethers, sulfides, and epoxides, including mechanism and stereochemistry. Students registering for this course must also register for CHEM 233A, which is the lecture component of the course.

CHEM 233B - Organic Chemistry IIB
2.0 - 1.5 - 2.5

Prerequisite: (2) College-level reading, writing, and math proficiency; and CHEM 233A — must be completed prior to taking this course.

Corequisite: (1) CHEM 233BL — must be taken at the same time as this course.

CHEM 233B is the second section in the sequence. Topics in this second section include the chemistry of conjugated pi systems, including aromatic compounds as well as an introduction to the structure and chemistry of carbonyl compounds including aldehydes and ketones. Students registering for the course must also register for CHEM 233BL, which is the lab component of the course.

CHEM 233BL - Organic Chemistry IIB Lab
0.0 - 0.0 - 0.0

Prerequisite: (2) CHEM 233A; and college-level reading, writing, and math proficiency — must be completed prior to taking this course.

Corequisite: (1) CHEM 233B — must be taken at the same time as this course.

CHEM 233BL is the laboratory component of the second module of Organic Chemistry II. The activities in this section focus on the structure, properties, and reactions of aromatic carbonyl compounds including mechanism and stereochemistry. Students registering for this course must also register for CHEM 233B, which is the lecture component of the course.

CHEM 233C - Organic Chemistry IIC
2.0 - 1.5 - 2.5

Prerequisite: (2) College-level reading, writing, and math proficiency; and CHEM 233B — must be completed prior to taking this course.

Corequisite: (1) CHEM 233CL — must be taken at the same time as this course.

CHEM 233C is the third section in the sequence. The topics in this section include a study of the structure, properties, and reactions of carboxylic acids and amines including reaction mechanisms. Students also study condensation reactions that

occur alpha to a carbonyl group. Students registering for this course must also register for CHEM 233CL, which is the laboratory component of the course.

CHEM 233CL - Organic Chemistry IIC Lab
0.0 - 0.0 - 0.0

Prerequisite: (2) CHEM 233B; and college-level reading, writing, and math proficiency — must be completed prior to taking this course.

Corequisite: (1) CHEM 233C — must be taken at the same time as this course.

This is the laboratory component of the third module of Organic Chemistry II. The lab course is offered as three modules, all of which must be completed to transfer as a semester-length course. The lab activities focus on the structure, properties, and reaction mechanisms of conjugated pi systems, including aromatic compounds. Students registering for this course must also register for CHEM 233C, which is the lecture component of the course.

CHEM 2310 - Fundamentals of Organic Chemistry
5.0 - 3.0 - 6.0

Prerequisite: (2) College-level reading, writing, and math proficiency; and CHEM 1010 (or an equivalent course) with a grade of C or better within the past four years — must be completed prior to taking this course.

Corequisite: (1) CHEM 2310L — must be taken at the same time as this course.

CHEM 2310 provides the student with an overview of the importance of organic molecules and their reactions. Topics include bonding, 3-D structure, and the relationship between structure, and reaction mechanisms as applied to hydrocarbons, alcohols, aldehydes, ketones, carboxylic acids and amines and their derivatives. The relationship of these compounds to biochemical is also discussed. Students registering for this course must also register for CHEM 2310L, which is the laboratory component of the course.

CHEM 2310L - Fundamentals of Organic Chemistry Lab
0.0 - 0.0 - 0.0

Prerequisite: (2) CHEM 1010/CHEM 1010L (or an equivalent course) with a grade of C or better within the past four years; and college-level reading, writing, and math proficiency — must be completed prior to taking this course.

Corequisite: (1) CHEM 2310 — must be taken at the same time as this course.

This is the lab component of CHEM 2310. The laboratory activities demonstrate such organic chemical properties as 3-D structure and bonding, isomerism, the relationship between structure and reactivity of carbon compounds, and reaction of organic functional groups. Students registering for this course must also register for CHEM 2310, which is the lecture component of the course.

CHEM 2900 - Special Topics in Chemistry
Variable

Various topics not typically covered in other chemistry courses may be offered depending upon interest, program need, and relevancy to the curriculum.

CHIN - Chinese

CHIN 1110 - Beginning Chinese I 
7.5 - 0.0 - 7.5

This course provides fundamental knowledge about Chinese language and culture. It emphasizes all four language skills - reading, writing, speaking, and listening. The Pinyin system of phonetic transliteration is used to teach the pronunciation of syllables and words. It introduces the formation of Chinese characters and establishes core vocabulary and grammar.

CHIN 1120 - Beginning Chinese II 
7.5 - 0.0 - 7.5

Prerequisite: (1) CHIN 1110 or equivalent competency — must be completed prior to taking this course.

This course helps beginners continue developing their communicative competence in the four basic skills of listening, speaking, reading, and writing while at the same time gaining competence in Chinese culture, exercising their ability to compare aspects of different cultures, making connections to their daily lives, and building links among communities.


CHRM - Culinary, Hospitality, Research, and Management

CHRM 1000 - CHRM Orientation 
1.5 - 0.0 - 1.5

This course is an introduction to the culinary, hospitality, research, and management program. Topics include the professional kitchen, an overview of the tremendous career opportunities available in the industry, and portfolio development. This course should be taken during the first quarter of enrollment.

CHRM 1010 - Culinary Math
2.0 - 0.0 - 2.0

This course covers all the basics of culinary math as a foundation to understanding the financial concepts of the food service industry. Topics include conversions, yields, recipe costing, recipe conversion, selling prices, and baking formulas, as well as basic math principles.

CHRM 1020 - Sanitation 
2.0 - 0.0 - 2.0

This course includes the study of safe food handling, identification of food-borne illness, and establishment of a food safety system. The study of the flow of food through the operation, as well as safe storage, sanitary facilities, and equipment are included. Other topics include establishment of an integrated pest management system, accident prevention, and crisis handling. There is an extensive discussion of sanitary regulations, agencies, and employee sanitation training. In order to pass this course, students must successfully pass the National Restaurant Association's Education Foundation ServSafe Exam and subsequently receive a certificate. This course is a corequisite to CHRM 1030, and all further first-year culinary lab classes require successful completion of this course.

CHRM 1030 - Introduction to Professional Cooking**2.0 - 6.0 - 4.0**

Pre/Co Requisite: (2) CHRM 1000; and CHRM 1020 or current ServSafe certification — must be taken either prior to or at the same time as this course.

This course guides students through the principles of introductory food handling, preparation, and cooking. Students learn and apply professional techniques common to restaurants and other food-service outlets. (Formerly Culinary Foundations 1: Skills)

CHRM 1035 - American Cuisine**2.0 - 6.0 - 4.0**

Prerequisite: (2) CHRM 1020 and CHRM 1030 — must be completed prior to taking this course.

This course is a continuation of CHRM 1030 Introduction to Professional Cooking. Students practice and refine professional cooking skills in the context of the significant historical, cultural, and immigrant influences reflected in modern American cuisine. (Formerly Culinary Foundations 2: Cuisines)

CHRM 1120 - Soup and Sauce Basics**1.0 - 6.0 - 3.0**

Prerequisite: (2) CHRM 1020 and CHRM 1030 — must be completed prior to taking this course.

Students learn and apply principles of stock, broth, soup, and sauce production used in commercial food production. Students also learn and practice professionally plating dishes with sauces.

CHRM 1130 - Protein Fabrication**0.5 - 4.5 - 2.0**

Prerequisite: (2) CHRM 1020 and CHRM 1030 — must be completed prior to taking this course.

Study focuses on the identification, fabrication, handling, and storage of protein items to include poultry, beef, pork, lamb, offals, shellfish, and finfish. Students are introduced to the concepts of protein cookery.

CHRM 1150 - World Cuisine**1.0 - 6.0 - 3.0**

Prerequisite: (2) CHRM 1020 and CHRM 1030 — must be completed prior to taking this course.

This is a continuation of CHRM 1030 and CHRM 1035. Students practice and refine professional cooking skills in the context of the significant historical, cultural, and religious influences reflected in cuisines outside of the United States. Students expand their experience and palates with global ingredients, flavors, and cooking techniques.

CHRM 1210 - Baking Basics**2.0 - 6.0 - 4.0**

Prerequisite: (2) CHRM 1020 and CHRM 1030 — must be completed prior to taking this course.

Students learn to apply fundamental baking skills in preparing yeast breads, quick breads, laminated dough, cookies, pies, pastries, cakes, custards, creams, and sauces.

CHRM 1220 - Pastries**1.0 - 6.0 - 3.0**

Prerequisite: (1) CHRM 1210 — must be completed prior to taking this course.

This course provides an in-depth study of baking emphasizing American and European pastries. Topics include knowledge of different ingredients for fancy cookies, petit fours, laminated pastries, puff pastries, pate a choux, meringues, assorted pastes and tarts, icing, fillings, and glazes.

CHRM 1250 - Artisan Bread**2.0 - 6.0 - 4.0**

Prerequisite: (1) CHRM 1210 — must be completed prior to taking this course.

This course is an in-depth study of artisan bread baking. Students apply old-world techniques with an emphasis on leavens, polish, and sponge bread methods. Students should complete CHRM 1210 prior to CHRM 1250 to obtain the skills necessary for successful completion of CHRM 1250.

CHRM 1260 - Cakes**2.0 - 6.0 - 4.0**

Prerequisite: (1) CHRM 1210 — must be completed prior to taking this course.

This course provides an in-depth study of cake formula and assembly techniques. Topics include knowledge of different cake-making methods, ingredients for icings, fillings, coatings, glazes, and production of finished cakes. It gives attention to production of layered and component cakes using an assortment of creams, including creme patisserie, Bavarians, and mousses.

CHRM 1550 - Customer Service**1.5 - 4.5 - 3.0**

Students are introduced to the power and invaluable tool of incredible customer service. No food service or hospitality establishment is successful unless employees are able to satisfy the customer, so a basic understanding of the key elements of customer service is presented. The lessons of providing high quality customer service is demonstrated, learned, and practiced in a lab environment in the service of A la Carte meals prepared in the Sage Student Bistro.

CHRM 1990 - Practical Baking Exam 1**0.0 - 1.5 - 0.5**

Prerequisite: (2) All first-year courses for Culinary Arts and Management/baking and pastry option are completed or near completion; and instructor approval — must be completed prior to taking this course.

This course is a practical exam to assess a student's readiness to progress into the second year of the Culinary Arts and Management/baking and pastry option. (Formerly Skills Demonstration for Bakers)

CHRM 1999 - Practical Cooking Exam 1**0.0 - 1.5 - 0.5**

Prerequisite: (2) Completion of all first-year Culinary Arts program option courses (or in progress); and instructor approval — must be completed prior to taking this course.

This course is a practical exam to assess a student's readiness to progress into the second year of the culinary arts option. (Formerly Skills Demonstration for Culinarians)

CHRM 2110 - Catering Production

0.0 - 9.0 - 3.0

Prerequisite: (1) CHRM 1999 — must be completed prior to taking this course.

Students learn and practice preparing, cooking, and serving food in high-volume food-service restaurant and catering operations utilizing standardized recipes and employing large scale food production techniques and equipment. (Formerly Quantity Production)

CHRM 2120 - Garde Manger

0.5 - 10.5 - 4.0

Prerequisite: (1) CHRM 1999 — must be completed prior to taking this course.

Students study traditional upscale pantry preparation. Students practice techniques for artistic displays of hors d'oeuvres, canapes, pates, terrines, and charcuterie. Students also practice artisan food preservation.

CHRM 2125 - Casual Dining

0.0 - 9.0 - 3.0

Prerequisite: (1) CHRM 1999 — must be completed prior to taking this course.

Study focuses on the aspects of casual dining and the distinct role it plays within the culinary environment. Students prepare a variety of dishes for service in a guest-centered restaurant utilizing their knowledge and skill sets learned from previous classes. Students also gain proficiency in the areas of kitchen sense, station management and organization, kitchen safety and sanitation, mise en place, and hustle. (Formerly A la Carte Cookery: American Regional)

CHRM 2130 - Fine Dining

0.0 - 12.0 - 4.0

Prerequisite: (1) CHRM 1999 — must be completed prior to taking this course.

Students learn a la carte and fine dining principles. Projects include menu design, research and development of dishes, plate presentation, and line cooking skills for fine dining as well as time budgeting and management. Students work in stations to include salads, broiler, saute, expeditor, and prep. Students plan and prepare up-scale theme menus.

CHRM 2230 - Baking Production

0.0 - 12.0 - 4.0

Prerequisite: (1) CHRM 1990 — must be completed prior to taking this course.

This class gives practical experience in preparation of retail bakery products to include breads, rolls, breakfast pastries, cookies, pies, tarts, and cakes. Students learn to meet production demands based on needs and customer expectation and satisfaction. It ties theory learned in other courses (e.g., sanitation, nutrition, purchasing) into these experiences in a practical way so that students develop and increase their baking techniques and kitchen sense.

CHRM 2250 - International Breads

1.0 - 6.0 - 3.0

Prerequisite: (1) CHRM 1990 or CHRM 1999 — must be completed prior to taking this course.

Students study and prepare breads from around the world. They learn how indigenous products, cultural preferences, and available fuel sources influence the development of unique regional and national styles of bread making.

CHRM 2270 - Chocolate, Sugar, and Decorations

1.0 - 6.0 - 3.0

Prerequisite: (1) CHRM 1990 — must be completed prior to taking this course.

This course covers chocolate and sugar ingredient identification and application. Confectionary skills covered include icing, fondant, piping, buttercream, marzipan, and royal icing decorations; poured, pulled, and blown sugar; chocolate and sugar work and sculptures; pastillage; and assorted sugar and chocolate decorative pieces.

CHRM 2280 - Plated Desserts

0.0 - 12.0 - 4.0

Prerequisite: (1) CHRM 2230 — must be completed prior to taking this course.

Students apply baking and pastry skills from throughout the curriculum in order to prepare and merchandise restaurant-style desserts. This course includes dessert menu planning, plating, garnishing, and producing component-style desserts.

CHRM 2350 - Nutrition

3.5 - 3.0 - 4.5

Prerequisite: (1) CHRM 1030 — must be completed prior to taking this course.

This course orients students to basic nutrition in the context of a modern food service operation. Emphasis is placed on nutrition guidelines for various population groups and disease states to enable the professional to respond knowledgeably to customers' specific nutrition needs. Students apply nutrition principles in developing menus and preparing various meals reflecting current health and dietary guidelines. Students also explore health-centered cooking techniques and prepare meals suitable for common dietary restrictions.

CHRM 2360 - Physiology of Flavor

2.0 - 3.0 - 3.0

Prerequisite: (2) CHRM 1030 and CHRM 1035 — must be completed prior to taking this course.

This course introduces students to the physiology of flavor perception. Students research culinary aromatics that contribute to flavor perception and apply them to the preparation of food with specific flavor profiles in a laboratory setting. Students also study aspects of history, medicinal benefits, growing, marketing, purchasing, and distributing, as well as culinary practices of culinary aromatics in a variety of local and international cuisines.

CHRM 2410 - Marketing and Industry Perspectives

2.0 - 3.0 - 3.0

This course exposes students to a wide variety of operations and broadens perspectives of the hospitality industry through site

visits, speakers, and vendor events. An exploration of menu planning and marketing strategies employed by various industry segments is done in conjunction with the visits. Flexibility of schedule and transportation is essential for student success.

CHRM 2460 - Cost Management 
4.5 - 0.0 - 4.5

Prerequisite: (1) MATH 1242 or CHRM 1010 — must be completed prior to taking this course.

Students develop an understanding of food cost, labor cost, portion control, menu pricing, and inventory and storeroom practices as they affect food service operations.

CHRM 2465 - Food Service Financial Management
4.5 - 0.0 - 4.5

Prerequisite: (1) CHRM 2460 — must be completed prior to taking this course.

Students discover the management systems used to report and analyze revenue, expenses, and profits, as well as the overall financial health of a food-related business.

CHRM 2470 - Hospitality Supervision 
4.5 - 0.0 - 4.5

This course considers approaches for effective culinary or hospitality supervision. It covers methods of recruiting, selecting, training, and evaluating personnel. Students examine team building and conflict management concepts.

CHRM 2475 - Leadership Principles
4.5 - 0.0 - 4.5

This course focuses on leadership and decision-making principles as applied to a variety of food operations. It develops skills in communication, empowerment, and planning.

CHRM 2480 - Purchasing
4.0 - 1.5 - 4.5

Prerequisite: (1) CHRM 2460 — must be completed prior to taking this course.

Purchasing methods and specifications in a variety of food operations are covered in this course. Students write purchasing specifications for a variety of foods using general purchasing methods, requirements, procedures, and ethics.

CHRM 2550 - Table Service
0.0 - 9.0 - 3.0

Prerequisite: (1) CHRM 1550 — must be completed prior to taking this course.

Students reinforce and expand knowledge of the dining room to include styles of service, customer service principles, order of service, wine and food affinities, and merchandising the menu in a guest-centered environment. Upon successful completion of this course, students may be awarded the National Restaurant Association ServSafe Alcohol Certificate.

CHRM 2560 - Beverage Management
3.0 - 0.0 - 3.0

Students study types of beverages (both alcoholic and non-alcoholic), purchasing procedures, beverage program development, and legal aspects of the beverage industry.

CHRM 2610 - Event Planning
1.5 - 4.5 - 3.0

Prerequisite: (2) CHRM 1030 and CHRM 1550 — must be completed prior to taking this course.

Students accumulate the skills and knowledge necessary to plan and coordinate all aspects of event management, including front-of-the-house, kitchen operations, and contract services in a client-driven, guest-centered environment. Students must have a flexible schedule to be successful in this course.

CHRM 2650 - Banquet Service
0.5 - 7.5 - 3.0

Prerequisite: (1) CHRM 1550 — must be completed prior to taking this course.

Students are introduced to and practice the fundamentals for executing successful events. Students learn the practical skills of buffet and banquet service in a guest-centered environment. Students taking this course must have a flexible schedule.

CHRM 2900 - Special Topics in Culinary Arts
Variable

This course permits instruction in special content areas that are not included in other culinary arts classes.

CHRM 2920 - Food and Media Studio
2.0 - 7.5 - 4.5

This course uses a broad, multi-disciplinary approach to develop food-related media pieces including, but not limited to, cookbooks, television programs, magazine articles, commercial art, and radio programs. The members of the studio select and create a professional-quality media piece for distribution. Students need flexibility in their scheduling, a commitment to team-based learning, advanced culinary and/or media development skills, and great organizational abilities in order to be successful in this course.

CHRM 2930 - Study Abroad
0.0 - 9.0 - 3.0

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

Students are immersed in cultural and culinary experiences while exploring various worldwide locations. Students experience local, regional, and international cuisines through each country's prism of religious, ethnic, political, and cultural influences. Applying prior skill sets and knowledge, students explore flavor profiles and indigenous ingredients in various representative dishes. Students visit local food markets and cultural, historic, and natural landmarks.

CHRM 2960 - Knowledge Bowl Competition
0.0 - 3.0 - 1.0

Recommended: Instructor Approval

This course is designed for students pursuing excellence through participation on the Knowledge Bowl Team. It is required for all those wishing to participate on Knowledge Bowl Teams at the Institute for the Culinary Arts at MCC. Students are introduced to the rigors of professional culinary competition as sanctioned by various organizations including the American Culinary Federation, the Research Chefs Association, SkillsUSA, and the

Retail Baker's Association. Students develop knowledge obtained throughout the culinary arts curriculum, foster team-building skills, and gain exposure to their regional and national contemporaries. Completion of this course requires participation in an extracurricular sanctioned culinary event that may require additional fundraising and membership in outside organizations.

CHRM 2961 - Advanced Knowledge Bowl Competition
0.0 - 3.0 - 1.0

Recommended: Instructor Approval

This course is designed for students pursuing excellence through participation on the Knowledge Bowl Team and is a continuation of the skills and knowledge introduced in CHRM 2960. It is a required course for all those wishing to participate on Knowledge Bowl Teams at the Institute for the Culinary Arts at MCC.

Students are introduced to the rigors of professional culinary competition as sanctioned by various organizations including the American Culinary Federation, the Research Chefs Association, SkillsUSA, and the Retail Baker's Association. Students develop knowledge obtained throughout the culinary arts curriculum, foster team-building skills, and gain exposure to their regional and national contemporaries. Completion of this course requires participation in an extracurricular sanctioned culinary event that may require additional fundraising and membership in outside organizations.

CHRM 297A - Competition Training Camp
0.0 - 3.0 - 1.0

In this teamwork-driven, highly-collaborative course, students are introduced to the rigors of professional culinary competition. Students develop the fundamental skills required for success in externally-sanctioned competitions. Students develop menus, refine culinary skills, discover the importance of mis-en-place and foster team-building skills.

CHRM 2970 - Culinary Competition
0.0 - 9.0 - 3.0

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This course is required for all those wishing to participate on the culinary competition team. The course introduces students to the rigors of professional culinary competition as sanctioned by various organizations, including the American Culinary Federation, the Research Chefs Association, and the Retail Baker's Association. Students develop competition-quality menus, refine their culinary skills, apply knowledge obtained throughout the culinary arts curriculum, foster team-building skills, and gain exposure to their regional and national contemporaries. Completion of this course requires participation in an extracurricular-sanctioned culinary event that may require additional fundraising and membership in outside organizations.

CHRM 2971 - Advanced Culinary Competition 1
0.0 - 9.0 - 3.0

Prerequisite: (1) CHRM 2970 — must be completed prior to taking this course.

Designed for students pursuing excellence through participation on the Culinary Competition Team, this course is a continuation of the skills and knowledge introduced in CHRM 2970. Students

may choose to advance sequentially from CHRM 2971 through CHRM 2979 to gain additional experience, further refine skills, and participate in competitions.

CHRM 2972 - Advanced Culinary Competition 2
0.0 - 9.0 - 3.0

Prerequisite: (1) CHRM 2970 — must be completed prior to taking this course.

This course is designed for students pursuing excellence through participation on the Culinary Competition Team. This course is a continuation of the skills and knowledge introduced in CHRM 2970.

CHRM 2973 - Advanced Culinary Competition 3
0.0 - 9.0 - 3.0

Prerequisite: (1) CHRM 2970 — must be completed prior to taking this course.

This course is designed for students pursuing excellence through participation on the Culinary Competition Team. This course is a continuation of the skills and knowledge introduced in CHRM 2970.

CHRM 2974 - Advanced Culinary Competition 4
0.0 - 9.0 - 3.0

Prerequisite: (1) CHRM 2970 — must be completed prior to taking this course.

This course is designed for students pursuing excellence through participation on the Culinary Competition Team. This course is a continuation of the skills and knowledge introduced in CHRM 2970.

CHRM 2975 - Advanced Culinary Competition 5
0.0 - 9.0 - 3.0

Prerequisite: (1) CHRM 2970 — must be completed prior to taking this course.

This course is designed for students pursuing excellence through participation on the Culinary Competition Team. This course is a continuation of these skills and knowledge introduced in CHRM 2970.

CHRM 2976 - Advanced Culinary Competition 6
0.0 - 9.0 - 3.0

Prerequisite: (1) CHRM 2970 — must be completed prior to taking this course.

This course is designed for students pursuing excellence through participation on the Culinary Competition Team. This course is a continuation of the skills and knowledge introduced in CHRM 2970.

CHRM 2977 - Advanced Culinary Competition 7
0.0 - 9.0 - 3.0

Prerequisite: (1) CHRM 2970 — must be completed prior to taking this course.

This course is designed for students pursuing excellence through participation on the Culinary Competition Team. This course is a continuation of the skills and knowledge introduced in CHRM 2970.

CHRM 2980 - Student Manager**0.0 - 9.0 - 3.0**

Prerequisite: (2) CHRM 2460 and CHRM 2550 — must be completed prior to taking this course.

Students participate in the daily supervision and management of the kitchen and dining area. The course focuses on interpersonal skill development, menu planning, and quality control.

CHRM 2981 - Internship**0.0 - 12.0 - 3.0**

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

Through goal-directed practice in a food-related establishment, students apply classroom knowledge and skills. Based on state guidelines, students must complete 40 hours of work for each credit hour in this course.

CHRM 2982 - Bakery Student Manager**0.0 - 9.0 - 3.0**

Prerequisite: (2) CHRM 2280 and CHRM 2460 — must be completed prior to taking this course.

This course provides practical experience in the operation of a restaurant kitchen and retail bakery from the perspective of a student manager. This experience is gained through training and supervising work related to the Bistro plated dessert station, planning menus, developing recipes, facilitating and assisting in bakery production requests, evaluating staff, determining and controlling costs, merchandising, and providing quality customer service. These duties tie into prior classroom work (sanitation, nutrition, purchasing, cost management, and supervision) in a practical way.

CHRM 2989 - Hospitality Management Internship**0.0 - 12.0 - 3.0**

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

The internship allows for integration of course requirements, classroom knowledge, and skills into managerial and leadership practice in a hospitality industry setting. Based on state guidelines, students must complete 40 hours of work for each credit hour in this course.

CHRM 2990 - Practical Baking Exam 2**0.0 - 1.5 - 0.5**

Prerequisite: (2) All required second year courses for the Culinary Arts and Management/baking and pastry option are completed or near completion; and instructor approval — must be completed prior to taking this course.

This course is a practical exam to assess a student's readiness to complete the Culinary Arts and Management/baking and pastry option. (Formerly Portfolio Development for Bakers)

CHRM 2999 - Practical Cooking Exam 2**0.0 - 1.5 - 0.5**

Prerequisite: (2) All culinary program option courses are completed or in progress; and instructor approval — must be completed prior to taking this course.

This course is a practical exam to assess a student's readiness to complete the second year of the culinary arts option with an emphasis on the necessary speed and efficiency required in a restaurant or food service establishment. (Formerly Portfolio Development for Culinarians)

CNST - Construction and Building Science**CNST 1005 - Introduction to the Construction Industry****4.5 - 0.0 - 4.5**

Students are introduced to the methods and materials used in the construction industry. The course covers construction efficiency and safety in the delivery, handling, and installation of building materials. Building materials, products, systems and procedures are also covered.

CNST 1020 - Blueprint Reading**4.5 - 0.0 - 4.5**

Students learn how to read and interpret residential architectural plans, including terms and definitions, architectural drawings, alphabet of lines, description of lines, and floor plan, electrical, plumbing, section, and mechanical symbols. The course emphasizes reading an architect's scale. It also includes extracting specified information from a set of building specifications and simple sketching procedures.

CNST 1030 - Digital Blueprint Applications**4.5 - 0.0 - 4.5**

Prerequisite: (1) CNST 1020 — must be completed prior to taking this course.

Students develop skills needed to interpret plans, both on paper and digitally, for commercial construction. Students obtain print reading experience with elements commonly included on prints for large commercial structures, including site work, mechanical, plumbing, electrical, mechanical systems, structural steel, reinforced concrete, and finish construction.

CNST 1050 - Introduction to Carpentry**4.5 - 0.0 - 4.5**

This course covers the safe use of hand tools. Students practice the proper set up of tools. They take part in an experiential learning project involving stationary and hand power tools as well as carpentry hand tools.

CNST 1070 - EIFS and Stucco Finish**3.0 - 1.5 - 3.5**

This course teaches students to apply two different exterior finishing systems: stucco, a non-insulated cement plaster wall covering, and EIFS, an exterior insulated finishing system. Students apply both in a practical lab experience.

CNST 1110 - Construction Safety (10-Hour)**1.0 - 0.0 - 1.0**

This course provides training outlined by the Occupational Safety and Health Administration (OSHA). This course supplies students with the recommended safety requirements for working in the construction field.

CNST 1110S - Construction Safety (10-Hour) - Spanish Version**1.0 - 0.0 - 1.0**

This course provides training outlined by the Occupational Safety and Health Administration (OSHA). This course supplies students with the recommended safety requirements for working in the construction field and is conducted in Spanish.

CNST 1220 - Remodeling and Deconstruction**6.0 - 1.5 - 6.5**

Prerequisite: (2) CNST 1050 and CNST 1020; or instructor approval — must be completed prior to taking this course.

This course prepares students for many of the unforeseen surprises that may occur in the fields of remodeling, renovation, and deconstruction. Students undertake actual remodeling projects such as floor, wall, ceiling, and roof alterations. Students evaluate existing loads and calculate new structural loads for additions using the latest IRC building code and local amendments.

CNST 1240 - Interior Finish and Cabinetry**9.0 - 0.0 - 9.0**

Prerequisite: (2) CNST 1020 and CNST 1050 — must be completed prior to taking this course.

Students learn interior finish terms and definitions that are used in the construction field. Students learn theory and practical application of various types of floor, wall and ceiling finish, interior door hanging, and various applications of interior trim and cabinets. Students practice estimation of labor and materials in all areas.

CNST 1255 - Commercial Framing**6.0 - 1.5 - 6.5**

Prerequisite: (2) CNST 1030 and CNST 1050 — must be completed prior to taking this course.

This course gives students a hands-on approach to metal stud framing. It covers proper layout procedures and wall types for interior, exterior, furred, structural, and fire-rated walls. Students learn methods of building headers, columns, soffits, and ceilings along with proper construction terms, definitions, specifications, and codes.

CNST 1360 - Floor, Wall, Stair and Ceiling Framing**9.0 - 0.0 - 9.0**

Prerequisite: (2) CNST 1020 and CNST 1050 — must be completed prior to taking this course.

Students learn the fundamentals of floor framing, wall parts, wall construction, stair parts, stair construction and installation of ceiling posts. Students construct a full-scale house in the indoor learning lab.

CNST 1370 - Exterior Finish**6.0 - 1.5 - 6.5**

Prerequisite: (2) CNST 1020 and CNST 1050; or instructor approval — must be completed prior to taking this course.

This course includes terms and definitions used in the construction field pertaining to exterior finish. It covers theory and practical application of various types of wall covering, roof covering, exterior doors, windows, and trim and emphasizes

estimation of labor and materials in all areas. Students install exterior siding, roofing, windows, doors, and roofing materials on a house in the indoor lab.

CNST 1400 - Introduction to Masonry**6.0 - 1.5 - 6.5**

This course emphasizes brick and block construction. Students mix mortar and use the trowel, spread mortar, cut brick and concrete blocks, and level and plumb laid-up units. It includes dry bonding techniques and various brick-block patterns.

CNST 1510 - Introduction to Concrete and Wall Forms**9.0 - 0.0 - 9.0**

Prerequisite: (1) CNST 1020 — must be completed prior to taking this course.

Students learn vocabulary, methods, and practices of concrete and concrete form construction. They perform testing procedures in accordance with the ASTM standards. The students learn about, and how to prepare different concrete mix designs. Students pour and finish concrete. Students also design and draw a concrete stair form and erect several types of concrete form systems. The students learn how to work safely in a concrete construction environment.

CNST 2060 - Building and Site Layout**4.5 - 0.0 - 4.5**

Prerequisite: (1) CNST 1020 — must be completed prior to taking this course.

Students learn common building layout procedures. Students use builder levels, Theodolites, and EDMs to practice actual procedures used in the construction field. They learn to read and shoot elevations using the latest equipment available, including lasers. Students also gain practical experience laying out and staking building sites. The course stresses understanding surveyor's terms and marking.

CNST 2100 - Construction Safety (30-Hour)**4.5 - 0.0 - 4.5**

This course provides students with training outlined by the Occupation Safety and Health Administration (OSHA). Many contractors require this course for anyone working in a supervisory capacity.

CNST 2120 - Construction Law and Document Management**4.5 - 0.0 - 4.5**

Students are introduced to common contracts used in the construction industry, with an emphasis on understanding the functions and interrelationships of documents. A review of law applied, application of the contract, and case studies used by construction professionals are covered. The course primarily focuses on disputes that typically arise in project performance and the options that exist to resolve those potential liabilities. Ethics in construction are covered.

CNST 2130 - Construction Estimating**7.0 - 0.0 - 7.0**

Estimating cost in construction prepares students for employment in the field of construction estimating. Students are prepared for this fast moving and changing field with training in electronic takeoffs. This course includes the use of spreadsheets Onscreen

Takeoff, Quick Bid, and Blue Beam Revu. Quantity takeoffs are performed using these softwares, as well as by hand, to facilitate an understanding of required mathematical operations. Students design a spreadsheet capable of computing quantities, labor, and materials.

CNST 2140 - Job Site Management

4.5 - 0.0 - 4.5

Prerequisite: (2) CNST 1005 and CNST 1020; or instructor approval — must be completed prior to taking this course.

Students go beyond the physical erection of a project and concentrate on the procedures and methods used by contractors during the construction and post-construction phases of a project systematic planning, organizing, managing, controlling, and documenting job site activities.

CNST 2160 - Advanced Construction Estimating and Scheduling

4.5 - 0.0 - 4.5

Prerequisite: (3) CNST 1005; CNST 1030; and CNST 2130 — must be completed prior to taking this course.

Students estimate and schedule a construction project. Students learn to use software to better facilitate the management and expectations of a project. Students design spreadsheets capable of computing quantities, labor and materials, and profitability for projects. A construction schedule is developed utilizing CPM standards.

CNST 2360 - Roof Framing

6.0 - 1.5 - 6.5

Prerequisite: (1) CNST 1020 or instructor approval — must be completed prior to taking this course.

This course covers the principles, calculations, and cutting of all components of gable, hip, and valley rafters. Students frame an actual roof on a house in the indoor lab.

CNST 2900 - Special Topics in CNST Variable

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This course permits instruction in special content areas not included in other courses of the Construction Technology program.

CNST 2981 - Internship Variable

Prerequisite: (2) GPA of 2.5 and career certificate or equivalent in framing, concrete, masonry management, cabinetry, or commercial construction; or instructor approval — must be completed prior to taking this course.

This internship gives students the opportunity to develop skills in the field and exposes them to established craftspeople. Applications for internships must be made through the program's full-time faculty. Based on state guidelines, students must complete 40 hours of work for each credit hour. NOTE: Students with four or more years of experience in the construction field may waive the internship requirement upon instructor approval. Contact a full-time instructor for more information. Credits toward the degree must be made up in other ways.

CRIM - Criminal Justice

CRIM 1010 - Introduction to Criminal Justice

4.5 - 0.0 - 4.5

This course is an overview of the history, development, and philosophies of crime control within a democratic society. It examines the criminal justice system with emphasis on the police, the prosecution and the defense, the courts, and the correctional agencies.

CRIM 1020 - Introduction to Corrections

4.5 - 0.0 - 4.5

This course outlines corrections as a systematic process, showing the evolving changes within institutional and community-based corrections. Topics include the history of corrections, the influence of social thought and philosophy on the development of corrections, the rights of the incarcerated inmate, and the duties of the correctional officer.

CRIM 1030 - Courts and the Judicial Process

4.5 - 0.0 - 4.5

Students examine the basic structure of the court system and court process. Students take a comprehensive look at the courts, their personnel, and the context in which they operate.

CRIM 1140 - Reporting Techniques for Criminal Justice

4.5 - 0.0 - 4.5

Prerequisite: (2) English level I and CRIM 1010 — must be completed prior to taking this course.

Students learn to observe and document the behavior of crime victims, witnesses, and suspects. Students also learn to accurately describe and record conditions and activities of crime scenes for courtroom presentations. In accordance with the legal guidelines of confidentiality, students maintain logs of classroom and field experiences.

CRIM 2000 - Criminal Law

4.5 - 0.0 - 4.5

Prerequisite: (1) CRIM 1010 — must be completed prior to taking this course.

This course outlines the purpose and function of criminal law. Topics include the rights and duties of citizens and police in relation to local, state, and federal law (e.g., arrest, search and seizure, confessions), and the development, application, and enforcement of laws, constitutional issues, and sentencing.

CRIM 2010 - Introduction to Probation and Parole

4.5 - 0.0 - 4.5

Prerequisite: (1) CRIM 1010 — must be completed prior to taking this course.

This course is an overview of the history and philosophical foundation of probation and parole. Students review legal issues and problems of probation and determinate/indeterminate sentencing. Students also examine the various roles of probation/parole officers and special programs as they relate to probation/parole.

CRIM 2020 - Legal Issues in Corrections ☞**4.5 - 0.0 - 4.5**

Prerequisite: (1) CRIM 1010 — must be completed prior to taking this course.

Criminal justice students are introduced to an overview of the critical issues of correction: to include the key correctional issues of changing goals within corrections, working with a diverse group of correctional offenders, and reentry concepts. Students also learn about the legal controversies of managing sex offenders, mental health offenders, and the elderly.

CRIM 2030 - Police and Society ☞**4.5 - 0.0 - 4.5**

Prerequisite: (1) CRIM 1010 — must be completed prior to taking this course.

This course examines the role of the police in relationship to the duties of law enforcement and their policing in a diverse society. Specific topics include key demographic trends related to the growth of multicultural communities. Also covered are key issues associated with immigration and how those issues affect law enforcement officials in their everyday job.

CRIM 2050 - Principles of Interviewing and Interrogation ☞**4.5 - 0.0 - 4.5**

Prerequisite: (1) CRIM 1010 — must be completed prior to taking this course.

This course examines interviews of witnesses, informants, and complainants as a communicative relationship. It includes demonstration, study, and practice of acceptable techniques and procedures in accordance with due process.

CRIM 2120 - Community-Based Corrections ☞**4.5 - 0.0 - 4.5**

Prerequisite: (1) CRIM 1010 — must be completed prior to taking this course.

This course outlines a number of community-based corrections programs such as probation, parole, electronic monitoring, and fines designed to meet the level of risk and needs of the offender. The course covers the balanced approach that reflects a strong emphasis on practical and legal matters. It also discusses the historical, philosophical, social, and legal contexts of community-based corrections.

CRIM 2150 - Contemporary Issues in Criminal Justice ☞**4.5 - 0.0 - 4.5**

Prerequisite: (1) CRIM 1010 — must be completed prior to taking this course.

This course examines some of the critical and prominent issues facing a modern police department and the U.S. court system. The course reviews the increase in the correction population and the use of modern technology, such as biometrics and global positioning tracking systems, in relationship to crime rates. Students evaluate and recommend an approach for the U.S. criminal justice system to better understand and respond to current critical issues.

CRIM 2190 - Police Field Services ☞**4.5 - 0.0 - 4.5**

Prerequisite: (1) CRIM 1010 — must be completed prior to taking this course.

This course is an analysis of the duties, extent of authority, and responsibilities of the uniformed patrol officer. It outlines rationales for the patrol philosophy and practices and presents accepted field techniques and their practical applications.

CRIM 2220 - Correctional Client ☞**4.5 - 0.0 - 4.5**

Prerequisite: (1) CRIM 1010 — must be completed prior to taking this course.

This course covers a wide variety of public safety and treatment issues related to a variety of special correctional offender typologies. The course draws from various fields of criminal justice, psychology, and counseling and discusses in detail 12 unique offender types and places a strong emphasis on assessment, diagnosis, and outcomes.

CRIM 2260 - Criminal Investigation ☞**4.5 - 0.0 - 4.5**

Prerequisite: (1) CRIM 1010 — must be completed prior to taking this course.

This course introduces criminal investigation procedures and reviews historical development and investigative processes related to law enforcement functions. Topics include proper collection, organization, and preservation of evidence using basic investigative tools; examination of primary sources of information; analysis of the importance of writing skills; and review of the constitutional (legal) limitations of the investigation.

CRIM 2300 - Community Relations ☞**4.5 - 0.0 - 4.5**

Prerequisite: (1) CRIM 1010 — must be completed prior to taking this course.

This course examines the traditional and current problems that inhibit understanding among all segments of the criminal justice system and the public. It explores methods of creating understanding and confidence by using various means of communication.

CRIM 2310 - Rules of Evidence ☞**4.5 - 0.0 - 4.5**

Prerequisite: (1) CRIM 1010 — must be completed prior to taking this course.

This course emphasizes the concept of evidence and rules governing its admissibility. It covers theoretical and pragmatic considerations of constitutional requirements affecting evidence and procedure.

CRIM 2320 - Correctional Facilities ☞**4.5 - 0.0 - 4.5**

Prerequisite: (1) CRIM 1010 — must be completed prior to taking this course.

This course discusses various case studies and research in an effort to present balanced and comprehensive coverage of prisons and prisoners. The course examines the many purposes

of prisons, punishment deterrence, rehabilitation, and incapacitation as well as many controversial issues regarding prisons.

CRIM 2330 - Introduction to Forensic Crime Scene Investigation

4.5 - 0.0 - 4.5

Prerequisite: (1) CRIM 1010 — must be completed prior to taking this course.

This course provides an overview of the basic concepts of forensic crime scene investigations. The course reviews the basic principles used by crime scene investigators. Topics include protecting the crime scene as a first responder, processing and establishing evidence, and understanding personnel disciplines that aid in the investigation to include special physical evidence handling.

CRIM 2400 - Introduction to Homeland Security

4.5 - 0.0 - 4.5

Prerequisite: (1) CRIM 1010 — must be completed prior to taking this course.

This course focuses on the impact of the war on terrorism upon individuals, society, and the government. It examines how the war on terrorism affected first responders, how it transformed local and state governmental planning, and how it defined a new relationship between state and federal government. The course explores changes in the American perspective on constitutional rights, the capacity of the government and the criminal justice system to respond to international acts of terrorism, and how to keep America safe.

CRIM 2430 - Emergency Response to Terrorism

4.5 - 0.0 - 4.5

Prerequisite: (1) CRIM 1010 — must be completed prior to taking this course.

This course covers the strategic planning, incident management, and intelligence techniques needed to provide the necessary foundation for anti-terrorism preparedness. Topics include infrastructure protection, the National Incident Management System, threat and vulnerability assessments, counter-intelligence measures, and terrorism prevention and deterrence operations. Students learn how best to lead, communicate, and coordinate in response/recovery efforts against terrorism.

CRIM 2500 - Introduction to Private Security Management

4.5 - 0.0 - 4.5

Prerequisite: (1) CRIM 1010 — must be completed prior to taking this course.

This course is an overview of history, development, and philosophies of private security within a complex society. The course examines the rich history, need for, and diversity of security systems and techniques with an emphasis on the challenges facing the nation and the need to protect employees, workers, manufacturing, and business infrastructure.

CRIM 2900 - Special Topics in Criminal Justice Variable

This course permits instruction in special content areas not included in other courses in the Criminal Justice program.

CRIM 2960 - Internship

Variable

Prerequisite: (3) Completion of at least 30.0 quarter hours within the program; 3.0 GPA; and instructor approval — must be completed prior to taking this course.

The internship is a legal agreement between the College and public or private criminal justice agencies to provide hands-on training for students. Students, the job site supervisor, a faculty monitor, and the academic dean agree to written goals and objectives as well as evaluation criteria. The Criminal Justice program faculty are responsible for providing a list of criminal justice agencies that accept students for internship positions during the academic program year. All initial internship program arrangements between the intern, the College, and the criminal justice agency are coordinated by the criminal justice faculty. Should students elect to use their own jobs as intern sites, they must perform and be evaluated at positions to which they are not regularly assigned. Based on state guidelines, students must complete 40 hours of work for each credit hour.

DENT - Dental Assisting

DENT 1000 - Introduction to Dental Assisting

2.0 - 0.0 - 2.0

This course includes a brief history of dentistry and dental assisting, educational and legal requirements for the dental team, and discussion of dental assisting as a profession. It covers basic terminology necessary for communicating with other dental professionals, the public, and patients and identifying the different types of dental patients and how to work with them in the office.

DENT 1020 - Dental Office Procedures

3.0 - 0.0 - 3.0

This course provides instruction in the management of the dental assistant's role as an administrative dental assistant. Topics include appointment control, recall programs, collections, letter writing, filing systems, recording fees charged and paid, dental payment plans, prepaid dental care plans, inventory control, and purchasing and disbursements.

DENT 1100 - Dental Anatomy

4.0 - 0.0 - 4.0

This course covers the embryonic development and histology of the skull and dentition; the characteristics and functions of human dentition; the study of the bones, muscles, nerves, and blood vessels of the head and neck; and the salivary glands and paranasal sinuses.

DENT 1120 - Related Anatomy

2.5 - 0.0 - 2.5

This course of study presents the basics of body structure and function. Students gain an understanding of patterns that enable the body systems to perform as an integrated whole.

DENT 1140 - Dental Pathology and Microbiology

2.5 - 0.0 - 2.5

This course covers dental pathology and microbiology. It includes an introduction to common abnormalities of the teeth and

supporting structures, the oral symptoms of systemic diseases, and the principles of disease transmission.

DENT 1160 - Dental Pharmacology
2.0 - 0.0 - 2.0

This course is a study of various drugs used in dentistry, preparation of prescriptions for doctor signature, drug effects on patients, and principles of pain control including types of anesthetic agents.

DENT 1180 - Nutrition and Preventive Dentistry
3.0 - 0.0 - 3.0

This course includes the basic study of diet and nutrition, its relationship to oral health with emphasis on dietary counseling, and philosophy of preventative dentistry, personal oral hygiene, and systemic and topical fluorides.

DENT 1200 - Dental Materials
4.0 - 4.5 - 5.5

This course gives students information on the composition and manipulation of materials used in restorative dentistry such as cements, amalgam, composites, glass ionomers, synthetic resins, temporary restorations, and metals. It also covers other materials such as waxes, impression materials, and gypsums. Students polish appliances, and fabricate custom trays, bleaching trays, mouth guards, and temporary crowns and bridges. The course also covers placement and removal of periodontal dressings and temporary crowns.

DENT 1230 - Dental Specialties I
4.0 - 0.0 - 4.0

This course provides the fundamentals of endodontics, periodontics, and oral surgery procedures with detailed instruction of the dental assistant's role in each specialty area including instrumentation.

DENT 1240 - Dental Specialties II
2.0 - 0.0 - 2.0

This course provides the fundamentals of pediatric dentistry, orthodontics, and fixed and removable prosthodontics with detailed instructions of the dental assistant's role in each specialty area including instrumentation.

DENT 1260 - Infection Control
2.0 - 3.0 - 3.0

This course covers infection control in depth as it relates to dentistry. Topics include universal and standard precautions, methods of disinfection and sterilization, proper use of chemicals and equipment, OSHA's Bloodborne Pathogens and Hazardous Communications Standards, and current recommendations from the CDC for dental office infection control.

DENT 1280 - Dental Office Emergencies
2.5 - 0.0 - 2.5

This course is a study of medical and dental emergencies that may occur in the dental office. Instruction includes ways to prevent or reduce the number of emergencies, office preparation for an emergency, taking of vital signs, the use of medical emergency equipment, review of CPR including AED, utilizing

OSHA guidelines during an emergency, and legal issues to consider when treating a dental patient.

DENT 1310 - Dental Radiology I
2.0 - 1.5 - 2.5

This course introduces dental film types, anatomical landmarks, mounting of films, generation of X-rays, manual film processing, and intraoral paralleling techniques.

DENT 1320 - Dental Radiology II
3.0 - 3.0 - 4.0

This course provides instruction in accessory radiographic techniques, patient management, identification of technique errors, automatic film processing, and preliminary film interpretation. Also included are radiation biology, patient protection, operator protection, and extraoral and digital radiography.

DENT 1350 - Chairside Assisting I
3.0 - 3.0 - 4.0

This course includes a detailed and practical application of dental equipment, rotary and dental hand instruments, arrangement of the patient and dental team during all phases of dentistry, and instrument transfer. It covers oral diagnosis with a focus on patient records, including medical and dental histories and charting using both paper and computer methods for recording all information.

DENT 1360 - Chairside Assisting II
3.0 - 3.0 - 4.0

This course includes a continuation of oral diagnosis with a focus on keeping correct patient records. A detailed study and practical application of maintaining the operating field, placement of topical anesthetic, preparation and proper handling of dental syringes, placement and removal of a rubber dam, placement and removal of matrices, and identifying and utilizing amalgam and composite instruments during an operative procedure is taught during this course.

DENT 1370 - Chairside Assisting III
3.0 - 3.0 - 4.0

This course includes a detailed study and practical application of the following procedures: oral inspection, alginate impressions, model trimming, coronal polish, removal of sutures, oral brush biopsy, pit and fissure sealants, and placement and removal of retraction materials.

DENT 1991 - Clinical Experience I
0.0 - 7.0 - 2.5

This course gives the dental assisting students the opportunity for clinical application of dental assisting techniques by assisting junior and senior students at Creighton University Dental College. This experience includes the areas of oral diagnosis, radiology, oral surgery, periodontics, endodontics, fixed and removable prosthodontics, pediatric dentistry, and operative dentistry. An individual and group conference is held each week with the dental assisting students to discuss their experiences and answer questions they may have about assisting with a dentist.

DENT 1992 - Clinical Experience II
0.0 - 24.0 - 8.0

This course gives the dental assisting students the opportunity to focus on their clinical skills in private or public dental offices or clinics with clinical experience in both general dentistry and specialty fields on a rotating basis. An individual and group conference is held each week with the dental assisting students to discuss their experiences and answer questions they may have about assisting with a dentist.

DENT 1993 - Clinical Seminar
2.0 - 0.0 - 2.0

This course meets once a week during the student's clinical experience to share ideas and unique methods used in the dental office. Dental assisting as a profession is discussed, including memberships and certifications. The laws and ethics governing the dental team are discussed. Completion of resumes and employment interviewing techniques are covered.

DESL - Diesel Technology

DESL 131U - CDL Training for Utility Line
3.0 - 1.5 - 3.5

Prerequisite: (4) Currently enrolled in Utility Line program; hold current driver's license in state of residence; current DOT physical and drug screen; obtain current CDL Learner's permit — must be completed prior to taking this course.

This training course covers the basic study requirements for non-vehicle activities in CDL (Commercial Drivers License) training in addition to preparing for the required backing, driving and vehicle inspection skills. Topics include safe driving, vehicle inspections and components, CDL endorsements, control (shifting, driving, backing), and understanding FMCS Regulations. This program is designed to prepare students to complete the required Class A CDL written tests at the DMV. Upon successful completion of this program, students receive a certificate of completion and are qualified to test at the DMV (Department of Motor Vehicles) for a CDL Class A license. Upon successful testing at the DMV, students are issued a CDL Class A license from the DMV that assists them in qualifying for employment as a utility lineman.

DESL 1000 - Diesel Preventive Maintenance ☺
3.0 - 4.5 - 4.5

This course is the study of truck and equipment preventive maintenance and inspection. Focus is on shop tools, equipment, and practices to start a career in diesel technology.

DESL 1040 - Generator Theory
5.0 - 3.0 - 6.0

Prerequisite: (1) UTIL 1020 — must be completed prior to taking this course.

Students study permanent magnet induction and synchronous ac generators while learning diagnosis and troubleshooting skills. (Formerly UTIL 1040)

DESL 1050 - Diesel/Automotive Parts Sales
1.0 - 3.0 - 2.0

Students study diesel engine parts sales. The course uses the Cummins brand diesel engine parts sales system. Lessons learned can easily be applied to other parts sales. Students learn how to look up key engine parts and other related items needed to complete the repair.

DESL 1115 - Alternative Fueled Engines ☺
2.0 - 3.0 - 3.0

Prerequisite: (1) DESL 1230 with a grade of C or better — must be completed prior to taking this course.

Students study the ignition and fuel systems of the alternative fueled engine. This course gives students hands-on skills with both current and older systems that are widely used with alternative fuels for truck service and power generation applications.

DESL 1200 - Fundamentals of Hydraulics ☺
1.0 - 6.0 - 3.0

Pre/Co Requisite: (1) DESL 1000 with a grade of C or better — must be taken either prior to or at the same time as this course.

This course is the study of basic principles relating to hydraulic systems and component identification. Activities involving schematic usage and symbol identification enhance students' diagnostic skills.

DESL 1210 - Electricity and Electronics ☺
4.0 - 6.0 - 6.0

Pre/Co Requisite: (2) DESL 1000 with a grade of C or better; and MATH 1240 — must be taken either prior to or at the same time as this course.

This course presents electrical principles and basic introductory electronics used in the diesel technology career field for service of medium-duty truck, heavy-duty truck, heavy equipment, and power generation applications. Theory, operation, and testing of common systems are investigated with MCC hands-on trainers and live work.

DESL 1220 - Advanced Diesel Hydraulics
5.0 - 3.0 - 6.0

Prerequisite: (1) DESL 1200 — must be completed prior to taking this course.

Students study hydraulic systems that are used on heavy equipment that relates closely to systems used on medium- and light-duty construction and utility equipment.

DESL 1230 - Diesel Engine Fundamentals ☺
2.0 - 6.0 - 4.0

Pre/Co Requisite: (1) DESL 1000 with a grade of C or better — must be taken either prior to or at the same time as this course.

This course is the study of diesel engine principles and component identification. Students gain knowledge through lecture and entry-level hands-on engine assembly and disassembly.

DESL 1300 - Class A CDL Driver Training
10.5 - 0.0 - 10.5

Students learn the safety fundamentals, essential regulatory requirements (i.e., overview of Federal Motor Carrier Safety Regulations/hazardous materials (HM) regulations), and trainee responsibilities not directly related to driving. This unit also covers the ramifications and driver disqualification provisions and fines for non-compliance with the various sections of the regulations including Parts 380, 382, 383, 387, and 390-399. This unit also includes an overview of the applicability of State and local laws relating to the safe operation of the CMV, stopping at weigh stations/scales, hazard awareness of vehicle size and weight limitations, low clearance areas (e.g., CMV height restrictions), and bridge formulas.

DESL 1300L - Class A CDL Road Training
0.0 - 12.0 - 4.0

Prerequisite: (3) DOT physical; DOT drug screen; and valid Class A Commercial Learner's permit from state of residence — must be completed prior to taking this course.

Corequisite: (1) DESL 1300 — must be taken at the same time as this course.

Students learn to identify basic CMV instruments and controls and how to properly perform vehicle inspections, control the motion of CMVs under various road and traffic conditions and shifting and backing techniques, and couple and uncouple combination vehicles. During the off-street driving exercises, trainees familiarize themselves with the basic operating characteristics of a CMV. Trainees must be able to perform the skills to a level of competency required to permit safe on-street driving.

DESL 1310 - Truck Driver CDL Training I
5.5 - 9.0 - 8.5

Prerequisite: (2) Completion of application requirements and approval by program faculty — must be completed prior to taking this course.

This introduction into CDL training provides students with the basics needed for all non-vehicle activities. The course also covers fundamental hands-on instruction in the safe operation of a Class A combination vehicle in order to prepare students for employment in the transportation industry.

DESL 1312 - Beginning Class B CDL Training
5.5 - 9.0 - 8.5

Prerequisite: (1) Completion of application requirements and approval interview with program faculty — must be completed prior to taking this course.

This introduction to CDL training provides students with the basics needed for all non-vehicle activities necessary to obtain employment with major transportation companies.

DESL 1320 - Truck Driver CDL Training II
4.0 - 16.0 - 9.0

Prerequisite: (3) DESL 1310; possession of a CDL learner's permit; and possession of a valid driver's license — must be completed prior to taking this course.

Corequisite: (1) EMSP 1010 — must be taken at the same time as this course.

During this advanced stage, training includes instruction and hands-on experience in safely driving and backing a Class A combination vehicle. Students complete EMSP 1010 while attending the DESL 1320 course. Students also participate in a professional defensive driving course and have the opportunity to drive on short road trips. This course prepares students to take the DMV CDL exam, which upon passing qualifies students to operate a Class A commercial vehicle.

DESL 1322 - Advanced Class B CDL Training
6.0 - 10.0 - 9.0

Prerequisite: (2) DESL 1312 and possession of a CDL learner's permit — must be completed prior to taking this course.

Corequisite: (1) EMSP 1010 — must be taken at the same time as this course.

This course covers advanced CDL training. Topics include instruction and hands-on experience in safely driving and backing a Class B vehicle. Students complete EMSP 1010 while taking DESL 1322. Students participate in a professional defensive driving course and drive on short road trips. The course prepares students to take the DMV CDL exam, qualifying them to operate a Class B commercial vehicle.

DESL 1620 - Climate Control/Heating and Air Conditioning
2.0 - 6.0 - 4.0

Prerequisite: (1) DESL 1210 — must be completed prior to taking this course.

This course is the study of diesel heating, air conditioning, and support systems in-depth. Students troubleshoot and make repairs in the shop with a variety of trucks and equipment.

DESL 2040 - Power Generator Applications
5.0 - 3.0 - 6.0

Prerequisite: (2) DESL 1040 and DESL 1115 — must be completed prior to taking this course.

Students study the specific application of stand-by and emergency power generation. This course covers theory and diagnostic applications. (Formerly UTIL 2040)

DESL 2100 - Heavy Duty Drivetrain 
2.0 - 6.0 - 4.0

Pre/Co Requisite: (1) DESL 1000 with a grade of C or better — must be taken either prior to or at the same time as this course.

This course is the study of medium- and heavy-duty truck clutches, transmissions, drivelines, and differentials. Focus is on operation, repair, and maintenance of these systems.

DESL 2110 - Heavy Equipment Drivetrain
4.0 - 6.0 - 6.0

Students study heavy equipment traction drives, brake systems, differentials, and their steering systems along with track and suspension systems.

DESL 2120 - Automatic and Automated Drivetrains
1.0 - 6.0 - 3.0

Students learn to analyze codes, diagnose problems, rebuild, repair, and properly maintain Allison automatic and other automated shift truck drivetrains in a professional setting.

DESL 2150 - Truck ABS and Brakes 🔄**2.0 - 6.0 - 4.0**

Pre/Co Requisite: (1) DESL 1000 with a grade of C or better — must be taken either prior to or at the same time as this course.

This course with professional lab presentations studies, analyzes, and repairs ABS systems on both medium- and heavy-duty trucks. Students learn to repair, rebuild, and maintain air brake systems through lab experiences in wheel-end repair and maintenance.

DESL 2200 - Steering and Suspension 🔄**2.0 - 6.0 - 4.0**

Pre/Co Requisite: (1) DESL 1000 with a grade of C or better — must be taken either prior to or at the same time as this course.

This course is a study of heavy-duty truck steering and suspension systems. Students learn to repair, align, and maintain these systems.

DESL 2211 - Fuel Operating Systems 🔄**3.0 - 4.5 - 4.5**

Prerequisite: (3) DESL 1000, DESL 1210, and DESL 1230 — must be completed prior to taking this course.

Recommended: DESL 1115 and DESL 1200 — recommended either prior to or at the same time as this course, but not required.

Students gain hands-on experience and understanding of hydromechanical injection and electronic control of diesel fuel systems used in modern diesel engines. This course provides the students with professional vocabulary terms and skills needed to repair sophisticated electronics and computerized circuits on diesel engine components.

DESL 2215 - Diesel Generator Controls 🔄**2.0 - 3.0 - 3.0**

Prerequisite: (4) DESL 1000, DESL 1040, DESL 1210, and DESL 1230 — must be completed prior to taking this course.

Pre/Co Requisite: (1) DESL 2211 — must be taken either prior to or at the same time as this course.

Students study the electronic and mechanical governor controllers and their inputs for both diesel and alternative fueled generator engines.

DESL 2220 - Diesel Engine Diagnostics 🔄**2.0 - 6.0 - 4.0**

Prerequisite: (2) DESL 1230 and DESL 2211 — must be completed prior to taking this course.

This course focuses on diagnosing and troubleshooting electronic diesel engines. Students gain knowledge through the use of the latest diagnostic equipment and hands-on practice.

DESL 2230 - Diesel Engine Rebuild**1.0 - 9.0 - 4.0**

Prerequisite: (1) DESL 1230 with a grade of C or better or verifiable experience — must be completed prior to taking this course.

Pre/Co Requisite: (1) DESL 2211 with a grade of C or better or verifiable experience — must be taken either prior to or at the same time as this course.

Students learn to do both in-chassis and out-of-chassis diesel engine rebuilds.

DESL 2240 - Emissions and Maintenance 🔄**1.0 - 6.0 - 3.0**

Prerequisite: (1) DESL 1230 with a grade of C or better or verifiable experience — must be completed prior to taking this course.

Pre/Co Requisite: (1) DESL 2211 with a grade of C or better and verifiable experience — must be taken either prior to or at the same time as this course.

This course is the study of today's newest emission control systems and engine maintenance. Focus is on how to tune-up and maintain the latest diesel engine after-treatment systems.

DESL 2250 - Field Service Maintenance**5.0 - 3.0 - 6.0**

Prerequisite: (1) DESL 2310 or valid Class B CDL — must be completed prior to taking this course.

This course refines the safety, productivity, and situational awareness that is required of professional technicians doing field service in the heavy equipment, power generation, and construction utility trades.

DESL 2301 - CDL Skills Certification Testing**0.0 - 3.0 - 1.0**

Prerequisite: (1) DESL 131U; DESL 1300; or DESL 2310 — must be completed prior to taking this course.

Students wishing to obtain their Commercial Driver License are required to pass a series of skills tests in order to achieve CDL certification. This course gives those students three opportunities to complete this qualification. MCC CDL Faculty are certified by the State of Nebraska to administer these tests. Tests must be passed in the order presented.

DESL 2310 - CDL for Diesel Technicians**4.0 - 4.5 - 5.5**

Prerequisite: (5) Completion of 25.0 credit hours in the Diesel Technology program, DOT Physical, DOT Drug Screen, Class-A Learners Permit, and instructor approval. — must be completed prior to taking this course.

Entry-level diesel technicians learn the skills necessary to pass the Department of Motor Vehicles test required to obtain a Class-A commercial driver's license. Students learn to safely operate a Class-A commercial motor vehicle (CMV). Topics include CMV regulations, basic control, air brakes, vehicle inspection, combination vehicle backing and driving, operating practices and procedures, fatigue and awareness, driver distraction, shifting, speed and space management, hazard perception, alcohol and drug regulations, and emergency maneuvers. Graduates are eligible to take the state of Nebraska CDL skills testing upon completion.

DESL 2900 - Special Topics in Diesel Technology Variable

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This course permits instruction in special content areas not included in other courses in the Diesel Technology program.

DESL 2980 - On-the-Job Training/Work Externship
0.0 - 24.0 - 6.0

Prerequisite: (2) DESL 1320 and application approved by program faculty — must be completed prior to taking this course.

This course gives students an opportunity to review with a CDL instructor the driving skills learned during the students' first weeks of employment. This also allows for additional instruction by a CDL instructor if required. Students must complete at least 240 hours of instruction with a mentor in order to receive credit for this course. Application for On-the-Job Training/Work Externship must be approved by the program faculty.

DESL 2981 - Diesel Internship I
0.0 - 32.0 - 8.0

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This internship gives students the needed experience to advance their skills while working with a qualified mentor in a diesel repair shop or dealership. The experience provides students with the opportunity to practice their skills in real-life work situations. Applications for internships must be approved by program faculty.

DESL 2982 - Diesel Internship II
0.0 - 32.0 - 8.0

Prerequisite: (2) DESL 2981 and instructor approval — must be completed prior to taking this course.

Pre/Co Requisite: (1) DESL 2230 — must be taken either prior to or at the same time as this course.

This second internship gives advanced students the experience necessary to acquire and be successful in a job in a diesel repair shop or dealership. Applications for this internship must be approved by program faculty.

DESL 2983 - Diesel Internship III
0.0 - 16.0 - 4.0

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This internship gives students a real experience in the diesel trade and solidly instills previously learned college classroom material while opening future employment opportunities.

DESL 2984 - Diesel Internship IV
0.0 - 16.0 - 4.0

Prerequisite: (1) DESL 1302 — must be completed prior to taking this course.

This internship is used to complete diesel technology students' degrees by providing a second level of hands-on learning in the real-work environment.

DESL 2985 - Heavy Equipment Internship
0.0 - 32.0 - 8.0

Prerequisite: (3) DESL 1200; successful completion of 20 credit hours of Diesel Technology; and instructor approval — must be completed prior to taking this course.

Corequisite: (2) DESL 1302 or a current CDL license; and DESL 2230 — must be taken at the same time as this course.

This internship gives advanced students the experience necessary to acquire and be successful in a job in a heavy

equipment diesel repair shop or dealership. Applications for this internship must be approved by program faculty.

DIMA - Design, Interactivity, and Media Arts**DIMA 1110 - Digital Design: Raster**
3.5 - 3.0 - 4.5

This course explores the visual and technical aspects of digital drawing and design using raster (resolution dependent) applications. Students acquire a basic understanding of computer graphics tools, menu functions and technical vocabulary through a series of exercises that explore the process of creative problem-solving and the theories and principles of drawing and design.

DIMA 1120 - Digital Design: Vector
3.5 - 3.0 - 4.5

This course focuses on the visual and technical processes of digital design using vector (resolution independent) applications and includes experience with raster/bitmap software. Students learn a vector software application through a series of exercises and projects that explore creative problem-solving while applying graphic design theory and principles.

DIMA 1200 - Illustration I
3.5 - 3.0 - 4.5

Prerequisite: (4) ARTS 1010; ARTS 1020; DIMA 1110; and DIMA 1120 — must be completed prior to taking this course.

This course covers the major movements in illustration. It also emphasizes media variety and techniques related to technical and pictorial illustration.

DIMA 1220 - Character, Narrative, and Storyboard Development
3.5 - 3.0 - 4.5

Prerequisite: (1) ARTS 1010 — must be completed prior to taking this course.

This course explores the basic principles of film structure and animation through observation, concept, narrative development, character design, and storyboard creation. It emphasizes the practice of drawing as a communication process to visualize stories that work as strong animation. Central activities include collaboration, brainstorming, oral presentation, and critiques.

DIMA 1230 - Drawing for Electronic Media
3.5 - 3.0 - 4.5

Prerequisite: (1) DIMA 1110 or DIMA 1120 — must be completed prior to taking this course.

This course emphasizes the concepts and processes involved with drawing directly into the computer. Using a digitizing pen and interactive LCD display as the primary tool and bitmap and vector applications as the primary medium, students explore form and space through direct and indirect observation. Areas of emphasis include perspective, the human figure and motion. Drawing the human form in space and motion prepares the students for sequential art and animation and further develops essential drawing and design skills. Traditional drawing tools, materials, and practices are incorporated.

DIMA 1240 - Character Design 1 🌐**3.5 - 3.0 - 4.5**

Prerequisite: (2) ARTS 1010; and DIMA 1110, or DIMA 1120, or DIMA 1230 — must be completed prior to taking this course.

This course is designed to teach the techniques for producing character designs through the creative process of drawing. Students develop the understanding of the basic principles of character design including clarity, shape variation, expression, contrast, and story.

DIMA 1305 - Concept Development**3.5 - 3.0 - 4.5**

This course provides a basic introduction to graphic design. It emphasizes creative problem-solving through the use of thumbnail and rough sketches.

DIMA 1310 - Typography I**3.5 - 3.0 - 4.5**

Prerequisite: (1) DIMA 1120 — must be completed prior to taking this course.

This course introduces type history, terminology, specifications, and design. Students apply fundamental criteria to select and use typefaces and fonts.

DIMA 1315 - Graphic Design Basics**3.5 - 3.0 - 4.5**

This course focuses on using raster, vector and layout programs according to graphic design professional standards. Students learn basic design and compositional principles necessary for all graphic design classes.

DIMA 1320 - History of Graphic Design**3.5 - 3.0 - 4.5**

Prerequisite: (1) DIMA 1310 — must be completed prior to taking this course.

This course covers the major developments and advancements in graphic design from the mid-15th century to the 21st century.

DIMA 1325 - Layout**3.5 - 3.0 - 4.5**

Prerequisite: (3) DIMA 1305; DIMA 1310; and DIMA 1315 — must be completed prior to taking this course.

Students combine typography and imagery to create one-page, multi-panel, basic multi-page, and large-format layouts.

DIMA 1400 - Game Design Fundamentals**3.5 - 3.0 - 4.5**

This course explores the practice and theory of interactive art. Students study the history of both analog and digital games and pursue the creative possibilities of interaction and play-based systems.

DIMA 1410 - 2-D Animation and Compositing I**3.5 - 3.0 - 4.5**

Prerequisite: (2) DIMA 1220 and ARTS 1010 — must be completed prior to taking this course.

Students explore animation compositing software and techniques as they create 2-D animation using traditional cell techniques and computer-based 2-D animation programs. This course

strengthens drawing skills, provides experience with collaborative production, and increases knowledge of animation concepts.

DIMA 1411 - History of Animation**4.5 - 0.0 - 4.5**

This course surveys the major developments in film animation from its beginnings to the present day. Students acquire an understanding of the different styles and evolution of animation as an art form and as a means of visual communication that reflects both social and historical contexts.

DIMA 1450 - Design for Motion Graphics I**3.5 - 3.0 - 4.5**

Students explore visual design concepts related to motion graphics. Adobe After Effects is the primary software and Photoshop introduced to compose still images, live-action video, and animation for television, film, web, and mobile devices. This course provides the student with the necessary technical software applications to produce title sequences, station identification, key-frame animation, and info-graphics.

DIMA 1455 - Introduction to Stop-Motion Animation**3.5 - 3.0 - 4.5**

This course explores the art of movement and visual art concepts through the techniques of stop-motion animation and provides a thorough understanding of stop-motion fundamentals. Students produce all animations using a DSLR camera, stop-motion, and basic audio software. The course addresses lighting techniques, including Claymation, puppet-model-making, cut-out animation, lip-syncing, and backgrounds/environments. Recommended readings, lectures, and demonstrations provide the critical skills to study a variety of stop-motion films screened in the course. Students produce a stop-motion short for their final project.

DIMA 1500 - Web Design**3.5 - 3.0 - 4.5**

Prerequisite: (2) DIMA 1110 and DIMA 1310 — must be completed prior to taking this course.

This course introduces students to the skills and competencies required to create original web graphics, media, and page designs using industry standard web design software applications and languages such as HTML and CSS. Students use creative problem-solving skills and web design processes to design and construct websites with emphasis on aesthetics, organization, client goals, and audience expectations.

DIMA 1510 - Interactive 2-D Design I**3.5 - 3.0 - 4.5**

Prerequisite: (1) DIMA 1120 — must be completed prior to taking this course.

This course teaches the concepts and techniques necessary to design and produce interactive projects that include computer graphics and animation and desktop video. Students apply design elements and principles, animation, and interactive objects using interactive software.

DIMA 1520 - UI/UX**3.5 - 3.0 - 4.5**

Prerequisite: (1) DIMA 1500 — must be completed prior to taking this course.

Students learn how to design user interfaces for websites and mobile devices that are creative, intuitive, and enhance the user experience. Utilizing HTML, CSS, and JavaScript, students design UI elements and animations, ensure cross-browser compatibility, and enhance responsive websites.

DIMA 1530 - Designing with WordPress

3.5 - 3.0 - 4.5

Prerequisite: (1) DIMA 1500 — must be completed prior to taking this course.

This course teaches students to apply design and visual communication principles to the popular Content Management System (CMS) WordPress. Students learn how this CMS fits into a larger visual communication strategy, and learn how to create a visual web presence for a company, product, or brand.

DIMA 1540 - Mobile App Design

3.5 - 3.0 - 4.5

Prerequisite: (1) DIMA 1500 — must be completed prior to taking this course.

Students learn the concepts and skills necessary to design mobile apps. Topics include the benefits and unique functionality that a highly graphical, task-oriented and feature-rich mobile app can bring to the user experience. Students create app concepts based on user profiles, and ideate and refine by using interactive prototypes, group usability studies, and knowledge of popular mobile OS design guidelines.

DIMA 1620 - Introduction to 3-D Modeling and Animation

3.5 - 3.0 - 4.5

This course is an introduction to the production of motion picture graphics using 3-D modeling and animation software. Students' study and practice techniques of 3-D model execution and scene design with light and camera placement.

DIMA 2200 - Illustration II

3.5 - 3.0 - 4.5

Prerequisite: (1) DIMA 1200 — must be completed prior to taking this course.

This course covers pictorial problem-solving with emphasis on art direction and personal style of expression.

DIMA 2210 - Electronic Illustration

3.5 - 3.0 - 4.5

Prerequisite: (2) DIMA 1110 and DIMA 1120 — must be completed prior to taking this course.

This course explores advanced illustration concepts and techniques through vector software combined with raster software. The course emphasizes concept development and personal style along with demonstrations of computer techniques. Output is both print form and animation.

DIMA 2300 - Logo Design and Branding

3.5 - 3.0 - 4.5

Prerequisite: (2) DIMA 1320 and DIMA 1325 — must be completed prior to taking this course.

This course covers branding and identity design. It emphasizes symbolism, conveying ideas through abstract imagery, and creating elements of a brand identity.

DIMA 2310 - Information Design

3.5 - 3.0 - 4.5

Prerequisite: (1) DIMA 2300 — must be completed prior to taking this course.

This course covers information design. It emphasizes analyzing verbal and statistical data and best approaches to translating data into graphic formats that are both functional and aesthetically engaging. The course also covers wayfinding and usability.

DIMA 2350 - Typography II

3.5 - 3.0 - 4.5

Prerequisite: (2) DIMA 1310 and DIMA 1325 — must be completed prior to taking this course.

This advanced course explores typographic concepts that integrate advanced design philosophies. Students examine type as both an analytical and structured medium as well as a metaphorical element.

DIMA 2351 - Package Design

3.5 - 3.0 - 4.5

Prerequisite: (1) DIMA 1325 — must be completed prior to taking this course.

This course presents challenges in the design of packages and the 3-D graphic design process. It emphasizes material selection, fabrication, and structural design.

DIMA 2352 - Publication Design

3.5 - 3.0 - 4.5

Prerequisite: (1) DIMA 1325 — must be completed prior to taking this course.

This course covers the design and production of multi-page printed publications. It covers a variety of formats, ranging from mass media to special interest.

DIMA 2410 - 2-D Animation and Compositing II

3.5 - 3.0 - 4.5

Prerequisite: (1) DIMA 1410 — must be completed prior to taking this course.

Students create original 2-D animation focusing on character and story development. Building on skills acquired in DIMA 1410, students produce a segment of a group project and an individual project. This course strengthens animation design and problem-solving, collaborative production abilities, and personal vision. Students further explore compositing and animation software.

DIMA 2450 - Design for Motion Graphics II

3.5 - 3.0 - 4.5

Prerequisite: (1) DIMA 1450 — must be completed prior to taking this course.

This course is a continuation of DIMA 1450 Design for Motion Graphics I with an intense focus on design, advanced techniques, and high-end concept creation for broadcast. Students continue to explore design concepts as they relate to motion graphics design, incorporating additional current industry-standard software as design tools. Topics include kinetic text, masking, expressions, motion tracking, 3-D layers, cameras, rotoscoping

and paint tools, and compositing. Projects are fewer and more in-depth than DIMA 1450 with emphasis on creative solutions.

DIMA 2500 - Web Design Partnership Project
3.5 - 3.0 - 4.5

Prerequisite: (3) DIMA 1520; DIMA 1530; and INFO 1311 — must be completed prior to taking this course.

This course is a partnership between a DIMA web design student and an INFO web development student. Students complete an independent project designing and publishing a website for an entrepreneur, small business, or nonprofit organization.

DIMA 2510 - Interactive 2-D Design II
3.5 - 3.0 - 4.5

Prerequisite: (1) DIMA 1510 — must be completed prior to taking this course.

This course is a continuation of DIMA 1510 with more complex interactive projects that present new challenges such as scripting and variable-driven dynamic applications.

DIMA 2620 - 3-D Character Development
3.5 - 3.0 - 4.5

Prerequisite: (1) DIMA 1620 — must be completed prior to taking this course.

This course builds on the introductory topics presented in DIMA 1620 with further exploration of the techniques of modeling, material definition, and animation that are the foundation of 3-D graphics for motion pictures and games. It emphasizes the development of 3-D characters, materials, and motion control. Students present an animated character at the conclusion of the course.

DIMA 2625 - 3-D Modeling for Animation and Games
3.5 - 3.0 - 4.5

Prerequisite: (1) DIMA 1620 — must be completed prior to taking this course.

This course builds on the topics presented in DIMA 1620 with further explorations of the techniques of modeling, material definition, and animation. It emphasizes the development of 3-D models with techniques that are particularly suitable for games.

DIMA 2640 - 3-D Lab
3.5 - 3.0 - 4.5

Prerequisite: (1) DIMA 2620 or DIMA 2625 or DIMA 2700 — must be completed prior to taking this course.

This course requires an animation or game project that offers students an opportunity to build upon and integrate existing technical skills, share ideas with students from diverse animation disciplines, and produce a more complex product. Students present an animation or game at the conclusion of the course.

DIMA 2700 - 3-D Game Development
3.5 - 3.0 - 4.5

Prerequisite: (1) DIMA 1620 — must be completed prior to taking this course.

This course is an introduction to the production of motion picture graphics using 3-D modeling and animation software. Techniques of 3-D model execution and scene design with light and camera placement are practiced and refined.

DIMA 2810 - Portfolio Development
3.5 - 3.0 - 4.5

Prerequisite: (1) DIMA 2310 — must be completed prior to taking this course.

This is the DIMA graphic design capstone course. Students create a comprehensive final portfolio by revising projects from previous courses and/or creating new work. The course also covers job-seeking skills specific to the profession and requires students to create an identity suitable for job seeking.

DIMA 2820 - Web Design Portfolio Development
3.5 - 3.0 - 4.5

Prerequisite: (3) DIMA 1520; DIMA 1530; and INFO 1311 — must be completed prior to taking this course.

Pre/Co Requisite: (1) INFO 2340 — must be taken either prior to or at the same time as this course.

This course is a capstone experience for students completing the web design concentration of the DIMA program. Each student completes a comprehensive individual web design portfolio representative of their technical and aesthetic accomplishments in the program.

DIMA 2840 - Projects Development
3.5 - 3.0 - 4.5

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This course is a capstone experience for the students completing the Design and Interactive Media Arts program. The primary activity of the course is the students' amalgamations of technical and aesthetic accomplishment into projects that are representative of individual achievement and principal to the students' portfolio.

DIMA 2900 - Special Topics in DIMA
Variable

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This course is designed to permit instruction in special content areas not included in other courses of the Design and Interactive Media Arts program.

DIMA 2981 - Internship
0.0 - 18.0 - 4.5

Prerequisite: (2) 54.0 credit hours in DIMA and instructor approval — must be completed prior to taking this course.

This internship program provides students with the opportunity to apply their knowledge, learn new techniques, and get on-the-job training at an approved work site. Based on state guidelines, students must complete 40 hours of work for each credit hour. Students must have completed 54.0 credit hours in their discipline to be eligible for an internship. Interested students must contact program faculty to develop an internship to meet their academic and career goals. NOTE: Previous on-the-job training or work experience may not be applied to fulfill the requirements of this course.

DRAF - Mechanical Drafting Technology

DRAF 1100 - AutoCAD Fundamentals

9.0 - 0.0 - 9.0

This course introduces computer-aided design methods using AutoCAD software. It covers drawing techniques and terminology using ANSI standards, text creation and editing, dimensioning, AutoCAD menus, file management, plotting, and drawing and display commands. Other AutoCAD commands include model space and layout, viewports, polylines, and use of attributes. NOTE: Students can take any design course after successful completion of AutoCAD Fundamentals. Design courses are DRAF 1200, DRAF 1400, DRAF 2200, and DRAF 2400.

DRAF 1200 - Design for Precision (Measurement)

9.0 - 0.0 - 9.0

Prerequisite: (1) DRAF 1100 — must be completed prior to taking this course.

This course presents dimensioning techniques that apply to manufactured products. It introduces geometric dimensioning and tolerancing used in the selection and application of dimensions. Students use the micrometer, caliper, and other precise measuring instruments to measure actual manufactured products. They examine fits and allowances and current ANSI standards. Students complete lab assignments using CAD software.

DRAF 1300 - Inventor Fundamentals

9.0 - 0.0 - 9.0

This course provides an understanding of the features and functions of Inventor software. It examines principles of solids modeling and parametric design and covers complex part modeling techniques, drawing view creating and editing, and assembly modeling. Students also learn annotations, dimensions, tables, and bills of material. This is a hands-on, project-based course.

DRAF 1400 - Manufacturing Process Design

9.0 - 0.0 - 9.0

Prerequisite: (1) DRAF 1100 — must be completed prior to taking this course.

This course examines the design process as it relates to manufactured products. Students also examine the materials and processes found in the manufacturing industry. They study the properties and processing of metals, including machining, welding, forging, casting, and forming. Working with prototypes is emphasized as well. Drawings are completed using the CAD system.

DRAF 2100 - SolidWorks Fundamentals

9.0 - 0.0 - 9.0

Students use SolidWorks, a parametric solid modeling and rendering software, to model parts, drawings, and assemblies. Topics include sweep, loft, extrude, and revolve. The course also features top-down assembly modeling. This is a hands-on, project-based course.

DRAF 2200 - Machine Design Principles

9.0 - 0.0 - 9.0

Prerequisite: (1) DRAF 1100 — must be completed prior to taking this course.

Students complete detail and assembly drawings on the CAD system with regard to the numerous design considerations found in machine controls, power transmissions, seals, gears, and mechanical linkages. They look at design considerations as they pertain to mechanisms that change speed and movement of various industrial machines. Students use CAD software to draw, design, and analyze the mechanisms.

DRAF 2300 - Creo (Pro/E) Fundamentals

9.0 - 0.0 - 9.0

This course examines the principles of solids modeling and parametric design using Creo (Pro/ENGINEER) software. It also covers the understanding of part modeling, assembling modeling, management, and troubleshooting. The course includes views, assembly drawings, dimension and notes, tables, symbols, bills of material, and drawings of complex assemblies. This is a hands-on, project-based course.

DRAF 2400 - Tool Design Processes

9.0 - 0.0 - 9.0

Prerequisite: (1) DRAF 1100 — must be completed prior to taking this course.

This course is a comprehensive study of the principles of the design for jigs and fixtures, dies and gages. It examines the study of tool steel and other materials. Students explore use of standard components, vendor catalogs, handbooks, and the CAD system.

DRAF 2900 - Special Topics in Mechanical Design Technology

Variable

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This course permits instruction in special content areas not included in other courses in the Mechanical Design Technology program.

DRAF 2981 - Internship

Variable

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This internship provides students the opportunity to apply their knowledge, learn new techniques, and get on-the-job training at an approved work site. To develop an internship to meet their academic and career goals, interested students must contact program faculty or the appropriate academic dean. Based on state guidelines, students must complete 40 hours of work for each credit hour.

ECED - Early Childhood Education

ECED 1050 - Expressive Arts

4.5 - 0.0 - 4.5

This course covers selection, construction, and use of materials, activities, and experiences that encourage the young child's creativity and aesthetic appreciation through the visual arts, music, body movement, and dramatic play. Curriculum is for three to eight years of age. This course requires a minimum of four field experience contact hours within early childhood education settings.

ECED 1060 - Observation, Assessment, and Guidance

4.5 - 0.0 - 4.5

Pre/Co Requisite: (1) ENGL 1010. The corequisite ENGL 1010 can be taken concurrently or have previously been completed. ENGL 1210, ENGL 1220, or ENGL 1230 can also satisfy the corequisite requirement and can be taken concurrently or have previously been completed. For students planning to transfer, ENGL 1010 is the better choice. — must be taken either prior to or at the same time as this course.

This course introduces a variety of observation, assessment, and guidance strategies used in early childhood education settings for birth through age eight. This course requires a minimum of four field experience contact hours within early childhood education settings.

ECED 1110 - Infant and Toddler Development

4.5 - 0.0 - 4.5

This course focuses on typical and atypical development of children in the prenatal period of development through 36 months of age. It examines planning curriculum in the domains of physical growth and motor skills, cognition, language, and social and emotional development. This course requires a minimum of four field experience contact hours within early childhood education settings.

ECED 1120 - Preschool Child Development

4.5 - 0.0 - 4.5

This course focuses on typical and atypical development of the child ages three to five years in the domains of physical growth and motor skills, cognition and language, and social/emotional development. This course requires a minimum of four field experience contact hours within early childhood education settings.

ECED 1150 - Introduction to Early Childhood Education

4.5 - 0.0 - 4.5

This course is an overview of early childhood education, history, and trends. It examines the philosophies of various programs, diversity, inclusion, licensing standards, current legislation, professionalism, and advocacy. This course requires a minimum of four field experience contact hours within early childhood education settings.

ECED 1160 - Early Language and Literacy

4.5 - 0.0 - 4.5

Prerequisite: (3) Take two courses from ECED 1110, ECED 1120, or ECED 1230; and one course from ENGL 1010, ENGL

1210, ENGL 1220, or ENGL 1230 — must be completed prior to taking this course.

This course focuses on the development of literacy and language skills from birth to age eight. Students plan and prepare developmentally appropriate literacy and language activities. This course requires a minimum of four field experience contact hours within early childhood education settings.

ECED 1220 - Prepracticum

1.5 - 0.0 - 1.5

This course provides an orientation to practicum experiences in the Early Childhood Education program. Students study child care licensing requirements for their state, obtain a current health report, and have their names cleared through appropriate background checks. Students understand practicum expectations and responsibilities, methods of evaluation, and the importance of professionalism in the work place. Prepracticum should be taken the quarter prior to the student's first anticipated practicum.

ECED 1221 - Infant Practicum

0.0 - 4.5 - 1.5

Prerequisite: (1) ECED Practicum Coordinator approval — must be completed prior to taking this course.

Students work with infants (six weeks through 12 months of age) on a weekly basis and become familiar with the daily routine of programs serving these ages. Basic skills include developmentally appropriate interactions, supporting caregiver plans, and fostering children's development. Students spend 45 hours with infants and plan experiences appropriate for this age group. Students are required to attend bi-monthly one-hour seminar sessions. NOTE: Students should register for ECED 1221 and ECED 1222 within the same quarter as they run 5.5 weeks consecutively in the same quarter. Students enrolling in the ECED practica should follow the procedures on the early childhood practicum website at mccneb.edu/ecp.

ECED 1222 - Toddler Practicum

0.0 - 4.5 - 1.5

Prerequisite: (1) ECED Practicum Coordinator approval — must be completed prior to taking this course.

Students work with toddlers (12-36 months) on a weekly basis and become familiar with the daily routine of programs serving these ages. Basic skills include developmentally appropriate interactions, supporting caregiver plans, and fostering children's development. Students spend 45 hours with toddlers and plan experiences appropriate for this age group. Students are required to attend bi-monthly one-hour seminar sessions. NOTE: Students should register for ECED 1221 and ECED 1222 within the same quarter as they run 5.5 weeks consecutively in the same quarter. Students enrolling in the ECED practica should follow the procedures on the early childhood practicum website at mccneb.edu/ecp.

ECED 1230 - School-Age Child Development and Programming

3.0 - 0.0 - 3.0

This course focuses on typical and atypical development of the child ages five through 12 years. This course examines program design in out-of-school care that addresses the domains of

physical growth and motor skills, cognition and language, and social/emotional development. This course requires a minimum of four field experience contact hours within early childhood education settings. (Formerly School-Age Child Development)

ECED 1240 - Preschool-Age Practicum
0.0 - 4.5 - 1.5

Prerequisite: (1) ECED Practicum Coordinator approval — must be completed prior to taking this course.

Students work with preschool-age children on a weekly basis and become familiar with the daily routine of programs serving these ages. Basic skills include developmentally appropriate interactions, supporting caregiver plans, and fostering development. Students spend 45 hours with the preschool-age children and plan a few experiences appropriate for this age group. Students are required to attend bi-monthly one-hour seminar sessions with the assigned instructor. NOTE: Students should register for ECED 1240 and ECED 1241 within the same quarter as they run 5.5 weeks consecutively in the same quarter. Students enrolling in the ECED practica should follow the procedures on the early childhood practicum website at mccneb.edu/ecp.


ECED 1241 - School-Age Practicum
0.0 - 4.5 - 1.5

Prerequisite: (1) ECED Practicum Coordinator approval — must be completed prior to taking this course.

Students work with school-age children (five to eight years of age) on a weekly basis and become familiar with the daily routine of programs serving these ages. Basic skills include developmentally appropriate interactions, supporting caregiver plans, and fostering development. Students spend 45 hours with the school-age children and plan a few experiences appropriate for this age group. Students are required to attend bi-monthly one-hour seminar sessions with the assigned instructor. NOTE: Students should register for ECED 1240 and ECED 1241 within the same quarter as they run 5.5 weeks consecutively in the same quarter. Students enrolling in the ECED practica should follow the procedures on the early childhood practicum website at www.mccneb.edu/ecp.

ECED 1260 - Children's Health and Nutrition 
4.5 - 0.0 - 4.5

Students gain an understanding of the inter-relatedness of health, safety, and nutrition in the life of a young child, birth through age eight. Students learn about health appraisals and appropriate assessment tools. They make an in-depth analysis of the infectious process and effective control of communicable diseases and acute illness found in the early childhood years and settings. The course examines safety management and the handling of child abuse and neglect. Students learn appropriate nutritional guidelines and practices for planning meals and snacks in the classroom. This course requires a minimum of four field experience contact hours within early childhood education settings.

ECED 2050 - Children with Exceptionalities 
4.5 - 0.0 - 4.5

Prerequisite: (2) ECED 1110, ECED 1120, or ECED 1230 — must be completed prior to taking this course.

Students become aware of the theory, development, and philosophy of early childhood education programs serving children with exceptionalities. Topics include working with families, legislation, role of the interventionist, interdisciplinary teams, and inclusion of children with special needs in natural environments. This course requires a minimum of four field experience contact hours within early childhood education settings.

ECED 2060 - Early Childhood Education Curriculum Planning
4.5 - 0.0 - 4.5

Prerequisite: (3) ECED 1240; ECED 1150; and ECED 1160 — must be completed prior to taking this course.

This course prepares students to plan a developmentally appropriate curriculum and environments for children three to eight years of age. Topics include writing goals and objectives, lesson plans, daily schedules, working with parents, and inclusionary practices. This course requires a minimum of four field experience contact hours within early childhood education settings.

ECED 2061 - Child Guidance Techniques
4.5 - 0.0 - 4.5

Prerequisite: (1) ECED 1060 — must be completed prior to taking this course.

This course focuses on the techniques teachers can use to help children between birth and eight years of age develop pro-social behaviors. Emphasis is placed on the foundation of guidance coming through the understanding of child development and observational skills. Indirect and direct guidance techniques are examined. The indoor and outdoor environments along with developmentally appropriate curriculum are emphasized. Focus is placed on prevention rather than discipline within the family and cultural context. Finally, students also explore techniques for dealing with challenging behaviors that can be exhibited in the classroom. Outcomes for this course emphasize application of the techniques studied. This course requires a minimum of four field experience contact hours within early childhood education settings.

ECED 2070 - Family and Community Relationships 
4.5 - 0.0 - 4.5

Prerequisite: (1) Completion of all first-year courses as stated in the College catalog — must be completed prior to taking this course.

This course focuses on the development of skills, techniques, and attitudes needed to form successful collaborations with diverse families and communities. This course requires a minimum of four field experience contact hours within early childhood education settings.

ECED 2090 - Early Childhood Student Teaching Practicum
0.0 - 18.0 - 6.0


Prerequisite: (1) ECED Practicum Coordinator approval — must be completed prior to taking this course.

Students work closely with a supervising teacher to develop skills in management, environmental planning, and curriculum development. Students may select the age group with whom to specialize. Students are expected to select and develop materials for interest centers and develop and implement daily lesson plans. Students are required to attend bi-monthly one-hour seminar sessions with the assigned instructor. Students enrolling in the ECED practica should register through the Early Childhood Practicum website at mccneb.edu/ecp.

ECED 2091 - Early Childhood Administrative Practicum
0.0 - 18.0 - 6.0


Prerequisite: (1) ECED Practicum Coordinator approval — must be completed prior to taking this course.

Students work closely with a director/administrator of an early childhood education program. Students gain experiences in policy review, record keeping, staff management and training, staff supervision, budgeting, and hiring. Other experiences can include program management of spatial resources, health and safety programs, foodservice operations, parent relations, and utilization of technology in the operation of an early childhood program.

ECED 2095 - Current Topics in Early Childhood Education 
4.5 - 0.0 - 4.5

Prerequisite: (1) Completion of 15.0 ECED credit hours as stated in the College catalog — must be completed prior to taking this course.

Students investigate current topics of interest to early childhood professionals. They select articles and provide written and oral critiques. Students also develop a professional portfolio that demonstrates their competencies. This course requires a minimum of four field experience contact hours within early childhood education settings.

ECED 2450 - Administration of Early Childhood Education Programs 
4.5 - 0.0 - 4.5

Prerequisite: (1) Completion of 9.0 ECED credit hours — must be completed prior to taking this course.

Students gain knowledge and planning skills in all of the procedures needed to operate early childhood education programs. They analyze policy-making, record keeping, staff management and training, supervision, budgeting, hiring, and dismissal of staff procedures. In addition, the course explores program management of spatial resources, health and safety programs, foodservice operations, parent relations, and future trends in the operation of early childhood settings. This course requires a minimum of four field experience contact hours within early childhood education settings.

ECED 2900 - Special Topics in Child Care
Variable

This course allows the Early Childhood Education program to design courses to meet the specific needs of an agency, organization, education program, or group.

ECON - Economics

ECON 1000 - Macroeconomics 
4.5 - 0.0 - 4.5

Recommended: BSAD 1000 and math requirements — recommended prior to taking this course, but not required.

This course explores theories of employment, national income, inflation, and economic growth. Topics include income theories, savings and investment, business fluctuations, inflation, growth theories, and monetary and fiscal policies.

ECON 1100 - Microeconomics 
4.5 - 0.0 - 4.5

Recommended: BSAD 1000 and math requirements — recommended prior to taking this course, but not required.

Microeconomics presents the theory and application of the four market structures: pure competition, monopolistic competition, oligopoly, and monopoly. Students determine the revenue, costs, output, and prices for each market structure along with the social implications of each market form. In addition, the course analyzes various social issues such as consumer choice, pollution, healthcare, public works projects, and poverty transfer programs using the microeconomic principles of elasticity, benefit and cost, and diminishing returns analysis.

ECON 2720 - International Economics
4.5 - 0.0 - 4.5

Prerequisite: (2) ECON 1000 and ECON 1100 — must be completed prior to taking this course.

Recommended: Math requirements — recommended prior to taking this course, but not required.


This course presents a broad overview of the fundamentals of international business and trade and familiarizes students with the basic terminology, key concepts, and issues unique to the subject. Students study the global economy, including international trade, investments, and the business environment. They study the management of multi-national firms in the context of the international financial system.

ECON 2900 - Special Topics in Economics
Variable

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This course permits instruction in special content areas not included in other economics courses.

EDUC - Education

EDUC 0090 - Math Praxis CORE Academic Skills for Educators Test 
1.0 - 0.0 - 1.0

This course prepares students for the Praxis CORE Academic Skills for Educators Test for students entering a teacher education program. Students conduct self-paced practice tests and learning activities in the area of math.

EDUC 0091 - Reading Praxis CORE Academic Skills for Educators Test 
1.0 - 0.0 - 1.0

This course prepares students for the Praxis CORE Academic Skills for Educators Test for students entering a teacher education program. Students conduct self-paced practice tests and learning activities in the area of reading.

EDUC 0092 - Writing Praxis CORE Academic Skills for Educators Test 
1.0 - 0.0 - 1.0

This course prepares students for the Praxis CORE Academic Skills for Educators Test for students entering a teacher education program. Students conduct self-paced practice tests and learning activities in the area of writing.

EDUC 1110 - Introduction to Professional Education
4.5 - 0.0 - 4.5

An overview of education in the United States viewed in terms of history, philosophy, finance and governance, this course encourages critical thought regarding the role of education in our multicultural society, the role of the teacher, and educational practices in schools. The course is designed to help students explore education as a prospective career.

EDUC 1700 - Professional Practicum
0.0 - 4.5 - 1.5

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This course is designed to acquaint students with the classroom situation and atmosphere by participation in the teaching-learning process. It includes observation and assistance in classroom-related activities under supervision of an experienced teacher.

EDUC 2000 - Educational Psychology
4.5 - 0.0 - 4.5

This course is a study of the three focal areas in education: the learner, the learning process, and the learning environment. It is a survey of the principles of psychology as applied to classroom teaching with emphasis on development, learning, motivation, evaluation, adjustment, and educational techniques and innovations.

EDUC 2010 - Human Growth and Learning 
4.5 - 0.0 - 4.5

Prerequisite: (3) Successfully complete the PPST; EDUC 2020; and EDUC 2030 — must be completed prior to taking this course.

This course focuses on the growth, development, and learning processes of the individual from conception through adolescence. The class emphasizes how current educational practices and theories of development and learning impact and influence each other. Students investigate how physical and emotional development of children and teens impact their cognitive growth. Students apply their knowledge to field observations and laboratory experiences in order to adequately internalize and transfer the course content to the teaching environment.

EDUC 2020 - Educational Foundations 
4.5 - 0.0 - 4.5

This course provides the philosophical, historical, and social foundations background that enables teacher candidates to understand their roles as teachers and as orchestrators of the learning environment. The content is based on a study of the driving social forces as they relate to different time periods and philosophic positions and the impact these forces have in shaping the role of education. Teacher candidates study and understand the national and state standards relevant to K-12 education and teacher preparation in the United States. They acquire competency in using education technologies such as Internet-based course delivery systems, database software, and digital portfolios. Teacher candidates develop dispositions for ethics in teaching and a high-level commitment for the teaching profession.

EDUC 2030 - Human Relations in Education 
4.5 - 0.0 - 4.5

This course is designed to increase multicultural knowledge and positively impact the diversity disposition of pre-service teachers. It is designed to help pre-service teachers become more aware of ways to motivate and positively impact the youth they encounter in their future classrooms. High value is placed on the discussion of human understanding, tolerance, and the acceptance of multiple worldviews. Teacher candidates examine existing attitudes toward various minority groups, such as race, ethnicity, age, sex, and mental and physical disabilities, and explore the ways in which these attitudes influence the assessment of learner needs and prescribed learning activities. Teacher candidates also examine the role of attitudes in implementing and assessing learning experiences. The course places special emphasis on skill development and the training of pre-service teachers to be effective orchestrators of the learning environment, which helps to ensure the performance assessment of teacher candidates.

EDUC 2590 - Instructional Technology
4.5 - 0.0 - 4.5

Recommended: EDUC 1110 — recommended prior to taking this course, but not required.

This course is an introduction to a variety of technologies and strategies for use in the instructional process to accommodate all learners. The focus is also on the social, ethical, legal, and human issues surrounding the use of technology.

ELAP - Electrical Apprenticeship

ELAP 1110 - Electrical IA
7.0 - 0.0 - 7.0

This course is the introduction to the electrical trade. It covers the math used in electrical calculations, Ohm's Law, and electrical fundamentals.

ELAP 1120 - Electrical IB
7.0 - 0.0 - 7.0

Prerequisite: (1) ELAP 1110 — must be completed prior to taking this course.

This course continues with the electrical fundamentals from Electrical IA and introduces apprentices to the National Electrical Code (NEC). This course also includes wiring basic electrical circuits and bending conduit.

ELAP 1210 - Electrical IIA
7.0 - 0.0 - 7.0

Prerequisite: (1) ELAP 1120 — must be completed prior to taking this course.

Apprentices learn how to layout and install branch circuits in all areas of residential construction with emphasis on the National Electrical Code.

ELAP 1220 - Electrical IIB
7.0 - 0.0 - 7.0

Prerequisite: (1) ELAP 1210 — must be completed prior to taking this course.

This course is an introduction to the layout and construction of residential electrical systems. It emphasizes the National Electrical Code as it relates to residential wiring. Apprentices calculate electrical service requirements, size over-current devices, and different conductors.

ELAP 2310 - Electrical IIIA
7.0 - 0.0 - 7.0

Prerequisite: (1) ELAP 1220 — must be completed prior to taking this course.

This course is an introduction to the design and construction of commercial electrical systems. It emphasizes the National Electrical Code as it relates to commercial electrical systems.

ELAP 2320 - Electrical IIIB
7.0 - 0.0 - 7.0

Prerequisite: (1) ELAP 2310 — must be completed prior to taking this course.

This course is a continuation of Electrical IIIA. Apprentices learn to calculate electrical service and branch circuits requirements for commercial electrical systems.

ELAP 2410 - Electrical IVA
7.0 - 0.0 - 7.0

Prerequisite: (1) ELAP 2320 — must be completed prior to taking this course.

This course deals with motor control circuits and electrical devices used in commercial electrical systems. Apprentices use the National Electrical Code to properly size branch circuit and feeder conductors and over-current protection for motors.

ELAP 2420 - Electrical IVB
7.0 - 0.0 - 7.0

Prerequisite: (1) ELAP 2410 — must be completed prior to taking this course.

This course is a continuation of Electrical IVA. Apprentices use the National Electrical Code to calculate feeder loads, size panel boards, and parallel conductors. This course also covers transformer theory and low-voltage systems.

ELAP 2550 - Journeyman Test Prep Course
3.0 - 0.0 - 3.0

This course covers relevant parts of the National Electric Code, emphasizing the calculations used in the code so that students are prepared to successfully complete the journeyman electrician or electrical contractor's exams.

ELTR - Electrical Technology

ELTR 1200 - Basic Electricity
8.0 - 0.0 - 8.0

This course is an introduction to the electrical field. Students are exposed to electrical fundamentals of safety, theory, calculations and the National Electrical Code. The course includes hands-on training of basic circuit wiring, troubleshooting and meter usage. NOTE: Completion of ELTR 1200 with a grade of C or better is required to advance to the next level class.

ELTR 1210 - Residential Wiring
9.0 - 0.0 - 9.0

Prerequisite: (1) ELTR 1200 with a grade of C or better — must be completed prior to taking this course.

This course is designed to give students a basic knowledge of the electrical circuitry found in residential wiring. Students learn to apply the National Electrical Code standards.

ELTR 1220 - Commercial Wiring I
9.0 - 0.0 - 9.0

Prerequisite: (1) ELTR 1210 with grade of C or better — must be completed prior to taking this course.

This course is designed to give students a basic knowledge of circuits used in commercial wiring applications. Fundamentals of pipe bending, complete raceway installations, and calculations are introduced. As a team, students build a small office setting following National Electrical Code guidelines.

ELTR 1250 - Electric Equipment Controls
6.0 - 0.0 - 6.0

Prerequisite: (1) ELTR 1200 with a grade of C or better — must be completed prior to taking this course.

This course explains the electric controls for general motor controllers, time clock lighting controls, photo electric controls, AC and DC controls, equipment grounding, heat pump concepts and controls, and furnace and AC concepts and controls. Troubleshooting basic motor and control concepts are covered.

ELTR 2100 - Project Leadership
4.5 - 0.0 - 4.5

This course is designed to emphasize teamwork and leadership skills on construction projects. Using the SkillsUSA Professional Development Program, students work through a variety of leadership theories and practical applications.

ELTR 2240 - National Electrical Code
4.5 - 0.0 - 4.5

Prerequisite: (2) ELTR 1220 and ELTR 2331 with grades of C or better — must be completed prior to taking this course.

This course trains students to effectively use the National Electrical Code.

ELTR 2250 - Commercial Wiring II
6.0 - 0.0 - 6.0

Prerequisite: (1) ELTR 1220 with a grade of C or better — must be completed prior to taking this course.

This course is a continuation of Commercial Wiring I. Students focus on advanced devices, equipment installations, troubleshooting, and repairs. Further study of calculations for equipment and National Electrical Code are included.

ELTR 2331 - Electric Services and Transformers
6.0 - 0.0 - 6.0

Prerequisite: (1) ELTR 1220 with a grade of C or better — must be completed prior to taking this course.

This course explains electric service, system transformers, and the principles of grounding and bonding electrical systems.

ELTR 2900 - Special Topics in Electrical Technology
Variable

This course permits instruction in special content areas not included in other courses in the Electrical Technology program.

ELTR 2981 - Internship
0.0 - 40.0 - 4.0

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

The internship provides students with the opportunity to apply their knowledge, learn new techniques, and get on-the-job training at an approved work site. To develop an internship to meet their academic and career goals, interested students must contact their program faculty. Based on Nebraska State Electrical Board guidelines, students must complete 400 hours of work related to the electrical trade. NOTE: Completion of ELTR 2981 with a grade of C or better is required to complete program.

EMSP- Emergency Medical Services Program

EMSP 1000 - Cardiopulmonary Resuscitation for Healthcare Providers
1.0 - 0.0 - 1.0

This course will teach the participant how to recognize and respond to life-threatening emergencies such as cardiac arrest, respiratory arrest, and foreign-body airway obstruction (choking). The student will learn to recognize heart attack and stroke symptoms in adults and breathing difficulty in children. This course teaches the skills needed to respond to emergencies identified. The participant will learn the skills of CPR for victims of all ages (including ventilation with barrier devices and bag-mask devices), use of an automated external defibrillator (AED), and relief of foreign-body airway obstruction (FBAO).

EMSP 1005 - CPR Refresher
0.5 - 0.0 - 0.5

Prerequisite: (1) Current Healthcare Provider card — must be completed prior to taking this course.

This course will review with the participant how to recognize and respond to life-threatening emergencies such as cardiac arrest, respiratory arrest, and foreign-body airway obstruction (choking). The student will review when to recognize heart attack and stroke symptoms in adults and breathing difficulty in children. This course teaches the skills needed to respond to the emergencies identified. The participant will review the skills of CPR for victims of all ages (including ventilation with barrier devices and bag-mask devices), use of an automated external defibrillator (AED), and relief of foreign-body airway obstruction (FBAO).

EMSP 1010 - Heartsaver First Aid with CPR and AED
1.0 - 0.0 - 1.0

This course teaches rescuers to effectively identify and treat adult emergencies in the critical first minutes of injury or illness until emergency medical service personnel arrive. The course provides basic training solutions for first aid, adult CPR, and use of an automated external defibrillator.

EMSP 1020 - Emergency Medical Responder
4.0 - 4.0 - 5.5

Prerequisite: (1) EMSP 1000 — must be completed prior to taking this course.

This course is designed to instruct a student to the level of Emergency Medical Responder, who serves as a vital link in the chain of the health care team. This curriculum includes skills necessary for the individual to provide emergency medical care with a limited amount of equipment. Successful completion of the program will allow the student to sit for the certifying exam.

EMSP 1100 - Emergency Medical Technician
10.0 - 6.0 - 12.0

This Emergency Medical Technician course provides an introduction to Emergency Medical Care. Modules of training will include medical-legal, roles and responsibilities of the EMT, documentation and communication, human body anatomy and physiology of the major human systems, medical terminology, lifting and moving, airway management basic and advanced, patient assessment, medical and trauma, medical emergencies, treatment, and use of assisted medications and IV maintenance, bleeding control and shock, trauma emergencies, use of immobilization devices, obstetrical emergencies, childbirth, pediatrics and children emergencies, ambulance operations, hazardous materials, mass casualty, and triage. This course consists of 110 didactic hours, 55 hours of lab, and 15 hours of patient contact.

EMSP 1105 - EMT Refresher
3.0 - 0.0 - 3.0

This course reviews material previously learned by the participant. The intent of this course is to maintain a provider's competence in knowledge and skill performance. EMSP 1105 is designed to meet the hours to renew certification as well as for those who may need remediation to gain initial certification.

EMSP 1110 - Advanced EMT
10.0 - 6.0 - 12.0

Prerequisite: (1) Must be an EMT — must be completed prior to taking this course.

This course is part 1 of a sequence of 2 courses in the Advanced EMT (AEMT) program that must be completed consecutively.

This course provides the AEMT's role and the unique aspects of the profession, such as an overview of EMS systems, the importance of personal well-being, and introduction to ethics and medical/legal issues. The module also provides the understanding of general principles of anatomy and physiology, pharmacology, medication administration, intravenous access, airway management basic and advanced, patient assessment, and introduction to respiratory emergencies and management.

EMSP 1112 - Advanced EMT Part 2 of 2

10.0 - 6.0 - 12.0

Prerequisite: (1) EMSP 1110 — must be completed prior to taking this course.

Corequisite: (1) EMSP 1113 — must be taken at the same time as this course.

This course is part 2 of a sequence of 2 in the Advanced EMT program that must be completed consecutively. This course provides an introduction to cardiac, neurological, endocrine, urological, and lymphatic emergencies. This course will provide the understanding of anatomy and physiology, signs and symptoms, and medical care of the above-mentioned medical emergencies. In conjunction with this course, the students will also be required to successfully complete (C or above) EMSP 1113.

EMSP 1113 - Advanced EMT Clinical/Field Component

0.0 - 10.5 - 3.5

Prerequisite: (1) EMSP 1110 — must be completed prior to taking this course.

Corequisite: (1) EMSP 1112 — must be taken at the same time as this course.

The clinical/field component of the Advanced EMT (AEMT) program allows the student to synthesize cognitive psychomotor skills. The clinical/field corequisite integrates and reinforces the didactic and skills laboratory component of the AEMT curriculum. The student will follow sound educational principles that will be logically sequenced to proceed from simple to complex tasks, being closely supervised and evaluated by experienced preceptors. This course must be taken concurrently with EMSP 1112.

EMSP 1120 - Paramedic Part 1 of 4

10.0 - 6.0 - 12.0

Prerequisite: (1) Acceptance into the Paramedic program — must be completed prior to taking this course.

The Paramedic Part 1 of 4 course is the first in a sequence of four courses that provides an introduction to emergency medical care. The modules in the first session provide knowledge of EMS systems, roles, responsibility and well-being of paramedic, medical, legal and ethical issues, anatomy and physiology, pathophysiology of the normal cell, respiratory system and acid base balance, general principles of pharmacology, IV access and medication administration, airway management and ventilation, therapeutic communication, patient assessment, communication and documentation, and understanding of respiratory emergencies. NOTE: All paramedic courses must be taken consecutively, completed with a C or above, and taken

concurrently with their respective corequisite clinical/field component in order to sit for the Paramedic certification exam.

EMSP 1122 - Paramedic Part 2 of 4

10.0 - 6.0 - 12.0

Prerequisite: (1) EMSP 1120 — must be completed prior to taking this course.

Pre/Co Requisite: (1) EMSP 1123 — must be taken either prior to or at the same time as this course.

This course provides an introduction to medical emergencies. Modules provide the understanding of anatomy and physiology, signs and symptoms and medical care of the cardiac, neurological, endocrine, gastrointestinal, allergies and anaphylaxis, and urological systems. NOTE: All paramedic courses must be taken consecutively, completed with a C or above, and taken concurrently with their respective corequisite clinical/field component in order to sit for the Paramedic certification exam.

EMSP 1123 - Paramedic Clinical/Field Component Part 1 of 3

0.0 - 11.0 - 3.5

Prerequisite: (1) EMSP 1120 — must be completed prior to taking this course.

Corequisite: (1) EMSP 1122 — must be taken at the same time as this course.

The clinical/field component of the paramedic program allows the student to synthesize cognitive and psychomotor skills. As the clinical/field corequisite of EMSP 1122 Paramedic Part 2 of 4, this course integrates and reinforces the didactic and skills laboratory component of the paramedic curriculum. The student will follow sound educational principles that will be logically sequenced to proceed from simple to complex tasks, being closely supervised and evaluated by experienced preceptors. This course must be taken concurrently with EMSP 1122.

EMSP 1124 - Paramedic Part 3 of 4

10.0 - 6.0 - 12.0

Prerequisite: (1) EMSP 1125 — must be completed prior to taking this course.

This course provides an introduction to hematological, environmental, toxicological, behavioral, trauma, obstetrical, pediatrics, geriatric emergencies, hazardous materials, and weapons of mass destruction. Modules provide the understanding of anatomy and physiology, signs and symptoms, and medical care of the above-mentioned emergencies. NOTE: All paramedic courses must be taken consecutively, completed with a C or above, and taken concurrently with their respective co-requisite clinical/field component in order to sit for the Paramedic certification exam.

EMSP 1125 - Paramedic Clinical/Field Part 2 of 3

0.0 - 11.0 - 3.5

Prerequisite: (2) EMSP 1122 and EMSP 1123 — must be completed prior to taking this course.

Corequisite: (1) EMSP 1124 — must be taken at the same time as this course.

The clinical/field component of the paramedic program allows the student to synthesize cognitive and psychomotor skills. This

course EMSP 1125 is the clinical/field corequisite of EMSP 1124 that integrates and reinforces the didactic and skills laboratory component of the paramedic curriculum. The student will follow sound educational principles that are logically sequenced to proceed from simple to complex tasks, being closely supervised and evaluated by experienced preceptors.

EMSP 1126 - Paramedic Part 4 of 4
10.0 - 6.1 - 12.0

Prerequisite: (2) EMSP 1124 and EMSP 1125 — must be completed prior to taking this course.

Corequisite: (1) EMSP 1127 — must be taken at the same time as this course.

This course provides an introduction to ambulance operations, rescue operations, and extrication, mass casualty incidences, and crime scene awareness. NOTE: All paramedic courses must be taken consecutively, completed with a C or above, and taken concurrently with their respective co-requisite clinical/field component in order to sit for the Paramedic certification exam.

EMSP 1127 - Paramedic Clinical/Field Part 3 of 3
0.0 - 11.0 - 3.5

Prerequisite: (2) EMSP 1124 and EMSP 1125 — must be completed prior to taking this course.

Corequisite: (1) EMSP 1126 — must be taken at the same time as this course.

The clinical/field component of the paramedic program allows the student to synthesize cognitive and psychomotor skills. This course EMSP 1127 is the clinical/field corequisite of EMSP 1126 that integrates and reinforces the didactic and skills laboratory component of the paramedic curriculum. The student will follow sound educational principles that will be logically sequenced to proceed from simple to complex tasks, being closely supervised and evaluated by experienced preceptors.

EMSP 1128 - Extended Paramedic Clinical/Field Rotation
0.0 - 6.0 - 2.0

Prerequisite: (1) EMSP 1127 — must be completed prior to taking this course.

This additional clinical/field component of the paramedic program allows the student to develop a level of mastery in cognitive and psychomotor skills. This course EMSP 1128 is the elective clinical/field course that integrates and reinforces the didactic and skills laboratory component of the paramedic curriculum with an emphasis on critical thinking and team leadership. The student will follow sound educational principles that will be logically sequenced to proceed from simple to complex tasks, being closely supervised and evaluated by experienced preceptors. This course may be taken upon successful completion of EMSP 1127 as an additional elective for the student who has otherwise not been able to complete the Department of Transportation clinical/field requirements in EMSP 1127. EMSP 1128 is not necessary for degree completion.

EMSP 1129 - Advanced Provider Refresher
4.5 - 0.0 - 4.5

Prerequisite: (1) Completion of an Emergency Medical Technician, Advanced EMT or Paramedic course or certification

at state or national registry level — must be completed prior to taking this course.

This course reviews material previously learned by the participant. The intent of this course is to maintain a provider's competence in knowledge and skill performance. EMSP 1129 is designed to meet the hours to renew certification as well as for those who may need remediation to gain certification. The EMT may attend EMSP 1120 to fulfill the EMT renewal requirements and receive 24 additional hours of continuing education. EMSP 1129 meets the standards of the National Registry of Emergency Medical Technician Refresher requirements.

EMSP 1130 - Emergency Medical Services Instructor
6.0 - 0.0 - 6.0

Prerequisite: (2) National Registered EMS Provider and Healthcare Provider Instructor — must be completed prior to taking this course.

This course is designed for the EMS Provider to become an educator who understands how the adult student learns, and to provide learning opportunities that support their intellectual, professional, and personal development.

EMSP 1131 - Critical Care Paramedic
6.5 - 0.0 - 6.5

Prerequisite: (1) Current certification as a paramedic — must be completed prior to taking this course.

This course is designed to give the paramedic the increased knowledge and skills to manage the critically injured/ill patient while being transported from one healthcare facility to another by critical care transport services.

EMSP 1400 - Advanced Medical Life Support
2.0 - 0.0 - 2.0

Prerequisite: (1) Emergency field-experienced EMT; or paramedic or RN; or RN student or paramedic student with emergency care experience — must be completed prior to taking this course.

Advanced Medical Life Support is an in-depth study of medical emergencies for the adult patient. The provider course emphasizes a pragmatic approach and systematic format to patient care. This course is designed to combine interactive case study-based lectures with hands-on physical assessment of patients.

EMSP 1410 - Pre-Hospital Trauma Life Support
2.0 - 0.0 - 2.0

The Pre-Hospital Trauma Life Support course is designed to provide the practicing pre-hospital care provider with a specific body of knowledge related to the pre-hospital assessment and care of the trauma patient. It is stressed that this is a continuing education program and contains information that may be a review for some or all participants. The uniqueness of this program rests not with an entirely new body of knowledge but instead with advances in pre-hospital trauma intervention techniques. New combinations and applications of existing skills and knowledge are being used to better the patient's chances at surviving traumatic events.

EMSP 1420 - Advanced Cardiac Life Support**2.0 - 0.0 - 2.0**

Prerequisite: (3) EMSP 1000; advanced healthcare provider; and instructor approval — must be completed prior to taking this course.

This course will teach the participant how to recognize and respond to life-threatening emergencies such as cardiac arrest, respiratory arrest, stroke, and hypothermic adult patient. The student will review rhythm recognition and how to use the heart monitor in the various modes of electrical therapy. The student will learn to recognize the signs and symptoms along with the management algorithm associated with the individual life threatening rhythm. The Advanced provider will learn and practice the various forms of advanced airway management along with a review of CPR for victims of all ages (including ventilation with barrier devices and bag-mask devices), use of an automated external defibrillator (AED), and relief of foreign-body airway obstruction (FBAO).

EMSP 1421 - Advanced Cardiac Life Support (ACLS) Renewal**1.0 - 0.0 - 1.0**

Prerequisite: (4) EMSP 1000; must be advanced healthcare provider; instructor approval; and current ACLS provider card — must be completed prior to taking this course.

This course will review with the participant how to recognize and respond to life-threatening emergencies, such as cardiac arrest, respiratory arrest, stroke, and the hypothermic adult patient. The student will review rhythm recognition and how to use the heart monitor. The participant will review the signs and symptoms along with the management algorithm associated with the individual life threatening rhythm. The advanced provider will review and practice the various forms of advanced airway management along with a review of CPR for victims of all ages (including ventilation with barrier devices and bag-mask devices), use of an automated external defibrillator (AED), and relief of foreign-body airway obstruction (FBAO).

EMSP 1430 - Pediatric Advanced Life Support (PALS)**2.0 - 0.0 - 2.0**

Prerequisite: (3) EMSP 1000; must be an advanced healthcare provider; and instructor approval — must be completed prior to taking this course.

This course will review with the participant how to recognize and respond to life-threatening emergencies such as cardiac arrest and respiratory arrest in the pediatric patient. The student will review rhythm recognition and how to use the heart monitor in the various modes of electrical therapy in the pediatric mode. The student will review the signs and symptoms along with the management algorithm associated with pediatric life threatening rhythms. The advanced provider will review and practice the various forms of advanced airway management along with a review of CPR for victims of all pediatric patients (including ventilation with barrier devices and bag-mask devices), use of an automated external defibrillator (AED), and relief of foreign-body airway obstruction (FBAO).

EMSP 1431 - PALS Renewal**1.0 - 0.0 - 1.0**

Prerequisite: (4) EMSP 1000; must be an advanced healthcare provider; instructor approval; current PALS provider card — must be completed prior to taking this course.

This course will review with the participant how to recognize and respond to life-threatening emergencies such as cardiac arrest and respiratory arrest in the pediatric patient. The student will review rhythm recognition and how to use the heart monitor in the various modes of electrical therapy in the pediatric mode. The student will review the signs and symptoms along with the management algorithm associated with pediatric life threatening rhythms. The advanced provider will review and practice the various forms of advanced airway management along with a review of CPR for victims of all pediatric patients (including ventilation with barrier devices and bag-mask devices), use of an automated external defibrillator (ED), and relief of foreign-body airway obstruction (FBAO).

EMSP 1440 - Anatomy and Physiology for EMS**5.0 - 0.0 - 5.0**

This course is designed to give the EMS provider an understanding of AP and its correlation with pre-hospital emergency medicine.

EMSP 1450 - Trauma First Response**1.0 - 0.0 - 1.0**

This course prepares the student for the role of the first responder: to care for the trauma patient prior to the arrival of the EMS personnel. The curriculum includes airway control, breathing assistance, control of bleeding and shock, understanding closed and open head and spine injury, as well as a variety of other skills. Previous EMS training not required.

EMSP 1460 - Tactical Combat Casualty Care TECC/TCCC**2.0 - 0.0 - 2.0**

Prerequisite: (1) EMSP 1410 — must be completed prior to taking this course.

This is the Department of Defense Tactical Combat Casualty Care (TCCC/TC/3) course as taught to Combat Medics/Corpsmen. This course takes the materials to the civilian setting for those SWAT team members, hostage rescue teams, emergency services units, and special operations units who find themselves caring for casualties in any number of combat situations. The class consists of Introduction to TCCC, Pretest, Care Under Fire, Tactical Field Care, Tactical Evacuation Care, Lessons Learned and Updates.

EMSP 1470 - EMS Safety Course**1.0 - 0.0 - 1.0**

This course will identify and address the safety issues facing today's EMS providers and create a culture of safety within the EMS profession and the agencies that provide emergency medical care.

EMSP 1471 - Candidate Physical Ability Test**2.0 - 4.5 - 3.5**

Prerequisite: (3) Proof of 18 years of age; high school diploma or GED; and signed waivers for participation in CPAT — must be completed prior to taking this course.

The job of a firefighter is a physically demanding job. It requires high levels of cardiopulmonary endurance, muscular strength, and muscular endurance. This test is designed to allow the candidate to prove the physical ability required to perform the duties of a firefighter. Upon completion of a successful test, the candidate has the certification that fire departments require to hire and train the candidate.

EMSP 1480 - Open Water Scuba Diver**3.0 - 7.5 - 5.5**

Prerequisite: (1) The student must have mastered the ability to swim. — must be completed prior to taking this course.

This course is designed to develop safe and confident open water scuba divers. It provides the student with an intellectual challenge in the areas of physics, biology, and environmental awareness as related to scuba diving. It instills a principle of discipline while achieving the goal of becoming a certified open water scuba diver. The lifestyle aspects of scuba diving, to include exercise and mental activity, provide lifetime benefits of stress management and physical activity. The course introduces and instills an interest in upper-level educational programs in several disciplines. It provides a lifetime certification from an internationally recognized certifying agency, Scuba Schools International (SSI).

EMSP 2900 - Selected Topics in Emergency Medical Services Variable

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This course permits instruction in special content areas not included in other courses in the EMSP program.

ENGL - English**ENGL 0950 - Reading and Responding****4.5 - 0.0 - 4.5**

Prerequisite: (1) Assessment testing — must be completed prior to taking this course.

Students explore strategies for reading, writing, and discussion including analyzing, questioning, summarizing, and responding to various texts. Students use the writing process to compose logical, complete summaries and responses.

ENGL 0960 - Fundamentals of College Writing**6.0 - 0.0 - 6.0**

Prerequisite: (1) Assessment testing or ENGL 0950 — must be completed prior to taking this course.

Students practice writing clearly and effectively for different audiences and purposes, exploring the fundamentals of effective essay-writing processes including invention, organization, revision, and editing.

ENGL 0990 - Composition Studio**1.5 - 0.0 - 1.5**

Prerequisite: (1) Placement testing — must be completed prior to taking this course.

Students receive supplemental instruction that aligns with their paired section of ENGL 1010. The course focuses on rhetorical awareness, critical reading, writing, and thinking; the writing process; and conventions through workshops, conferences, discussions, and individualized instruction.

ENGL 0995 - Applied Communications Studio**1.5 - 0.0 - 1.5**

Prerequisite: (1) Placement testing — must be completed prior to taking this course.

Students receive supplemental instruction that aligns with their paired section of ENGL 1225. Skills learned include writing clearly and concisely; collecting and organizing information and graphics; applying the writing process to a variety of workplace documents; and communicating effectively, verbally and nonverbally.

ENGL 1010 - English Composition I  **4.5 - 0.0 - 4.5**

Prerequisite: (2) Assessment testing or ENGL 0960; and RDLS 0100 or college-level reading assessment test score — must be completed prior to taking this course.

Students develop rhetorical knowledge; practice critical reading, thinking, and writing; and use a writing process to draft, revise, and edit texts in a variety of genres with an emphasis on thesis-driven essays. This is a Level-I English class.

ENGL 1020 - English Composition II  **4.5 - 0.0 - 4.5**

Prerequisite: (1) English Level 1 course — must be completed prior to taking this course.

Students continue to develop writing and critical thinking skills learned in Level-I English course by integrating outside research into their own writing. Students research, analyze, and organize primary and secondary sources of information and demonstrate their critical thinking through different types of thesis-driven writing assignments, including persuasive/argumentative.

ENGL 1210 - Applied Communications**4.5 - 0.0 - 4.5**

Prerequisite: (2) Assessment testing or ENGL 0960; and RDLS 0100 or college-level reading assessment test score — must be completed prior to taking this course.

This course prepares students for the communication challenges of today's workplace by surveying business and technical communication principles. Skills learned include writing clearly and concisely, collecting and organizing information and graphics, applying the writing process to a variety of workplace documents, and communicating effectively, both verbally and nonverbally. This is a Level-I English class.

ENGL 1220 - Technical Writing **4.5 - 0.0 - 4.5**

Prerequisite: (2) 1000-level writing assessment test score or ENGL 0960; and 1000-level reading assessment test score or RDLS 0100 — must be completed prior to taking this course.

Students develop rhetorical knowledge; practice critical reading, thinking, and writing; and use a writing process to draft, revise, and edit technical documents.

ENGL 1225 - Applied Communications I**4.5 - 0.0 - 4.5**

Prerequisite: (2) RDLS 0100 or college-level reading assessment test score; and ENGL 0960 or assessment testing — must be completed prior to taking this course.

This innovative course prepares students for the communication challenges of today's often technology-based workplace by surveying business and technical communication principles in a field-specific environment. Skills learned include writing clearly and concisely; reading and analyzing contextualized workplace documents; applying the writing process to a variety of contextualized workplace documents; and communicating effectively, verbally and nonverbally, in typical workplace situations.

ENGL 1230 - Business Writing **4.5 - 0.0 - 4.5**

Prerequisite: (2) 1000-level writing assessment test score or ENGL 0960; and 1000-level reading assessment test score or RDLS 0100 — must be completed prior to taking this course.

Students develop rhetorical knowledge; practice critical reading, thinking, and writing; and use a writing process to draft, revise, and edit workplace documents.

ENGL 1240 - Oral and Written Reports **4.5 - 0.0 - 4.5**

Prerequisite: (1) English Level 1 course — must be completed prior to taking this course.

Students continue to develop writing and critical thinking skills learned in their Level-1 English course by integrating outside research into their own writing. Students research, analyze, and organize primary and secondary sources of information and demonstrate their critical thinking through oral and written technical and workplace reports.

ENGL 1245 - Applied Communications II**4.5 - 0.0 - 4.5**

Prerequisite: (1) Level I English — must be completed prior to taking this course.

Students build on the skills learned in their Level I English course and further develop industry-specific rhetorical knowledge through contextualized writing and presentation assignments. Students practice critical reading strategies using field-specific texts (work orders, requests for proposals, etc.). Students learn field-specific research strategies and resources. Students practice various forms of workplace writing and oral presentation including action plans and project proposals; and use a writing process to draft, revise and edit documents. This is a Level II class.

ENGL 1310 - Creative Writing**4.5 - 0.0 - 4.5**

Prerequisite: (1) Level I English — must be completed prior to taking this course.

Students explore the genres, elements, and themes of creative writing by writing fiction, poetry, drama, and/or creative non-fiction and by critically reading, discussing, and responding to published creative writing and the work of other students.

ENGL 1311 - Poetry Writing Studio**4.5 - 0.0 - 4.5**

Prerequisite: (1) ENGL 1310 — must be completed prior to taking this course.

Students explore the elements and styles of poetry, practicing form, musicality, imagery, and metaphor. Students read and write lyric and narrative poems in both traditional forms and free verse. In addition to writing their own poems, students critically read, discuss, and respond to published poetry and the poems of other students.

ENGL 1312 - Fiction Writing Studio**4.5 - 0.0 - 4.5**

Prerequisite: (1) ENGL 1310 — must be completed prior to taking this course.

Students explore the elements of fiction, learning to develop voice, character, narrative tension, and dialogue, and continuing to explore such elements of POV and imagery. Students read and work in multiple genres, such as speculative fiction, contemporary realism, mystery, and romance. In addition to writing their own fiction, students critically read, discuss, and respond to published fiction and the fiction of other students.

ENGL 1313 - Creative Nonfiction Writing Studio**4.5 - 0.0 - 4.5**

Prerequisite: (1) ENGL 1310 — must be completed prior to taking this course.

Students explore the elements of creative nonfiction, such as narrative, lyricism, imagery, symbolism, and theme. Students read and work in a range of creative nonfiction styles, such as memoir, narrative journalism, travel writing, nature writing, and cultural criticism. In addition to writing their own creative nonfiction, the students critically read, discuss, and respond to published creative nonfiction and the nonfiction of other students.

ENGL 1320 - Introduction to Publication**4.5 - 0.0 - 4.5**

Prerequisite: (1) Level I English — must be completed prior to taking this course.

To introduce students to processes and resources for professional publication of writing, this course places students into the complementary roles of editors and writers, and guides them through two instructive publishing projects. As editors, students participate in the process of producing a college literary magazine or other publication. As writers, students employ standard writing and research techniques and their knowledge of the editorial process to prepare their own works for submission to reputable publications. This course, along with various graphic arts courses, also prepares students to plan lay-out for various in-

house business publications and publishing houses. (See certificate for Publication Writing and Design under the Design, Interactivity, and Media Arts program)

ENGL 2210 - Grant Writing

4.5 - 0.0 - 4.5

Prerequisite: (1) Level II English or ENTR 2050 — must be completed prior to taking this course.

Students explore the non-profit environment, recognize community/organizational needs, identify effective grant-writing practices, and use rhetorical knowledge as well as research and writing processes to create a proposal.

ENGL 2215 - Creative Writing Capstone

4.5 - 0.0 - 4.5

Prerequisite: (2) All AFA major requirements; and instructor approval — must be completed prior to taking this course.

Students propose, execute, and evaluate their own original creative writing project such as a chapbook of poems, a short story, a play, or a lyric essay. In addition to presenting the work in publishable form, the student gives a public reading of the creative project.

ENGL 2450 - Introduction to Literature 

4.5 - 0.0 - 4.5

Prerequisite: (1) Level I English or instructor approval — must be completed prior to taking this course.

Students explore the genres, elements, and themes of literature by critically reading, discussing, and responding in writing to a culturally diverse selection of works. Fiction, poetry, and drama are emphasized. Students learn to appreciate literature as essential to understanding self and society.

ENGL 2460 - Introduction to Short Stories

4.5 - 0.0 - 4.5

Prerequisite: (1) Level II English, ENGL 2450, or instructor approval — must be completed prior to taking this course.

Students explore the elements of the short story and the history of its development by critically reading, discussing, and responding in writing to a selection of culturally diverse works.

ENGL 2470 - Introduction to Women's Literature

4.5 - 0.0 - 4.5

Prerequisite: (1) Level II English, ENGL 2450, or instructor approval — must be completed prior to taking this course.

This course introduces students to writings by and about women. Students read a variety of writings (fiction, poetry, essays, plays) while studying the social, cultural, economic and political influences that have impacted women throughout literary history. Students respond to these writings analytically, creatively, and personally.

ENGL 2480 - Introduction to Drama Literature I

4.5 - 0.0 - 4.5

Prerequisite: (1) ENGL 1020 or ENGL 1240 or ENGL 2450, or THEA 2010 with instructor approval — must be completed prior to taking this course.

Students examine the elements of drama, notable dramatic works, and the major dramatic genres from antiquity through the 17th century. (Cross-listed as THEA 2480)

ENGL 2481 - Introduction to Drama Literature II

4.5 - 0.0 - 4.5

Prerequisite: (1) Level II English, ENGL 2450, or THEA 2010 with instructor approval — must be completed prior to taking this course.

Students examine the elements of drama, notable dramatic works, and the major dramatic genres from the 18th century through contemporary times. (Cross-listed as THEA 2481)

ENGL 2490 - Introduction to Latin American Literature

4.5 - 0.0 - 4.5

Prerequisite: (1) Level II English, ENGL 2450, or instructor approval — must be completed prior to taking this course.

This course provides an overview of major influential Latin American writers and the contemporary and historical issues raised by their works. This course can be taken as an English or a Spanish course.

ENGL 2510 - American Literature I 

4.5 - 0.0 - 4.5

Prerequisite: (1) Level II English, ENGL 2450, or instructor approval — must be completed prior to taking this course.

The America we know today came into existence during the tumultuous years of 1600-1865. The literature written during that period brings to life the social, cultural, artistic, religious, and political climate of the time. By critically reading, discussing, and responding in writing to a variety of early American texts, students explore themes such as origins, community, freedom, and identity.

ENGL 2520 - American Literature II

4.5 - 0.0 - 4.5

Prerequisite: (1) Level II English, ENGL 2450, or instructor approval — must be completed prior to taking this course.

The United States has experienced radical changes since 1865. The literature written during this period brings to life the social, cultural, artistic, and political climate of the time. By critically reading, discussing, and responding in writing to a variety of American texts written since 1865, students explore themes such as the conflict between the urban and rural, migration, industrialization, progress, globalization, language, freedom, and identity.

ENGL 2530 - Ethnic Literature

4.5 - 0.0 - 4.5

Prerequisite: (1) Level II English, ENGL 2450, or instructor approval — must be completed prior to taking this course.

Students explore the genres, mediums, elements, and themes of U.S. ethnic literature through critical reading, discussion, and written responses. Students read a selection of works by authors who reflect diverse ethnic/cultural backgrounds. Students internalize new perspectives and learn to appreciate literature as essential to understanding self and society.

ENGL 2610 - British Literature I**4.5 - 0.0 - 4.5**

Prerequisite: (1) Level II English; or ENGL 2450; or instructor approval — must be completed prior to taking this course.

Students explore literature from the 7 to the 18 centuries and study the ways in which Britain developed its literary identity over the course of this period. The literature written during this period brings to life the religious, social, and political climate of the time. By critically reading, discussing, and responding in writing to a variety of early British texts, students explore themes such as origins, faith, freedom, and identity.

ENGL 2620 - British Literature II**4.5 - 0.0 - 4.5**

Prerequisite: (1) Level II English; or ENGL 2450; or instructor approval — must be completed prior to taking this course.

Students explore British literature from the late 18 century to the present and study the ways in which Britain developed its literary identity over the course of this period. The literature written during this period brings to life the social, cultural, and political climate of the time. By critically reading, discussing, and responding in writing to a variety of British texts written since 1785, students explore themes such as the conflict between nature and industrialization, progress, faith, freedom, and identity.

ENGL 2900 - Special Topics in Literature**4.5 - 0.0 - 4.5**

Prerequisite: (1) Level II English; or ENGL 2450; or instructor approval — must be completed prior to taking this course.

Literary studies not covered by other courses may be offered, depending upon interest. Past topics have included dramatic literature, detective fiction, African-American literature, and the writings of a particular author or genre.

ENGL 2901 - Special Topics in Writing**4.5 - 0.0 - 4.5**

Prerequisite: Varies based on topic of course; instructor approval also accepted — must be completed prior to taking this course.

This course permits instruction in advanced writing not included in other English courses, depending on interest. Writing may include advanced composition, advanced poetry writing, or advanced fiction writing, among others.

ENGL 2902 - Special Topics in Creative Writing Studio**4.5 - 0.0 - 4.5**

Prerequisite: (1) ENGL 1310 — must be completed prior to taking this course.

Students explore a specific sub-genre as instructor expertise and student interest permit. Examples might be true-crime nonfiction, young adult fiction, blogging as memoir, or song lyrics. Students study the essential elements of the sub-genre, and read and write deeply in that style. In addition to composing their own creative writing, students critically read, discuss, and respond to published creative writing in the sub-genre and the writing of other students.

ENGR - Pre-Engineering**ENGR 1010 - Introduction to Engineering Design****4.5 - 0.0 - 4.5**

This course is an introduction to the engineering profession, engineering problem solving, and engineering design with an emphasis on current topics. Students learn using projects and group learning activities. It is recommended that students have high school math (trigonometry and pre-calculus) and high school science before taking this course.

ENGR 1020 - MATLAB Programming**4.5 - 0.0 - 4.5**

Prerequisite: (3) College-level reading, writing and math proficiency; MATH 1420; and fluency with Windows commands, word processing software, and the tools used to create PDF files — must be completed prior to taking this course.

This course is a freshman engineering course that introduces students to computer programming for engineers using MATLAB. The course includes manipulation of functions that range from general math operations, string manipulation, and scientific plotting to domain-specific toolboxes, such as statistics, signal and image processing, efficient matrix, and array computations. The course also includes easy creation of scientific and engineering graphics, which make the course particularly useful for engineering students.

ENGR 2010 - Elements of Electrical Engineering I**4.5 - 0.0 - 4.5**

Prerequisite: (3) College-level reading, writing, and math proficiency; MATH 2411; and PHYS 211C — must be completed prior to taking this course.

This course is a sophomore engineering course that introduces students to the basic elements of electrical engineering. The course teaches the fundamental concepts of dc and ac circuit analysis using basic concepts, basic methods and circuits to filter and amplify signals, basic methods of digital signals, and accompanying mathematics associated with transformers, motors, and power systems.

ENGR 2020 - Engineering Statics**4.5 - 0.0 - 4.5**

Prerequisite: (3) College-level reading, writing, and math proficiency; MATH 2411; and PHYS 210C — must be completed prior to taking this course.

This course is a sophomore engineering course that introduces students to the basic principles of statics. Topics include an introduction to the fundamental principles of statics; strength of materials; translational and rotational equilibrium problems; moments of inertia; vector product of forces; centroids; simple structures, frames, and trusses; and wedges, screws, bearings, and belts.

ENTR - Entrepreneurship

ENTR 1050 - Introduction to Entrepreneurship 4.5 - 0.0 - 4.5

Students evaluate the business skills and commitment necessary to successfully operate an entrepreneurial venture and review the challenges and rewards of entrepreneurship. Students understand the role of entrepreneurial business in the United States and the impact on national and global economy. Students prepare a realistic foundational business plan appropriate to the launch of a small business.

ENTR 2040 - Entrepreneurship Feasibility Study 4.5 - 0.0 - 4.5

Students assess the viability of a business idea to determine if the concept is feasible for business start-up, expansion, or long-term growth. Students identify and analyze through basic research the present climate to determine current trends for their business idea by completing an industry, target market, and competitive analysis. The students begin to assess the financial needs for the business idea in addition to their own skill, strengths, and talents to launch a successful business idea.

ENTR 2050 - Marketing for the Entrepreneur 4.5 - 0.0 - 4.5

Students gain insights essential for marketing their entrepreneurial venture utilizing innovative and financially responsible marketing strategies. Students develop an understanding of traditional and non-traditional entrepreneurial marketing strategies and prepare marketing strategies with associated tactics to launch and sustain an entrepreneurial venture.

ENTR 2060 - Entrepreneurship Legal Issues 4.5 - 0.0 - 4.5

Students explore legal issues related to business entities, including sole proprietorship, general partnerships, limited partnerships, and corporations. Students review contract law, articles of incorporations and the filing process, intellectual property, employment law (including FEPA, ADA, and FMLA), personnel policies and procedures, the hiring process, job descriptions, disciplinary actions, and business insurance.

ENTR 2070 - Entrepreneurship Financial Topics 4.5 - 0.0 - 4.5

Recommended: INFO 1001 — recommended prior to taking this course, but not required.

This course covers financial topics for small businesses. Financial topics include budgeting, creation of financial statements, and learning how to work with an accounting professional. Other topics covered are income tax, sales and use tax, payroll tax, unemployment tax, employee benefits, and retirement planning.

ENTR 2090 - Entrepreneurship Business Plan 4.5 - 0.0 - 4.5

Prerequisite: (1) ENTR 2040 — must be completed prior to taking this course.

Students evaluate business concepts and create a business plan. Students assess the strengths and weaknesses of a business concept; apply research data into the plans; and prepare the financial projections for the business concept. Students identify and evaluate various resources available for funding small businesses.

ENTR 2700 - Introduction to International Business and Global Entrepreneurship 4.5 - 0.0 - 4.5

This course presents a broad overview of the fundamentals of international business and global entrepreneurship. Unique issues include world-wide integration of financial markets, adaption of products and services, and the globalization of economic, political, legal, and cultural systems. The course also introduces students to topics related to international trade, rise of emerging markets, strategies for foreign market entry, and resources available to support entrepreneurial growth abroad.

ENTR 2900 - Special Topics in Entrepreneurship Variable

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This course permits instruction in special content areas not included in other entrepreneurship courses.

ENTR 2981 - Entrepreneurship Internship 0.0 - 18.0 - 4.5

Prerequisite: (2) Completion of at least 24.0 credit hours of the program's major requirements and instructor approval — must be completed prior to taking this course.

This internship is an advanced course. It requires that students have completed at least 9.0 credit hours in entrepreneurship at MCC. Students apply knowledge and skills learned in Introduction to Entrepreneurship and other courses completed in the Entrepreneurship program to assist real small business owners or nonprofit organizations with a working project. Students individually record the tasks performed in a notebook reviewed periodically by the respective owner and faculty sponsor to assure that appropriate competencies are developed and reinforced. Students make final presentations summarizing project results and recommendations. Based on state guidelines, students must complete 40 hours of work for each credit hour.

ESLX - English as a Second Language

ESLX 0811 - Academic Listening and Speaking 1 6.0 - 0.0 - 6.0

Prerequisite: (1) Within two years prior to beginning the course, MCC placement test — must be completed prior to taking this course.

This high-beginning-level course provides instruction and practice in the listening comprehension and speaking of academic English and the development of academic vocabulary and critical-thinking skills.

ESLX 0812 - Academic Listening and Speaking 2
6.0 - 0.0 - 6.0

Prerequisite: (1) Within two years prior to beginning the course, successful completion of ESLX 0811 with a grade of P; or MCC placement test — must be completed prior to taking this course.

This low-intermediate-level course provides instruction and practice in the listening comprehension and speaking of academic English and the development of academic vocabulary and critical-thinking skills.

ESLX 0813 - Academic Listening and Speaking 3
4.5 - 0.0 - 4.5

Prerequisite: (1) Within two years prior to beginning the course, successful completion of ESLX 0812 with a grade of P; or MCC placement test — must be completed prior to taking this course.

This intermediate-level course provides instruction and practice in the listening comprehension and speaking of academic English and the development of academic vocabulary and critical-thinking skills.

ESLX 0814 - Academic Listening and Speaking 4
4.5 - 0.0 - 4.5

Prerequisite: (1) Within two years prior to beginning the course, successful completion of ESLX 0813 with a grade of P; or MCC placement test — must be completed prior to taking this course.

This high-intermediate-level course provides instruction and practice in the listening comprehension and speaking of academic English and the development of academic vocabulary and critical-thinking skills.

ESLX 0815 - Academic Listening and Speaking 5
6.0 - 0.0 - 6.0

Prerequisite: (1) Within two years prior to beginning the course, successful completion of ESLX 0814 with a grade of P; or MCC placement test — must be completed prior to taking this course.

This advanced-level course provides instruction and practice in the listening comprehension and speaking of academic English and the development of academic vocabulary and critical-thinking skills.

ESLX 0823 - Grammar 1
4.5 - 0.0 - 4.5

Prerequisite: (1) Within two years prior to beginning the course, successful completion of ESLX 0822 with a grade of P; or MCC placement test — must be completed prior to taking this course.

This intermediate-level course is the first of a two-course ESL grammar module that provides explicit instruction and practice to increase students' awareness of standard grammatical forms and uses and to improve grammatical accuracy in speaking and writing.

ESLX 0824 - Grammar 2
4.5 - 0.0 - 4.5

Prerequisite: (1) Within two years prior to beginning the course, successful completion of ESLX 0823 with a grade of P; or MCC placement test — must be completed prior to taking this course.

This intermediate-level course is the second of a two-course ESL grammar module that provides explicit instruction and practice to

increase students' awareness of standard grammatical forms and uses and to improve grammatical accuracy in speaking and writing.

ESLX 0831 - Academic Reading and Writing 1
4.5 - 0.0 - 4.5

Prerequisite: (1) Within two years prior to beginning the course, MCC placement test — must be completed prior to taking this course.

This high-beginning-level course provides instruction and practice in the reading and writing of academic English and the development of academic vocabulary and critical-thinking skills.

ESLX 0832 - Academic Reading and Writing 2
4.5 - 0.0 - 4.5

Prerequisite: (1) Within two years prior to beginning the course, successful completion of ESLX 0831 with a grade of P or MCC placement test — must be completed prior to taking this course.

This low-intermediate-level course provides instruction and practice in the reading and writing of academic English and the development of academic vocabulary and critical-thinking skills.

ESLX 0833 - Academic Reading and Writing 3
6.0 - 0.0 - 6.0

Prerequisite: (1) Within two years prior to beginning the course, successful completion of ESLX 0832 with a grade of P; or MCC placement test — must be completed prior to taking this course.

This intermediate-level course provides instruction and practice in the reading and writing of academic English and the development of academic vocabulary and critical-thinking skills.

ESLX 0834 - Academic Reading and Writing 4
6.0 - 0.0 - 6.0

Prerequisite: (2) Within two years prior to beginning the course, successful completion of ESLX 0823 and ESLX 0833 both with grades of P; or MCC placement test — must be completed prior to taking this course.

This high-intermediate-level course provides instruction and practice in the reading and writing of academic English and the development of academic vocabulary and critical-thinking skills.

ESLX 0835 - Academic Reading and Writing 5
6.0 - 0.0 - 6.0

Prerequisite: (2) Within two years prior to beginning the course, successful completion of ESLX 0824 and ESLX 0834 both with grades of P; or MCC placement test — must be completed prior to taking this course.

This advanced ESL course provides instruction and practice in the reading and writing of academic English and the development of academic vocabulary and critical thinking skills.

ESLX 0843 - American English Pronunciation
3.0 - 0.0 - 3.0

Prerequisite: (2) Within two years prior to beginning the course, successful completion of ESLX 0812 and ESLX 0832 both with grades of P, or MCC placement test, or department approval — must be completed prior to taking this course.

Pronunciation is an important element of effective communication. Non-native speakers of English often struggle

with intelligibility, low confidence in speaking, and distracting accent features that can interfere with the ability to fully participate in their academic, professional, and social lives. Assisted by computer technology and the instructor, students in this course learn to identify and correct their pronunciation challenges to improve comprehensibility. Topics include the basics of pronunciation, vowels and consonants, speech rhythm, and intonation and stress patterns.

ESLX 0900 - Special Topics for ESL Students Variable

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This course provides ESL students with information and experiences that would enhance their learning of English and United States culture.

ESLX 1000 - Medical English for ESL Healthcare Professionals 4.5 - 0.0 - 4.5

Prerequisite: (4) Certificate or diploma in healthcare-related field, or enrollment in courses leading to a certificate or diploma in a healthcare-related field; ESLX 0815, ESLX 0835, and advisor recommendation; or assessment testing in lieu of ESLX courses — must be completed prior to taking this course.

This course prepares students to communicate in English in academic and professional environments in the healthcare fields. The focus of the course is language; the context is healthcare delivery in North America. Students read, write, speak, and listen in order to build a comprehensive repertoire of linguistic and cultural knowledge within the context of their health careers.

FASH - Fashion Design

FASH 1000 - Fashion Design Principles 4.5 - 0.0 - 4.5

This course is an introduction to basic design fundamentals of fashion. Areas of emphasis include the study of basic principles and elements of design as applied to fashion design, fashion terminology, the design process, and the structure of the industry.

FASH 1400 - History of Fashion 4.5 - 0.0 - 4.5

This course is a survey of the evolution of costume and fashion design from ancient Egypt to modern times. Students become familiar with and learn to recognize characteristics of various historic fashion silhouettes and their application to current design trends.

FASH 2100 - Fashion Illustration 3.0 - 4.5 - 4.5

Prerequisite: (1) FASH 1400 — must be completed prior to taking this course.

This course explores the use and techniques of free-hand sketching using a variety of media to communicate ideas, concepts, details, and embellishments. Portfolio-ready projects explore sources of inspiration, drawing the fashion figure, rendering techniques of various fabrics and materials, and garment detailing.

FASH 2200 - Digital Design Principles for Fashion Designers 3.5 - 3.0 - 4.5

Prerequisite: (1) FASH 2100 — must be completed prior to taking this course.

This class teaches students how to create a digital portfolio from existing projects. Basic principles of image capture and manipulation and layout design are presented.

FASH 2900 - Special Topics in Fashion Design Variable

Prerequisite: (1) Completion of 30.0 or more credit hours in the Fashion Design program — must be completed prior to taking this course.

This course permits instruction in independent study of special content areas not included in other courses in the Fashion Design program.

FASH 2981 - Fashion Apprenticeship I 0.0 - 16.0 - 4.0

Prerequisite: (1) Completion of 30 or more credit hours in the Fashion Design program — must be completed prior to taking this course.

This course is the first in a series of apprenticeship courses in fashion design. Students are given the opportunity to observe/take part in the process of fashion design through a local fashion-oriented organization.

FASH 2982 - Fashion Apprenticeship II 0.0 - 16.0 - 4.0

Prerequisite: (1) Completion of 30 or more credit hours in the Fashion Design program — must be completed prior to taking this course.

This course is the second in a series of apprenticeship courses in fashion design. Students are given the opportunity to observe/take part in the process of fashion design through a local fashion-oriented organization.

FASH 2983 - Fashion Apprenticeship III 0.0 - 16.0 - 4.0

Prerequisite: (1) Completion of 30 or more credit hours in the Fashion Design program — must be completed prior to taking this course.

This course is the third in a series of apprenticeship courses in fashion design. Students are given the opportunity to observe/take part in the process of fashion design through a local fashion-oriented organization.

FINA - Finance

FINA 1000 - Financial Literacy 4.5 - 0.0 - 4.5

This course reviews the most critical financial literacy concepts needed by consumers in today's marketplace including issues specific to income, taxes, purchasing power, financial planning, banking, risk management, buying decisions, credit management, savings, and investment.

FINA 1010 - Customer Service Skills **4.5 - 0.0 - 4.5**

Recommended: Level 1 English course — recommended either prior to or at the same time as this course, but not required.

This course provides an in-depth look at the soft skills and self-management skills needed to provide effective customer service and support in all business environments. (Cross-listed as INFO 1010)

FINA 1100 - Principles of Property and Casualty Insurance **4.5 - 0.0 - 4.5**

This course is an introduction to the field of property and casualty insurance and is registered with the Nebraska Department of Insurance as satisfying pre-licensing standards. The needs of individuals or organizations for various categories of protection are discussed and the course covers fire, accident, theft, property damage, and liability insurance, as well as the legal environment of insurance products. The course also introduces the basic concepts of product design, underwriting, pricing, marketing, and claim administration. NOTE: Lab fee covers course completion and documentation fees required by Nebraska Department of Insurance. Students are required to schedule their own licensure exams and satisfy other licensing requirements. (Cross-listed as INSU 1100)

FINA 1300 - Introduction to Investments**4.5 - 0.0 - 4.5**

Recommended: FINA 1000 or FINA 1200 — recommended prior to taking this course, but not required.

This course presents an introductory review of investment concepts and theory, including analysis of individual investments (e.g., stocks, bonds, mutual funds), security markets, and portfolio management.

FINA 1200 - Wealth-Building Fundamentals and Personal Finance **4.5 - 0.0 - 4.5**

This course gives students an understanding and practical application of the theories and concepts of how to analyze and direct one's financial affairs and that of their family.

FINA 1311 - Introduction to Financial Services Industry **4.5 - 0.0 - 4.5**

This course covers the fundamental functions of financial institutions. Topics include money, financial markets, financial institutions, the deposit and payment functions, the Federal Reserve System, and other regulatory functions.

FINA 1320 - Financial Calculator Applications **1.0 - 0.0 - 1.0**

This course teaches the skills necessary to utilize a financial calculator. Applications include time value concepts, bond value calculations, statistical applications, interest rate computations, profit margin determinations, and break-even analysis.

FINA 2200 - Investment Planning **4.5 - 0.0 - 4.5**

Recommended: FINA 1200 Wealth Building Fundamentals and Personal Finance — recommended prior to taking this course, but not required.

This course presents basic investment concepts, such as investment markets and transactions, investment planning and information, and investment risk and return. The course also explores the investment environment by examining the role and scope of various investment vehicles including, common stock, fixed-income securities, derivative securities, and mutual funds. NOTE: Lab fee covers assessment curriculum required by CFP board-certified courses.

FINA 2209 - Risk Management and Insurance **4.5 - 0.0 - 4.5**

This course analyzes financial risk and the preservation of personal assets. Course content provides an overview of the risk management process with a primary focus on various lines of insurance (life, health, disability, long-term care, homeowners, auto, and liability). NOTE: Lab fee covers assessment curriculum required by CFP board-certified courses.

FINA 2210 - Financial Planning Principles **4.5 - 0.0 - 4.5**

This course is the first in the series of financial planning courses (income tax planning, retirement planning, and estate planning). Course content provides an overview of the financial planning process, including concepts related to the accumulation, preservation, and transference of wealth. NOTE: Lab fee covers assessment curriculum required by CFP board-certified courses.

FINA 2230 - Business Finance **4.5 - 0.0 - 4.5**

Recommended: ACCT 1100, ACCT 1110, and ACCT 1120 — recommended either prior to or at the same time as this course, but not required.

This course presents the basics of financial analysis: forecasting, operating and financial leverage, working capital, current asset management, short-term financing, dividend policy, convertible bonds, warrants, and options - all areas primarily oriented toward corporate financial management. NOTE: It is strongly recommended that ECON 1100 and FINA 2230 be taken late in the program of study.

FINA 2240 - Financial Statement Analysis **4.5 - 0.0 - 4.5**

Prerequisite: (1) ACCT 1110 — must be completed prior to taking this course.

This course presents the characteristics of financial statements and procedures for analysis. It covers goals, methods, and tools of analysis; analysis of profit and loss, accounts receivables, inventories, and balance sheets; relationship of balance sheet accounts to sales; and projected statements of cash budgets.

FINA 2310 - Income Tax Planning **4.5 - 0.0 - 4.5**

Prerequisite: (2) FINA 2200 and FINA 2210; or instructor approval — must be completed prior to taking this course.

This course acquaints students with tax planning strategies as they relate to investment goals. It emphasizes discretionary income and net worth. Students learn to evaluate specific investment decisions based on current and relevant tax implications. NOTE: Lab fee covers assessment curriculum required by CFP board-certified courses.

FINA 2320 - Retirement Planning and Employee Benefits 
4.5 - 0.0 - 4.5


Prerequisite: (2) FINA 2200 and FINA 2210; or instructor approval — must be completed prior to taking this course.

This course emphasizes pertinent issues faced by those preparing for retirement. Such issues include income planning, Social Security, Medicare, long-term care insurance, distributions from retirement plans, housing and residence concerns, guardianships, conservatorships, durable powers of attorney, and living trusts. The course reviews employee benefits as they relate to the retirement planning process. NOTE: Lab fee covers assessment curriculum required by CFP board-certified courses.


FINA 2330 - Estate Planning 
4.5 - 0.0 - 4.5

Prerequisite: (2) FINA 2200 and FINA 2210; or instructor approval — must be completed prior to taking this course.

This course provides a comprehensive review of estate planning topics, such as estate and gift taxes, various issues related to trusts planning and administration, property ownership issues, life insurance, private annuities, postmortem tax planning, and charitable giving. NOTE: Lab fee covers assessment curriculum required by CFP board-certified courses.

FINA 2400 - Financial Counseling 
4.5 - 0.0 - 4.5

This course explores the foundations of financial counseling, including the communication and listening processes, decision making and problem solving, and various strategies and tactics utilized in effective counseling relationships.

FINA 2410 - Consumer Credit 
4.5 - 0.0 - 4.5

This course reviews the most critical consumer credit issues, including consumer rights, secured and unsecured debt, credit card debt, student loan debt, debt collection, foreclosures and repossessions, evictions, credit restructuring, and bankruptcy-related issues.

FINA 2900 - Special Topics in Finance
Variable

This course permits instruction in special content areas that are not appropriately treated in other finance courses.

FINA 2940 - Financial Plan Development and Case Analysis 
4.5 - 0.0 - 4.5

Prerequisite: (5) FINA 2200, FINA 2210, FINA 2310, FINA 2320, and FINA 2330; or instructor approval — must be completed prior to taking this course.

This course serves as the capstone course in the Financial Planning program. This case-based class provides students with

an opportunity to demonstrate competencies in financial planning and insurance principles, income tax planning, retirement planning, and estate planning. NOTE: Lab fee covers assessment curriculum required by CFP board-certified courses.

FINA 2981 - Internship in Finance
0.0 - 18.0 - 4.5

Prerequisite: (2) MCC completion of at least 24.0 credit hours of the program's major requirements; instructor approval — must be completed prior to taking this course.

This internship is an advanced course taken in the second year of study. This course provides opportunities for practical application of concepts and techniques learned in various finance courses. The work setting is a public, private, or nonprofit organization appropriate to students' educational and career goals. Students observe and, with supervision, perform professional tasks consistent with the career. Students document progress and receive evaluation. Based on state guidelines, students must complete 40 hours of work for each credit hour.

FIST - Fire Science Technology

FIST 1000 - Principles of Emergency Services
3.0 - 0.0 - 3.0

Prerequisite: (1) Acceptance into the Fire Science Technology program — must be completed prior to taking this course.

This course provides an overview of fire protection and emergency services; career opportunities in fire protection and related fields; culture and history of emergency services; fire loss analysis; organization and function of public and private fire protection services; fire departments as part of local government; laws and regulations affecting the fire service; fire service nomenclature; specific fire protection functions; basic fire chemistry and physics; introduction to fire protection systems; introduction to fire strategy and tactics; and life safety initiatives. (Formerly Introduction to Fire Protection Principles)

FIST 1020 - Fire Behavior and Combustion
4.0 - 0.0 - 4.0

Prerequisite: (1) Acceptance into the Fire Science Technology program — must be completed prior to taking this course.

This course explores the theories and fundamentals of how and why fires start, spread, and are controlled. Topics include fundamental laws of chemistry, states of matter, gas laws, chemical bonding, and thermodynamics with applications to various industrial processes. (Formerly Chemistry and Dynamics of Fire)

FIST 1030 - Hazardous Materials Chemistry
3.0 - 0.0 - 3.0

Prerequisite: (1) Acceptance into the Fire Science Technology program — must be completed prior to taking this course.

This course provides basic chemistry relating to the categories of hazardous materials, including problems of recognition, reactivity, and health encountered by firefighters. NOTE: Upon successful completion of this course, students are able to apply for certification as a Technician Level Hazardous Material Responder.

FIST 1040 - Principles of Property and Casualty Insurance 
3.0 - 0.0 - 3.0

Prerequisite: (1) Acceptance into the Fire Science Technology program — must be completed prior to taking this course.

This course serves as an introduction to the field of property and casualty insurance and the needs of individuals or organizations for various categories of protection. Areas of emphasis include fire, accident, theft, property damage, liability insurance, and the legal environment of insurance products. Students are also introduced to the basic concepts of product design, underwriting, pricing, marketing, and claim administration.

FIST 1050 - Building Construction for Fire Protection
3.0 - 0.0 - 3.0

Prerequisite: (1) Acceptance into the Fire Science Technology program — must be completed prior to taking this course.

This course provides a basic understanding of how the construction type, alternative design, and materials influence a building's reaction to fire. This course provides recognition of relevant information about a building before a fire, as well as fire ground 'reading' of the building that provides the ability to assess building stability and resistance to fire and determine likely paths of fire extension. Students become familiar with the materials and types of construction used for the various parts of buildings in this class. This course covers building code requirements; steel, timber, and masonry construction; structures of the common form; lift-slab and tilt-up construction; and developments in the building construction field. This course teaches building construction as it relates to the firefighter and life safety. (Formerly Building Construction Related to Fire Science)

FIST 1060 - Occupational Safety and Health for Emergency Services
3.0 - 0.0 - 3.0

Prerequisite: (1) Acceptance into the Fire Science Technology program — must be completed prior to taking this course.

This course introduces the basic concepts of occupational health and safety as it relates to emergency service organizations. Topics include risk and hazard evaluation and control procedures for emergency service organizations. (Formerly Fire Science Professional: Health and Welfare)

FIST 1070 - Fire Protection Systems 
3.0 - 0.0 - 3.0

Prerequisite: (1) Acceptance into the Fire Science Technology program — must be completed prior to taking this course.

This course provides information relating to the features of design and operation of fire alarm systems, water-based fire suppression systems, special hazard fire suppression systems, water supply for fire protection, and portable fire extinguishers.

FIST 1080 - Fire Protection Hydraulics and Water Supply
4.0 - 0.0 - 4.0

Prerequisite: (1) Acceptance into the Fire Science Technology program — must be completed prior to taking this course.

This course provides a foundation of theoretical knowledge in order to understand the principles of the use of water in fire

protection and to apply hydraulic principles to analyze and solve water supply problems. (Formerly Hydraulics and Water Supply)

FIST 1090 - Firefighter I
7.0 - 8.0 - 10.0

Prerequisite: (1) Medical screening compliant with NFPA 1582 — must be completed prior to taking this course.

Pre/Co Requisite: (1) FIST 2070 — must be taken either prior to or at the same time as this course.

This course includes the information and skills to perform basic firefighting functions on the fire ground. Upon completion, students can take the Nebraska State Firefighter I Certification Test. This course prepares students to meet the requirements of Firefighter I per NFPA 1001 Standard for Firefighter Professional Qualifications and Hazardous Materials Awareness per NFPA 472 Standard for Responders to Hazardous Materials Incidents.

FIST 1480 - Physical Training for the Firefighter/ EMS Professional
3.5 - 0.0 - 3.5

The job of a firefighter is one of the most physically demanding jobs in North America. It requires high levels of cardiopulmonary endurance, muscular strength and muscular endurance. Physical fitness is the ability to perform physical activities, such as job tasks, with enough reserve for emergency situations dealing with multiple variables. This course prepares the firefighter and emergency management services candidates with specific physical fitness training to prepare them for the Candidate Physical Ability Test.

FIST 2000 - Incident Command System
3.0 - 0.0 - 3.0

Prerequisite: (1) Acceptance into the Fire Science Technology program — must be completed prior to taking this course.

This course provides an introduction to the basic principles of the Incident Command System within the National Incident Management System (NIMS) compliant framework. The course covers the Department of Homeland Security Incident Command courses 100, 200, and 700. These are the minimum Federal ICS requirements for first responders within the United States. In addition to the course reading material and lecture, the course relies heavily on a final group activity and an understanding of inter-agency dynamics. Personnel accountability, safety at the scene, planning for the continuity of operations, and logistical requirements for incidents of all risks and sizes are only a few of the major components that are covered.

FIST 2010 - Fire Investigation I
3.0 - 0.0 - 3.0

Prerequisite: (1) Acceptance into the Fire Science Technology program — must be completed prior to taking this course.

This course provides students with the fundamentals and technical knowledge needed for proper fire scene interpretations, including recognizing and conducting origin and cause, preservation of evidence and documentation, scene security, motives of the fire-setter, and types of fire causes. (Formerly Incendiary Fire Analysis and Investigation)

FIST2011 - Fire Investigation II**3.0 - 0.0 - 3.0**

Prerequisite: (2) FIST 2010; and acceptance into the Fire Science Technology program — must be completed prior to taking this course.

This course is intended to provide the student with advanced technical knowledge on rule of law, fire scene analysis, fire behavior, evidence collection and preservation, scene documentation, case preparation, and testifying.

FIST2020 - Fire Prevention, Inspection and Codes**4.0 - 0.0 - 4.0**

Prerequisite: (1) Acceptance into the Fire Science Technology program — must be completed prior to taking this course.

This course is an examination and evaluation of the techniques, procedures, programs, and agencies involved with fire prevention. It gives consideration to related governmental inspection and education procedures. (Formerly Fire Prevention, Building Inspection, and Codes)

FIST2030 - Legal Aspects of Emergency Services**3.0 - 0.0 - 3.0**

Prerequisite: (1) Acceptance into Fire Science Technology program — must be completed prior to taking this course.

This course is an introductory course that addresses the federal, state, and local laws that regulate emergency services and includes a review of national standards, regulations, and consensus standards.

FIST2040 - Principles of Fire & Emergency Services Safety & Survival**3.0 - 0.0 - 3.0**

Prerequisite: (1) Acceptance into Fire Science Technology program — must be completed prior to taking this course.

This course introduces the basic principles and history related to the national firefighter life safety initiatives, focusing on the need for cultural and behavioral change throughout the emergency services.

FIST2050 - Introduction to Fire and Emergency Services Administration**3.0 - 0.0 - 3.0**

Prerequisite: (1) Acceptance into the Fire Science Technology program — must be completed prior to taking this course.

This course introduces students to the organization and management of a fire and emergency services department and the relationship of government agencies to the fire service. Emphasis is placed on fire and emergency service, ethics, and leadership from the perspective of the company officer.

FIST2060 - Strategy and Tactics**4.0 - 0.0 - 4.0**

Prerequisite: (1) Acceptance into the Fire Science Technology program — must be completed prior to taking this course.

This course provides an in-depth analysis of the principles of fire control through utilization of personnel, equipment, and extinguishing agents on the fire ground.

FIST2069 - Hazardous Materials Awareness**1.0 - 0.0 - 1.0**

This course provides first responders with the knowledge and skills to understand hazardous substances and the risks associated with them in an incident; recognize the presence of hazardous substances in an emergency; understand the role of the emergency responder at the Awareness level, including site security and control; have understanding of the U.S. Department of Transportation Emergency Guidebook, realize the need for additional resources, call for appropriate assistance, and make appropriate notifications to the community.

FIST2070 - Hazardous Materials Operations**3.0 - 2.0 - 3.5**

Prerequisite: (1) Acceptance into the Fire Science Technology program — must be completed prior to taking this course.

This course introduces the basic skills necessary to safely and effectively manage on-scene operations involving the uncontrolled release of dangerous chemicals. It focuses on those individuals in local jurisdictions who respond to releases or potential releases of hazardous substances as part of the initial response to the site for the purpose of protecting nearby persons, property, or the environment from the effects of the release. Those individuals respond in a defensive fashion without actually trying to stop the release. Upon successful completion, students are able to apply for certification at the Hazardous Materials Operations Level, as per OSHA regulation 29 CFR 1910.120, their function is to contain the release from a safe distance, keep it from spreading, and prevent exposures.

FIST2071 - Hazwoper for the Industry**3.0 - 1.0 - 3.5**

Prerequisite: (1) Acceptance into the Fire Science Technology program — must be completed prior to taking this course.

This course provides students with entry-level education for students entering the remediation trade where hazardous and/or toxic materials are involved.

FIST2080 - Hazardous Materials Technician**5.0 - 9.0 - 8.0**

Prerequisite: (2) Successful completion of FIST 1090 and FIST 2070 with a grade of C or better — must be completed prior to taking this course.

This specialized training utilizes a modular format where a fire department may analyze its current level of competency and choose course modules that provide the skills needed by its hazardous materials team. Training includes offensive procedures for mitigation of hazardous materials spills, leaks, and exposures. Topics include chemistry, detection devices, advanced recognition and identification, pre-incident planning, incident management, scene evaluation and termination, terrorism, toxicology, medical surveillance, emergency care, PPE usage and limitations, and decontamination.

FIST2090 - Firefighter II**4.0 - 4.0 - 5.5**

Prerequisite: (4) FIST 1090; FIST 2070; acceptance into the Fire Science Technology program; and medical screening compliant with NFPA 1582 — must be completed prior to taking this course.

This course is the continuation of Firefighter I, and upon successful completion of the course individuals shall function on emergency scenes with general supervision. Firefighter II begins the entry-level education requirements for leading a team in emergency mitigation and/or hazardous materials response. Firefighter II is a national curriculum and certified by the state of Nebraska. The curriculum expands the students' knowledge of ventilation, search and rescue, hazardous materials response, extrication and firefighting strategy, tactics, and tasks. Advanced fire suppression operations and pre-fire planning and occupancy inspections are covered in the curriculum.

FIST 2900 - Selected Topics in Fire Science **Variable**

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This course permits instruction in special content areas not included in other courses in the Fire Science Technology program.

FREN - French

FREN 1110 - Elementary French I **7.5 - 0.0 - 7.5**

FREN 1110 is the first of three sequential courses that teach the basic skills of listening, speaking, reading, and writing in French. Students build these skills by preparing for the unit objectives with grammar tutorials, interactive vocabulary presentations, authentic readings, and corresponding assessment activities.

FREN 1120 - Elementary French II **7.5 - 0.0 - 7.5**

Prerequisite: (1) FREN 1110 — must be completed prior to taking this course.

FREN 1120 is the second of three sequential courses that teach the basic skills of listening, speaking, reading, and writing in French. Students build these skills by preparing for the unit objectives with grammar tutorials, interactive vocabulary presentations, authentic readings, and corresponding assessment activities.

FREN 2110 - Intermediate French I **4.5 - 0.0 - 4.5**

Prerequisite: (1) FREN 1120 — must be completed prior to taking this course.

FREN 2110 is the third of three sequential courses that teach the intermediate level skills of listening, speaking, reading, and writing in French. Students focus on building proficiency in the language by watching, listening, and practicing speaking after native speakers on video, learning vocabulary, verb forms, and grammatical structures of the language, discovering the Francophone culture through reading and watching videos, and practicing what they have learned through online exercises and quizzes.

FREN 2120 - Intermediate French II **4.5 - 0.0 - 4.5**

Prerequisite: (1) FREN 2110 — must be completed prior to taking this course.

This course reviews and continues to develop the skills of listening, speaking, reading, and writing in French. Students build these skills by watching, listening, and practicing speaking after native speakers on video, learning vocabulary, verb forms, and grammatical structures of the language, discovering the Francophone culture through reading and watching videos and practicing what they have learned through online exercises and quizzes.

FREN 2900 - Special Topics in French **Variable**

This course offers topics not normally addressed by other courses in French. Examples include advanced grammar, intensive conversation and pronunciation, and contemporary culture.

GEOG - Geography

GEOG 1010 - Fundamentals of Geography **4.5 - 0.0 - 4.5**

This course provides students with an overview of the environmental and social concerns encompassed by the discipline of geography. It surveys essential concepts in both cultural, human, and physical geography, and students acquire basic skills in the use and interpretation of maps. College-level reading skills are recommended for success in this course.

NOTE: Beneficial for all undergraduates, this course is particularly valuable for teachers and for those planning to teach geography or the social sciences.

GEOG 1020 - World Regional Geography **4.5 - 0.0 - 4.5**

Recommended: College-level reading skills — recommended prior to taking this course, but not required.

The course expands students' knowledge of the world. The course material about the earth is divided into a manageable number of geographical regions. Students analyze the regions in terms of their human and physical geographies. Particular attention is given to distinctions between the earth and those areas that remain less developed. Students explore processes of globalization that increasingly link regions to one another. (Formerly GEOG 2150)

GEOG 1050 - Introduction to Human Geography **4.5 - 0.0 - 4.5**


Recommended: College-level reading skills — recommended prior to taking this course, but not required.

The course provides spatial and ecological perspectives on the human occupancy of the earth. It examines distinctive cultural landscapes as the product of different ways of life, including particular mixes of language, religion, population dynamics, food production, economic and political organization, settlement systems, natural resource exploitation, and culture history.

GEOG 1150 - Introduction to Physical Geography - Weather and Climate **5.0 - 3.0 - 6.0**

Recommended: College-level reading skills — recommended prior to taking this course, but not required.

This lecture and lab course introduces the ways in which the complex interplay of solar radiation, temperature, moisture, atmospheric pressure, and wind produces the short-term atmospheric conditions called weather and the long-term atmospheric conditions called climate. It gives particular attention to the ways in which weather and climate influence human life and to evidence of climate changes, past and present.

GEOG 1160 - Introduction to Physical Geography - Landforms 

5.0 - 3.0 - 6.0

Recommended: College-level reading skills — recommended prior to taking this course, but not required.

This lecture and lab course examines the physical processes that shape and reshape the face of the earth. The course introduces geomorphic forces that work from within the earth to create landforms and to processes that operate at the earth's surface to wear landforms away. It gives considerable attention to the fact that many of the processes that create or destroy landforms also constitute natural hazards with which human societies must contend.

GEOG 1210 - Introduction to Physical Geology 

5.0 - 3.0 - 6.0

Recommended: College-level reading skills — recommended prior to taking this course, but not required.

This lecture and lab course is the study of the earth and the processes that shape it. Students learn about the materials and physical features of the earth, changes in those features, and the processes that bring them about. It studies the earth as a planet, as a changing body, and as humans' home.

GEOG 2900 - Special Topics in Geography Variable

This course permits instruction in special content areas that are not included in other geography courses.

GERM - German

GERM 1010 - Elementary German I 

7.5 - 0.0 - 7.5

This is the first of a two-course introductory sequence in which students begin to learn the fundamentals of German. It stresses comprehension, pronunciation, speaking, listening, reading, writing, and vocabulary.

GERM 1020 - Elementary German II 

7.5 - 0.0 - 7.5

Prerequisite: (1) GERM 1010 or its equivalent — must be completed prior to taking this course.

Students continue focusing on the skills begun in GERM 1010. The course stresses comprehension, pronunciation, speaking, listening, reading, writing, and vocabulary.

GERM 2900 - Special Topics in German Variable

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This course offers topics not normally addressed by other courses in the German curriculum. Examples include advanced grammar, intensive conversation and pronunciation, and contemporary culture.

HDIM - Health Data and Information Management

HDIM 1001 - Medical Terminology  

4.5 - 0.0 - 4.5

In this course, students study the language of medicine, including basic word roots, prefixes, suffixes, combining forms, and medical abbreviations. Definition of medical, surgical, and therapeutic terms is emphasized.

HDIM 1010 - Healthcare Delivery Systems 

4.5 - 0.0 - 4.5

This course introduces students to the broad range of career options in the health information management (HIM) profession, the functions of a health information manager in the healthcare environment, and the resources used by HIM professionals. This course is an overview of the components of the healthcare delivery system in the United States, the organizations that provide healthcare, the external forces affecting healthcare organizations, the reimbursement methods used, and the professionals who provide the services. Students examine the organizational components of healthcare organizations: the governing board, the medical staff, and the administration.

HDIM 1020 - Health Data and Electronic Health Records 

4.5 - 0.0 - 4.5

Pre/Co Requisite: (1) HDIM 1010 — must be taken either prior to or at the same time as this course.

In this course, students study the origin, uses, content, and format of healthcare data across the continuum of healthcare, including both paper and electronic health records (EHR); accreditation and regulatory requirements applicable to healthcare data; and methods of ensuring compliance with requirements: quality and integrity of healthcare data.

HDIM 1030 - Healthcare Data Management and Use 

4.5 - 0.0 - 4.5

Prerequisite: (1) HDIM 1020 — must be completed prior to taking this course.

This course focuses on the methods to collect, access, and retrieve and retain health data and medical records. These methods include master patient index, record identification and filing systems, record retention and disaster planning; electronic document management systems, data governance, health information exchange, health data registries, e.g., cancer registry; voice recognition, and management of medical transcription services.

HDIM 2010 - Healthcare Statistics 

4.5 - 0.0 - 4.5

Prerequisite: (2) INFO 1001 and MATH 1310 — must be completed prior to taking this course.

The course includes the study of the methods/formulas for computing, preparing, and presenting statistical reports used in the delivery of healthcare services. Students utilize current software to learn and apply spreadsheet techniques and fundamentals of database creation and use.

HDIM 2020 - Health Law, Privacy, and Ethics

4.5 - 0.0 - 4.5

Prerequisite: (1) HDIM 1010 — must be completed prior to taking this course.

Students study legal principles, laws, and regulations related to healthcare and health information; confidentiality, privacy, subpoenas of health information, and methods used to enhance the security of health information; legal terminology and procedures and court systems; and liability of healthcare providers, patient rights, healthcare compliance, and health information management ethics. Students apply concepts learned to simulated health information cases.

HDIM 2030 - Performance Improvement

4.5 - 0.0 - 4.5

Prerequisite: (2) HDIM 2010 and HDIM 2020 — must be completed prior to taking this course.

The course encompasses the investigation of peer review in healthcare and the components of quality management programs in healthcare organizations including quality/performance improvement, utilization management, risk management, safety, and credentialing.

HDIM 2050 - Reimbursement in Healthcare

4.5 - 0.0 - 4.5

Pre/Co Requisite: (1) HDIM 2432 — must be taken either prior to or at the same time as this course.

The course includes an in depth examination of healthcare reimbursement methodologies, bill reconciliation, and revenue cycle management including the charge master. Students apply the principles and application of diagnostic and procedural grouping. Students gain an understanding of Recovery Audit Contractor (RAC) audits, the Office of Inspector General (OIG) audits, case mix, interpreting explanation of benefits (EOB), and remittance advice.

HDIM 2060 - Supervision in Healthcare

4.5 - 0.0 - 4.5

Prerequisite: (2) Enrolled into the HDIM program; and college-level English and math proficiency — must be completed prior to taking this course.

Students study the principles of authority and responsibility, delegation, and communication; organization charts, job descriptions, and policies and procedures; and employee motivation, discipline, employment law, and performance evaluation. The principles are applied to health information management functions.

HDIM 2421 - Clinical Coding I

4.5 - 0.0 - 4.5

Prerequisite: (2) BIOS 1310 or HIMS 1310; and HDIM 1001 or HIMS 1120 and HIMS 1130 — must be completed prior to taking this course.

Pre/Co Requisite: (1) HIMS 1180 — must be taken either prior to or at the same time as this course.

Students gain knowledge of the International Classification of Diseases, Clinical Modification (ICD-10-CM) systems, official coding guidelines, and application of coding principles to diagnostic statements found across the continuum of healthcare. Students explore utilization of coding resources and tools.

HDIM 2431 - Clinical Coding II

4.5 - 0.0 - 4.5

Prerequisite: (1) HDIM 2421 — must be completed prior to taking this course.

Students gain knowledge of the Current Procedural Terminology (CPT)/Health Care Procedural Coding System (HCPCS), official coding guidelines, and assignment of codes to various clinical statements, scenarios, reports, and patient records. Students explore utilization of coding resources and tools.

HDIM 2432 - Clinical Coding III

4.5 - 0.0 - 4.5

Prerequisite: (1) HDIM 2431 — must be completed prior to taking this course.

Students gain a comprehensive foundation of inpatient hospital coding and inpatient classification systems for medical specialties. Students experience coding from complete medical records.

HDIM 2982 - HDIM Capstone

4.5 - 0.0 - 4.5

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

Students discuss current issues and trends in the healthcare field which impact health information management practice; the professional rights and responsibilities of health information management professionals; career management strategies; and review and prepare for national registration exam. This course is for students near completion of the associate degree program in HDIM.

HDIM 2983 - HDIM Practicum

0.0 - 6.0 - 2.0

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

Students apply knowledge learned in the Health Data and Information Management Program to various health information management (HIM) functions at healthcare organizations under the guidance of HIM professionals. This course is for students near completion of the associate degree program in HDIM. Based on state requirements, students must complete 40 hours of work for each credit hour.

HIMS - Health Information Management Systems

HIMS 1111 - Healthcare Careers


4.5 - 0.0 - 4.5

This course provides an overview of the healthcare field. Topics include healthcare delivery systems, history of healthcare,

careers in healthcare, personal qualities of healthcare workers, principles of teamwork, time management, human growth and development, cultural diversity, safety issues, and computer technology in healthcare settings. Current issues in healthcare are addressed in order to enrich students' understanding and breadth of knowledge of the U.S. healthcare system and the roles and functions of various healthcare professionals.

HIMS 1120 - Medical Terminology I  
4.5 - 0.0 - 4.5

This course establishes a solid foundation of prefixes, suffixes, word roots, abbreviations, medical terms and symbols. It emphasizes understanding the medical vocabulary as it applies to the anatomy, physiology, pathology, diagnostic procedures, and therapeutic procedures of the human body. Students participate in an in-depth study of the terms, as well as correct spelling and pronunciation to be prepared to enter their professions in the healthcare field.

HIMS 1130 - Medical Terminology II  
4.5 - 0.0 - 4.5

Prerequisite: (1) HIMS 1120 — must be completed prior to taking this course.

This course is a continuation of HIMS 1120. It presents additional body systems, specialty medical areas, clinical procedures, laboratory tests, medical terms, and abbreviations. Students study practical applications with case reports, operative and diagnostic tests, and laboratory and x-ray reports. The course also emphasizes correct spelling and pronunciation.



HIMS 1150 - Introduction to Medical Law and Ethics  
4.5 - 0.0 - 4.5

This course gives a foundation in the federal and state laws of the medical profession and ethical issues associated with working in a healthcare setting. It explores HIPAA regulations in detail. Topics include professional, social, and interpersonal healthcare issues. Coverage also includes identification of measures to promote confidentiality as major changes in electronic health record technology occur. Students learn investigation of techniques to maintain office safety as well as the safety and confidentiality of patients and medical records.

HIMS 1180 - Disease Processes  
4.5 - 0.0 - 4.5

Prerequisite: (1) HIMS 1130 or HDIM 1001 — must be completed prior to taking this course.

This course introduces the fundamentals of human disease processes. Students gain knowledge in the study of the nature and description of disease, disease etiology, signs and symptoms, diagnostic evaluation procedures, complications, treatment, management, prognosis, and prevention of disease. The course organizes the coverage of diseases by major body systems. It also explores bacteriology as related to health, immunology, and infectious diseases. Students apply the knowledge learned and use critical-thinking and problem-solving skills to address case studies and complete team activities.

HIMS 1210 - Medical Office Communications  
4.5 - 0.0 - 4.5

Prerequisite: (1) HIMS 1130 — must be completed prior to taking this course.

This course provides basic information and guidelines for style, grammar, and specific medical transcription mechanics. Topics include career role and responsibilities in medical office management and medical transcription, transcription tools and guidelines, medical records and reports, and correspondence and business documents. It emphasizes punctuation and capitalization; numbers, figures, dosages, and medical abbreviations; editing, proofreading, and quality assurance; utilization of reference materials; and word forms.

HIMS 1212 - Microsoft Word for Medical Office  
4.5 - 0.0 - 4.5



Prerequisite: (1) INFO 1001 — must be completed prior to taking this course.

This course explores the features of Microsoft Word to create, design, and produce professional documents commonly used in a medical setting. It emphasizes the basics in the use of the ribbon to the minute details of forms, fields, and customization tools. Students gain in-depth knowledge in the use of these features by completing a variety of projects related to their field of study. Students also study technologies used in a medical office or healthcare facility.

HIMS 1310 - Introduction to Anatomy and Physiology  
4.5 - 0.0 - 4.5

Prerequisite: (1) HIMS 1130 or HDIM 1001 — must be completed prior to taking this course.

This course focuses on the human body as a living, functioning organism. It explores important concepts about human anatomy and physiology. Students learn how cells, tissues, organs, and body systems function together to carry on complex activities. The course emphasizes all major body systems, their interaction with other structures and systems, and their role in the human organism.

HIMS 1410 - Introduction to Insurance  
3.0 - 0.0 - 3.0

This course introduces the health insurance field, managed healthcare, and legal and regulatory issues, as well as reimbursement methodologies. It explores various types of insurance while focusing on claim form instructions, billing and collection practices, and reimbursement guidelines including the audit and appeals process. Students complete CMS 1500 claim forms and apply basic Medicare and Medicaid rules, commercial insurance regulations, and regulations of worker's compensation claims. This course uses DRG process as well as Encoder to code ICD-10, CPT, and HCPCS.

HIMS 2110 - Principles of Management in Healthcare  
4.5 - 0.0 - 4.5

Prerequisite: (1) HIMS 1212 — must be completed prior to taking this course.

This course acquaints healthcare practitioners with management and supervision concepts essential to the understanding of the organizational environment in the healthcare field. Topics include

management concepts; leadership and supervision; delegation and communication; financial management; planning, decision-making, and organizing; employment law; human resources management (staffing, performance evaluation, employee retention, training, and development); policies and procedures; compliance regulations; adaptation, motivation, and conflict management; and strategic management.

HIMS 2155 - Fundamentals of Pharmacology

4.5 - 0.0 - 4.5

Prerequisite: (1) HIMS 1130 or HDIM 1001 — must be completed prior to taking this course.

This course provides a basic understanding of pharmacological concepts, emphasizing routes of administration, basic pharmacokinetics, and the specific pharmacology of drugs commonly used in the healthcare field. Students become familiar with drug names, drug classifications, and drug schedules and categories. Other topics include drug actions and the rationale for treatment, side effects, and contraindications. Students review current healthcare topics relating to pharmacology and ethical issues.

HIMS 2220 - Healthcare Documentation

4.5 - 0.0 - 4.5

Prerequisite: (3) HIMS 1130; HIMS 1210; and HIMS 1212 — must be completed prior to taking this course.

This course reinforces the importance of accurate healthcare capture and documentation and its impact on reimbursement and patient care. Students are introduced to editing, proofreading, and the documentation skills required with the changes in technology and the electronic health record (EHR). (Formerly Healthcare Documentation I)

HIMS 2400 - Introduction to Coding and Billing

4.5 - 0.0 - 4.5

Prerequisite: (1) HIMS 1130 — must be completed prior to taking this course.

Recommended: HIMS 1410 — recommended prior to taking this course, but not required.

This course introduces students to basic coding procedures and insurance claim forms used in medical offices and hospitals. This course is designed to broaden coding knowledge and concepts but not to gain employment as a coder. Students gain a basic knowledge of the ICD-10-CM, HCPCS, and CPT classification systems to code diagnoses, conditions, and procedures.

HIMS 2420 - Coding and Billing I

4.5 - 0.0 - 4.5

Prerequisite: (1) HIMS 2400 — must be completed prior to taking this course.

This course provides students with a comprehensive understanding of the International Classification of Disease (ICD-10-CM) coding system. Students learn the guidelines and terminology for correctly coding diagnoses in a physician's office, hospital, home healthcare agency, or other healthcare facility diagnosis codes. Challenging practice drills test students' coding skills in a variety of realistic healthcare settings using real-life patient health records.

HIMS 2430 - Coding and Billing II

4.5 - 0.0 - 4.5

Prerequisite: (1) HIMS 2420 — must be completed prior to taking this course.

This course provides in-depth coverage of procedural coding utilizing the HCPCS coding system composed of current procedure terminology and national level II codes: detailed application of the CPT classification system for inpatient and outpatient services. The course emphasizes evaluation and management and surgery codes, as well as the use of modifiers and global services. Students apply coding and billing principles through the use of case study exercises and patient records. Students examine prospective payment in ambulatory and outpatient services and explore the implications of coding.

HIMS 2900 - Special Topics in Health Information Management Systems

Variable

This course permits instruction in special content areas not included in other courses in the Health Information Management Systems program.

HIMS 2910 - CPC Exam Preparation

8.0 - 0.0 - 8.0

Prerequisite: (1) HIMS 2430 — must be completed prior to taking this course.

This review course is for coders who are interested in taking the American Academy of Professional Coders Certification (AAPC) examination. This course provides an in-depth look at the medical coding process by applying coding guidelines for hospital, outpatient, and physician practice services. Guidelines include ICD-10-CM, CPT, and HCPCS coding methodologies. Upon completion of this course, a date is set for the student to take the five-hour and forty minute certified professional coder examination. NOTE: To maintain accreditation as a CPC, the AAPC requires completion of 36 continuing education units (CEUs) every two years. The CPC exam may be re-taken yearly in lieu of submission of CEU credits for that year. A passing score must be obtained to fulfill the CEU requirement. All exams must be taken prior to the renewal date.

HIMS 2920 - COC Exam Preparation

4.5 - 0.0 - 4.5

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This review course is designed for coders who are interested in taking the American Academy of Professional Coders Certification-Hospital examination (COC). The student gains an in-depth look at the medical coding process by applying coding guidelines for hospital, outpatient, and physician practice services. Guidelines include ICD-10-CM, CPT, and HCPCS coding methodologies. A pass/fail grade is issued. Upon completion of this course, a date is set for students to take the five hour and forty minutes COC examination. To maintain accreditation as a COC, the American Academy of Professional Coders requires completion of 36 continuing education units (CEUs) every two years. To maintain double-core certification (CPC, COC), the AAPC requires 40 CEUs every two years. The COC exam may be re-taken yearly in lieu of submission of CEU

credits for that year. A passing score must be obtained to fulfill the CEU requirement. All exams are required to be taken prior to the renewal date.

HIMS 2980 - Medical Office Applications

4.5 - 0.0 - 4.5

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This capstone course provides the opportunity to develop medical office management skills through individual and collaborative learning experiences. This course integrates all of the competencies obtained throughout the program, as well as provides lab activities in the navigation of an electronic health record and the importance of accuracy as related to continuity of care and reimbursement. NOTE: All classes in the chosen degree program must be completed prior to being granted instructor approval for this course.

HIMS 2981 - Internship

0.0 - 12.0 - 4.0

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

The internship places students in a working and learning environment to receive on-the-job training before graduation. To develop internships to meet academic and career goals, students must work with the faculty internship coordinator to secure a job in a related field. Students prepare a portfolio based on the successful completion of the HIMS program. NOTE: All classes in the chosen degree program must be completed prior to being granted instructor approval for this course.

HIST - History

HIST 1010 - United States History to 1877

4.5 - 0.0 - 4.5

This course is a survey of American history from discovery through and including the Civil War and reconstruction.

HIST 1020 - United States History from 1865 to Present

4.5 - 0.0 - 4.5

This course is a survey of American history from the end of the Civil War to the present.

HIST 1050 - Introduction to Black History

4.5 - 0.0 - 4.5

This course is a survey of the history of black Americans from their origins in Africa to the present. It considers political, economic, social, and cultural factors as well as the interaction between African Americans and the larger society.

HIST 1060 - Black Women in the United States

4.5 - 0.0 - 4.5

This course explores the history of Black women in the United States. It covers Black women's roles in the home, industry, and during world wars from the colonial period to present day. Topics include American social movements, race relations, ethnicity, sexuality, gender, medical issues, and age. (Formerly The History of Black Women in America)

HIST 1070 - Traditional and Modern China

4.5 - 0.0 - 4.5

This course examines the historical, cultural, political, and economic aspects of China. The course starts in 1644 and ends in the present-day era. It covers the late Ming dynasty, the Qing dynasty, Eastern and Western influences causing wars and rebellions, the Republic of China, the People's Republic of China, and the country's current transitional state.

HIST 1080 - Traditional and Modern Japan

4.5 - 0.0 - 4.5

This course examines the historical, cultural, political, and economic aspects of Japan. The course starts in the 1500s by studying the Tokugawa dynasty and its wealthy and powerful rulers and then examines the impact of Eastern and Western influences in Japan including World Wars I and II and the rebuilding and modernization of Japan. The course ends by exploring Japan's present role, influence, and effect on global nationalism.

HIST 1110 - World Civilization from Prehistory to 1500

4.5 - 0.0 - 4.5

This course surveys the history of selected civilizations from the origins of the first human civilizations to the Renaissance. It focuses on the political, economic, social, cultural, and technological contributions of these civilizations, individually and collectively, to the modern world.

HIST 1120 - World Civilization from 1500 to Present

4.5 - 0.0 - 4.5

This course surveys the history of selected civilizations from the Renaissance to the present. It focuses on the political, economic, social, cultural, and technological contributions of these civilizations, individually and collectively, to the modern world.

HIST 2050 - Modern Europe Since 1789

4.5 - 0.0 - 4.5

This course studies the people and national powers which shaped modern Europe from the French Revolution's beginning in 1789 to our global present. There is an emphasis on cultural, social, and political developments of the various European countries within the examined timeframe. Topics include the evolution of European nation states, World War I, World War II, Communism, the post-1989 establishment of democratic countries, and the current state of the European Union. (Formerly Modern Europe Since 1815)

HIST 2200 - Latin American History

4.5 - 0.0 - 4.5

This course covers the history and culture of Latin America from ancient history to the present. It considers political, economic, social, and cultural factors as well as the interaction between Latin America and the larger society.

HIST 2220 - U.S. and Global Military History

4.5 - 0.0 - 4.5

This course is a survey of global military history that situates war strategies and tactics, starting from the founding days of America to the present. The course has a special emphasis on warfare in the 20th and 21st centuries. Its primary purpose is to provide

students with a better understanding of the political, social, cultural, economic, and marshal aspects of global military history.

HIST 2900 - Special Topics in History Variable

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This course permits instruction in special content areas not included in other history courses.

HITP - Health Information Technology

HITP 1005 - Introduction to Electronic Health Records 4.5 - 0.0 - 4.5

This course introduces the types of patient records and documentation issues associated with them. It covers filing systems and record storage circulation methods, including electronic health records. Students gain an understanding for indexes, registers, and health data collection. (Formerly Introduction to Record Keeping)

HITP 1010 - Introduction to Health Information Technology



4.5 - 0.0 - 4.5

This class introduces students to basic concepts in health information technology. Topics such as the evolution of health information technology and the history of electronic health records are discussed. In addition, students are introduced to the field of informatics and basic computing concepts.

HITP 1115 - Electronic Health Records (EHR) Lab Experience



4.5 - 0.0 - 4.5

This course prepares students to use electronic records in a medical practice. It covers history, theory, and potential benefits of EHRs. Students explore EHR components, including prescriptions, exam notes, lab orders and results, scanned images, and others. The course covers privacy and security of health records in detail. (Formerly Using Electronic Health Records)

HITP 1145 - Healthcare Applications

4.5 - 0.0 - 4.5

In this course students learn about today's U.S. healthcare environment. Topics include communication of health information, verbal and non-verbal communication, HIPAA standards, dealing with complaints, legal and ethical issues, maintaining the patient's chart, and proper documentation.

HITP 1310 - Principles of Healthcare Management

4.5 - 0.0 - 4.5

This course reviews principles of management, planning, and leadership and applies them to common situations that occur in the healthcare IT environment. It teaches effective communication skills and human relations skills and reinforces these skills through experiential learning.

HITP 1415 - Workflow Redesign

4.5 - 0.0 - 4.5

Students are introduced to the fundamentals of health workflow process analysis as a necessary component of complete practice automation. Students discuss the concept of quality improvement in the healthcare setting. (Formerly Workflow Redesign I)

HITP 1510 - Working with EHR Systems

4.5 - 0.0 - 4.5

In this laboratory class, students work with simulated electronic health record systems or real EHR systems with simulated data. As students play the role of practitioner using these systems, they learn what is happening under the hood. Students experience threats to security and learn to appreciate the need for standards, high levels of usability, and how errors can occur.

HITP 1512 - Usability and Health Information Systems

4.5 - 0.0 - 4.5

This course introduces students to health IT standards, health-related data structures, software applications, and enterprise architecture in healthcare and public health organizations. Students also study rapid prototyping, user-centered design and evaluation, and usability.

HITP 1616 - Health Information Exchange

4.5 - 0.0 - 4.5

This course presents an in-depth analysis of data mobility, including the hardware infrastructure, the Open Systems Interconnection model, standards, Internet protocol, federations and grids, the National Health Information Network, and other nationwide approaches.

HITP 2040 - Info Systems in Healthcare

4.5 - 0.0 - 4.5

Prerequisite: (2) HDIM 1030 and INFO 1001 — must be completed prior to taking this course.

In this laboratory course, students examine and analyze health information technology applications. Students apply principles to usability of health IT systems, configure electronic health record systems, and examine the potential impact of system-facilitated errors. Students are introduced to the processes used for system acquisition and evaluation.

HITP 2940 - Health IT Capstone

4.5 - 0.0 - 4.5

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This capstone course gives students the opportunity to integrate the skills and knowledge acquired throughout the HITP curriculum. Students develop, manage, and execute each stage of a health IT project.

HITP 2981 - Health IT Internship

0.0 - 13.5 - 4.5

This internship places students in a working and learning environment to receive on-the-job training before graduation. Students prepare a portfolio based on the successful completion of the HITP program. Students must complete 40 hours of work for each credit hour.

HLSM - Horticulture, Land Systems, and Management

HLSM 1000 - Horticulture, Land Systems and Management Orientation

1.0 - 0.0 - 1.0

This course is an introduction to the horticulture land systems management program (HLSM). Students seeking an associate's degree, certificate of achievement or career certificate in the HLSM program should take this course during the first quarter of enrollment.

HLSM 1010 - Introduction to Horticulture

5.0 - 3.0 - 6.0

This course forms the basis for all the other horticulture courses. It includes the study of structures and functions in plants; requirements for growth and production, including soil and fertilizers, temperature, light, growth stimulants and retardants, and water use and application; propagation; and growing problems as they relate to the production of vegetables, bedding plants, bulbs, nursery stock, potted plants, and cut flowers. Hands-on laboratory experience is provided.

HLSM 1020 - Introduction to Aquaponics

2.0 - 3.0 - 3.0

Students are introduced to the methods and applications of raising fish together with plants in closed recirculating systems. Topics include aquaponics principles and system designs, nitrogen cycling and water quality, and fish and plant biology and health. Emphasis is on flood and drain culture of Tilapia, vegetables and herbs.

HLSM 1030 - Introduction to Floral Design

2.0 - 3.0 - 3.0

This course is an introduction to the art and mechanics of arranging fresh flowers for the home and events using modern techniques.

HLSM 1040 - Pesticide Applicators' Certification

3.5 - 3.0 - 4.5

Students learn the requirements for the Nebraska Pesticide Applicators' License as outlined in the Core Manual and the Ornamental and Turf Pest Control Manual, prepared by UNL Extension, in preparation for successful completion of the NE Department of Agriculture exams in weed, insect and disease applicator certification.

HLSM 1050 - Introduction to Landscape Design

2.0 - 3.0 - 3.0

Students are introduced to the areas involved in planning, designing and drawing landscapes including the proper use of drafting equipment and technology. This course covers the basics of sites and site maps, how to draw maps, the tools to use and how to perform basic site analysis.

HLSM 1100 - Perennials: Culture and Identification

2.5 - 1.5 - 3.0

Prerequisite: (1) HLSM 1010 — must be completed prior to taking this course.

This course includes the study of perennials in the landscape. Emphasis is placed on culture, flower/leaf, texture, color, proper location, soil, and blooming periods.

HLSM 1110 - Turfgrass Management

2.5 - 1.5 - 3.0

Prerequisite: (1) HLSM 1010 — must be completed prior to taking this course.

This course includes the laboratory and discussion of the culture and care of turf areas, including residential, public, and intense use areas. Emphasis is on propagation, establishment, identification, watering, fertilizing, insects, diseases, and the safe use of power tools for grasses used in Nebraska turf.

HLSM 1120 - Pomology: Culture and Identification

3.0 - 0.0 - 3.0

Prerequisite: (1) HLSM 1010 — must be completed prior to taking this course.

This course covers the characteristics, identification, care, and use of small fruits and tree fruits, including establishing planting, controlling pests, pollination, pruning, and fruit set.

HLSM 1130 - Deciduous Trees: Culture and Identification

2.5 - 1.5 - 3.0

Prerequisite: (1) HLSM 1010 — must be completed prior to taking this course.

This course includes the study of characteristics, growth rate, care, and use of deciduous trees for landscaping purposes in the Midwest. The students follow right plant, right place guidelines and are aware of insects and diseases that could be a problem for certain trees. Students learn proper use of equipment used for pruning and spraying when necessary.

HLSM 1140 - Coniferous Trees: Culture and Identification

2.5 - 1.5 - 3.0

Prerequisite: (1) HLSM 1010 — must be completed prior to taking this course.

This course covers both herbaceous and evergreen groundcovers and where they grow. Students also study the broadleaf and needled evergreens with emphasis on the right plant, right place guidelines. Students learn about correct pruning methods and tools and the right time of year to do pruning and propagation.

HLSM 1150 - Shrubs: Culture and Identification

2.5 - 1.5 - 3.0

Prerequisite: (1) HLSM 1010 — must be completed prior to taking this course.

This course covers the use of shrubs in the landscape that are hardy in Nebraska. Emphasis is placed on characteristics that help in identification, including leaf, flower, stems, time of bloom, size of shrub, and proper environment for growth. Included in this class are awareness of diseases and insects that might be a problem and knowing pruning techniques and proper time to spray, along with equipment to use.

HLSM 1200 - Floral Care and Identification**1.0 - 3.0 - 2.0**

This course provides an in-depth and hands-on experience with the plants that are used in the floral design industry. This course stresses nomenclature and identification. Emphasis is placed on characteristics that help in identification including leaf, flower, stems, time of bloom, size of bud, and the proper environment for growth. Students have hands-on learning experiences as they explore proper procedures for care and handling techniques.

HLSM 1210 - Floral Design: Specialty Events and Occasions**2.0 - 3.0 - 3.0**

Prerequisite: (1) HLSM 1030 — must be completed prior to taking this course.

This course provides advanced practice leading to excellence in designing for specialty events.

HLSM 1220 - Floral Design: Tablescape and Hospitality**2.0 - 3.0 - 3.0**

Prerequisite: (1) HLSM 1030 — must be completed prior to taking this course.

This course provides advanced practice leading to excellence in designing for weddings, home decor, edible arrangements, funerals, and parties.

HLSM 1230 - Floral Design: Sympathy**1.0 - 3.0 - 3.0**

Prerequisite: (1) HLSM 1030 — must be completed prior to taking this course.

This course provides advanced practice leading to excellence in designing for sympathy and remembrance designs. Students learn all aspects of sympathy designs from consultation with loved ones to completion of designs.

HLSM 1320 - Landscape Graphics: 2-D**1.0 - 3.0 - 2.0**

Prerequisite: (1) HLSM 1010 — must be completed prior to taking this course.

This course explores current 2-D computer applications as they relate to the landscape industry. Students explore drafting and different uses for the application along with how to use these platforms to communicate to clients and contractors.

HLSM 1325 - Landscape Graphics - 3-D**1.0 - 3.0 - 2.0**

Prerequisite: (1) HLSM 1010 — must be completed prior to taking this course.

This course explores current 3-D computer applications as they relate to the landscape industry. Students explore drafting and different uses for the application along with how to use these platforms to communicate to clients and contractors.

HLSM 1340 - Construction Documents and Details**2.0 - 3.0 - 3.0**

Prerequisite: (1) HLSM 1050 — must be completed prior to taking this course.

Students develop a deeper sense of understanding of construction documents and the elements needed to construct

them properly. The materials covered include instruction on reading and putting together construction documents, details of both hardscape and elements in the landscape.

HLSM 1400 - Natural Systems and Sustainability**3.0 - 0.0 - 3.0**

Prerequisite: (1) HLSM 1010 — must be completed prior to taking this course.

This class introduces students to the basic principles and importance of natural systems, focusing on ecology and biodiversity. Students are also introduced to the role of sustainability in landscape design and its effect on natural systems. This class encourages critical thinking about design and its impact on the site and surrounding area. Current and potential sustainable design theories are examined along with a brief history of sustainable design.

HLSM 2200 - Floral Design: Weddings**2.0 - 3.0 - 3.0**

Prerequisite: (1) HLSM 1030 — must be completed prior to taking this course.

This course provides advanced practice leading to excellence in designing for weddings.

HLSM 2205 - Floral Body Wear I**1.0 - 3.0 - 2.0**

This course teaches the introduction to the design and implementation of corsage and boutonnières. Students work through the basic fundamentals of working with flowers, taping, wiring, gluing, and decorative additions. Students design for several different occasions.

HLSM 2215 - Floral Body Wear II**1.0 - 3.0 - 2.0**

Prerequisite: (1) HLSM 2205 — must be completed prior to taking this course.

This course teaches advanced design and implementation of corsage and boutonnières along with the current trends in floral body wear. Students work through advanced fundamentals of working with flowers, taping, wiring, gluing, and decorative additions. Students design for several different occasions.

HLSM 2220 - Advanced Bouquet**1.0 - 3.0 - 2.0**

This course teaches advanced design and implementation of bouquets along with the current trends in bridal floral accessories. Students work through advanced fundamentals of working with flowers, taping, wiring, gluing, and decorative additions. Students design for several different types of bouquets.

HLSM 2300 - Landscape Design I**2.0 - 3.0 - 3.0**

Prerequisite: (1) HLSM 1050; — must be completed prior to taking this course.

Students are introduced to the areas involved in planning, designing, and composing landscapes including the proper use of drafting equipment and technology. Students learn existing site analysis, correct identification of site opportunities and issues, and different types of design theory and methods.

HLSM 2305 - Landscape Design II**2.0 - 3.0 - 3.0**

Prerequisite: (2) HLSM 1050 and HLSM 2300; — must be completed prior to taking this course.

Students demonstrate their ability to design and compose landscapes in this final design class that focuses on the relationship between plants and design. Students briefly review previous classes and have an opportunity to work on a large design project of their own from beginning to end.

HLSM 2320 - Grounds Construction and Maintenance**2.0 - 3.0 - 3.0**

Prerequisite: (1) HLSM 1050 — must be completed prior to taking this course.

Students gain an understanding of how landscape products are installed. Students learn how to construct landscape elements and maintain them once built. Materials covered vary based on new trends and technology.

HLSM 2330 - Therapeutic Horticulture**2.5 - 1.5 - 3.0**

Prerequisite: (1) HLSM 1010 — must be completed prior to taking this course.

This course is the study of the history of restorative gardens and the benefits provided to people. The course emphasizes therapeutic benefits to people working with plants and gardens.

HLSM 2340 - Introduction to Regional Planning**3.0 - 0.0 - 3.0**

Prerequisite: (1) HLSM 1010 — must be completed prior to taking this course.

This course introduces students to the basic principles and importance of regional planning.

HLSM 2400 - Site Systems**3.0 - 0.0 - 3.0**

Prerequisite: (1) HLSM 1010 — must be completed prior to taking this course.

This course introduces students to the basic principles and importance of topography, soil, and storm water.

HLSM 2410 - Plant Propagation**2.0 - 3.0 - 3.0**

Prerequisite: (1) HLSM 1010 — must be completed prior to taking this course.

This course covers the principles and practices of plant propagation. Emphasis is placed on the importance of clones/cultivars that are maintained by seed and vegetative means. Students study the physiological development of plants from seed to maturity and the many ways to propagate them in these stages. The course also offers hands-on introduction to these propagation techniques as well as learning the wide range of plants that are propagated in each area.

HLSM 2420 - Plant Pathology**2.5 - 1.5 - 3.0**

Prerequisite: (1) HLSM 1010 — must be completed prior to taking this course.

This course is an introduction to plant diseases of economic importance to horticultural crops. Identifying characteristics of diseases, life cycles, and IPM control methods are examined.

HLSM 2425 - Entomology**2.5 - 1.5 - 3.0**

Prerequisite: (1) HLSM 1010 — must be completed prior to taking this course.

This course examines detection, identification, and control of insects that damage ornamental plants. Identifying insect characteristics, life cycles, and IPM control methods are examined.

HLSM 2430 - Plant Physiology**3.5 - 3.0 - 4.5**

Prerequisite: (1) HLSM 1010 — must be completed prior to taking this course.

This is an introductory course studying plant morphology and physiology of herbaceous and woody plant divisions within the plant kingdom.

HLSM 2500 - Small Market Farming**3.0 - 0.0 - 3.0**

Prerequisite: (1) HLSM 1010 — must be completed prior to taking this course.

Students receive an overview of the current study of urban agriculture with emphasis on production in limited production area models. Areas explored include the different marketing methods available to small producers, locating current sources for business development and the agricultural products that can be produced.

HLSM 2510 - Olericulture**2.0 - 3.0 - 3.0**

Prerequisite: (1) HLSM 1010 — must be completed prior to taking this course.

Students learn about food systems through cultivating a diverse vegetable garden. Emphasis is placed on organic and biodynamic management practices.

HLSM 2520 - Introduction to Small Animal Husbandry**2.0 - 3.0 - 3.0**

This course covers the principles and practices of small animal husbandry: laying chickens and other poultry, rabbits, and squab. The course covers purchasing, housing, behavior, hygiene, nutrition, and harvest/fabrication.

HLSM 2610 - Floriculture Production**2.0 - 3.0 - 3.0**

Prerequisite: (1) HLSM 1010 — must be completed prior to taking this course.

This course provides an opportunity for students to acquire knowledge and skills in producing greenhouse crops under glass, in plastic structures, and outdoors.

HLSM 2900 - Special Topics in HLSM Variable

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This course permits instruction in special content areas not included in other horticulture courses, depending upon interest and relevancy to the curriculum. Topics may include EPA certification, water gardening, and rain gardens.

HLSM 2910 - Internship
0.0 - 15.0 - 3.0

Prerequisite: (2) Minimum of 18.0 credit hours in HLSM; and instructor approval — must be completed prior to taking this course.

Students work in a horticulture-related field under the direction of a qualified supervisor. Based on state guidelines, students must complete 40 hours of work for each credit hour.

HLSM 2920 - Special Projects in Horticulture
0.0 - 3.0 - 1.0

Prerequisite: (2) HLSM 1010 and enrollment in Horticulture program — must be completed prior to taking this course.

Students work with the horticulture faculty in designing, implementing, and evaluating a special horticulture project. Students meet with the faculty on a regular basis for consultation and evaluation.

HLTH - Health

HLTH 1050 - Nutrition in the Life Cycle 🗑️
4.5 - 0.0 - 4.5

Prerequisite: (1) BIOS 1310 or BIOS 2310 — must be completed prior to taking this course.

Nutrition represents an important health concern throughout the life cycle. This course includes human nutrition, nutrition in healthcare through the lifecycle, introduction to therapeutic and modified diets, nutritional assessment and analysis, and a brief introduction overview of nutrition support. This course also covers gastrointestinal, cardiovascular, respiratory, and endocrine systems as related to medical nutrition therapy. This is a transferable course.

HLTH 1200 - Long-Term Care - CNA
5.0 - 4.5 - 6.5

Prerequisite: (2) 16 years of age; and documented proficiency in English — must be completed prior to taking this course.

The course meets the Nebraska Health and Human Services System training requirements for nursing assistant certification and employment in long-term care facilities. The course combines classroom lecture, laboratory application, and clinical experience for development of basic skills needed to care for the elderly. Course content focuses on teaching nursing assistants to provide safe, effective, and caring services to the elderly or chronically ill patients of any age in a long-term care facility.

HLTH 1300 - Medication Aide
5.0 - 0.0 - 5.0

Pre/Co Requisite: (1) 18 years of age by end of course — must be taken either prior to or at the same time as this course.

This course prepares students to meet the requirements of the Nebraska Medication Aide Act. It includes information regarding medication administration, pharmacology, state rules and

regulations, classification of drugs, and documentation of drug administration. The course focuses on the responsibilities of the medication aide in an assisted-living facility or a skilled-care nursing facility.

HLTH 1510 - Foundations of Public Health
4.5 - 0.0 - 4.5

Foundations of Public Health provides students with foundational knowledge of public health's historical contributions; the ethical bases; key terms and concepts; system organization; and the social, behavioral, psychological, and biological factors that contribute to specific individual and community health outcomes through interactive learning strategies and the application and integration of concepts to understand and prevent current public health problems and those facing public health in the 21st century.

HLTH 1520 - Prevention in Community Health
4.5 - 0.0 - 4.5

This course introduces and applies the principles of public health and study design needed to support population-based and community-health assessment and evaluation. It focuses on how individuals and groups approach issues of health behavior, health communication, and health promotion. Basic and more advanced methods are covered as appropriate, with application to public health and community contexts.

HLTH 2900 - Selected Topics
Variable

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This course permits instruction in special content areas not included in other courses in the Health program.

HLTH 2960 - Internship
0.0 - 24.0 - 6.0

The internship is an agreement between the College, student, and public or private agency, which provides hands-on training for the student. Written goals and objectives, as well as evaluation criteria, are agreed upon and confirmed in writing by the student, site supervisor, and faculty mentor. Based on state guidelines, students must complete 40 hours of observation for each credit hour in this course. Should students elect to use his/her own job as an intern site, he/she must perform and be evaluated at positions in which he/she is not regularly assigned.

HMRL - Human Relations

HMRL 1010 - Human Relations Skills 🗑️ 🗓️
4.5 - 0.0 - 4.5

This is an introductory course in interpersonal skills, stressing the importance of utilizing those skills in the workplace. Students are presented with opportunities to become more effective, discerning, ethical, flexible, perceptive, and understanding in both professional and personal endeavors. Special attention is given to appropriate communication skills, multinational and diversity awareness, teamwork, and job-seeking skills as applied to an increasingly customer-oriented workplace.

HMRL 1050 - Leadership: Training and Skill Development 4.5 - 0.0 - 4.5

This course prepares students to assume increasingly responsible leadership roles in their personal, professional, and academic lives. As such, the course focuses not only on significant theories of leadership and their applicability to leaders of the past and present but also includes substantial hands-on, experiential learning opportunities in which students practice leadership in action.

HMRL 2900 - Special Topics in Human Relations Variable

This course permits instruction in special areas of interest within the human relations discipline.

HMSV - Human Services

HMSV 1010 - Introduction to Human Services ☞ 4.5 - 0.0 - 4.5

This introductory course explores the human services field. Students are exposed to historical perspectives, ethics, and the role of the community support human service practitioner in various agencies and specific areas of human services employment.

HMSV 1120 - Helping Skills and Techniques 4.5 - 0.0 - 4.5

This course introduces students to basic interpersonal skills such as appropriate self-disclosure, active listening, and constructive challenging. The course also prepares students to use professional helping skills on a one-to-basis. Helping skills that are discussed and practiced include at least four of the following: active listening, reflective feedback, summarizing, self-disclosing, displaying empathy, confronting, establishing rapport, and communicating at the client's comprehension level. Students acquire and demonstrate skills through videotaped role-plays, in-class role-plays, counseling critiques, case studies, and other experiential exercises.

HMSV 1130 - Introduction to Counseling Theories ☺ 4.5 - 0.0 - 4.5

Prerequisite: (2) HMSV 1120 with a grade of C or better; and ENGL 1020 — must be completed prior to taking this course.

Students focus on an examination of the historical and current theories of counseling. Counseling theories include at least the following: rational-emotive therapy, Gestalt therapy, reality therapy, and client-centered therapy.

HMSV 1140 - Assessment, Case Planning, and Management ☞ 4.5 - 0.0 - 4.5

Prerequisite: (1) LMHP or PLMHP; or (2) ENGL 1020 and PSYC 1010 — must be completed prior to taking this course.

This course includes the process of collecting pertinent data about client or client systems and their environment and appraising the data as a basis for making decisions regarding diagnosis, treatment, and/or referral of chemical dependency clients. Instruction on coordinating and prioritizing client treatment

goals and working with other services, agencies, and resources to achieve those treatment goals is included. This course also includes practice in assessing and managing a case. This includes the development of sample case records and utilization of written client records to guide and monitor services with emphasis on the development of the social history and intake, initial assessment, case reviews and consultation, individual treatment plan with measurable goals and objectives, documentation of progress, on-going assessment, and discharge planning including appropriate referrals. Confidentiality of client information and records as defined in 42 CFR Part 2 is addressed. The strengths and weaknesses of various levels of care and the selection of an appropriate level for clients is studied. Basic information on two or more objective screening instruments for alcohol/drug disorders, such as the Michigan Alcoholism Screening Test (MAST), Substance Abuse Subtle Screening Inventory (SASSI), Addiction Severity Index (ASI), Mortimer-Filkins, and others are studied.

HMSV 1150 - Community Resources ☞ 4.5 - 0.0 - 4.5

Prerequisite: (1) HMSV 1010 — must be completed prior to taking this course.

This course provides students with the opportunity to explore career options in the human services field through direct observation in a field setting and through guest speakers. This course also helps students to begin to develop knowledge of community resources.

HMSV 1160 - Medical and Social Aspects of Addictions ☞ 4.5 - 0.0 - 4.5

Prerequisite: (1) LMHP or PLMHP; or ENGL 1010 — must be completed prior to taking this course.

Pre/Co Requisite: (1) PSYC 1010 (waived for those with LMHP or PLMHP) — must be taken either prior to or at the same time as this course.

This course includes the study of the physiological, psychological, and sociological aspects of alcohol/drug use, abuse, and dependence. The classifications and basic pharmacology of drugs, basic physiology, and the effects of drug use on the systems of the human body and alcohol and drug tolerance are discussed.

HMSV 2050 - Ethics and Professionalism ☞ 4.5 - 0.0 - 4.5

Prerequisite: (4) ENGL 1020; HMSV 1130; HMSV 1140; plus HMSV 1160 if in chemical dependency counseling option or HMSV 1010 if in general human services option — must be completed prior to taking this course.

This course addresses a wide range of ethical issues as they apply to human services and chemical dependency counseling. These issues include confidentiality, dual relationships, competency and referral, counselor values and conflicts, legality and ethics, client welfare, establishing appropriate limits and boundaries in the client relationship, informed consent, dealing with impaired professionals, professionalism (including responsibility for competence, professional development, burnout, and self-care), and the need for cultural diversity. This course examines ethical codes of professional organizations.

These organizations include, but are not limited to, NOHSE, NAADAC, ACA, APA, ARCA, and NASW. Also included is information on work behavior and work attitude, and professional presentation and development at a practicum site. (Formerly Professional Ethics and Issues)

HMSV 2110 - Group Counseling

4.5 - 0.0 - 4.5

Prerequisite: (1) ENGL 1020 — must be completed prior to taking this course.

Pre/Co Requisite: (1) HMSV 1130 — must be taken either prior to or at the same time as this course.

This course includes the study of group theory, processes, and dynamics as well as techniques and methods of group counseling and facilitation. The coursework includes practice in group counseling and facilitation.

HMSV 2120 - Social Services Policy and Exceptional Populations

4.5 - 0.0 - 4.5

Prerequisite: (3) HMSV 1010, PSYC 1010, and ENGL 1020 — must be completed prior to taking this course.

This course examines social policy development based on historical factors, value assumptions, and social, political, and economic contexts. Social issues in the field of human services are explored and related to social policy. This course also identifies and defines exceptionalities, as well as the social policies and legalities implemented. (Formerly Social Services Policy)

HMSV 2130 - Treatment Issues in Chemical Dependency

4.5 - 0.0 - 4.5

Prerequisite: (1) LMHP or PLMHP; or (2) HMSV 1160 and ENGL 1020 — must be completed prior to taking this course.

Pre/Co Requisite: (1) HMSV 1140 (waived for those with LMHP or PLMHP) — must be taken either prior to or at the same time as this course.

This course includes the study of treatment issues specific to alcohol and drug disorders, including, as a minimum, dual diagnosis and the impact of physical and mental health disorders on alcohol and drug treatment; the historic and generational influences on alcohol and drug abuse and dependence, including adult children of alcoholics, enabling, and the family disease concept; the influences of Alcoholics Anonymous, Narcotics Anonymous, and the 12-step philosophies in alcohol and drug treatment; and the uniqueness of special populations, including sexual orientation, cultural dimensions, adolescents, women, and the elderly, and how that uniqueness affects assessment of, response to, and delivery of alcohol and drug treatment. Students discuss treatment issues specific to different populations; other aspects of chemical dependency treatment, including treatment methodology; aspects of treatment that address resistance, denial, minimization, relapse and relapse prevention, cross-addiction, spirituality issues; and the influence of other self-help groups, including 12-step groups.

HMSV 2150 - Multicultural Counseling

4.5 - 0.0 - 4.5

Prerequisite: (1) ENGL 1020 — must be completed prior to taking this course.

Pre/Co Requisite: (1) HMSV 1130 — must be taken either prior to or at the same time as this course.

This course focuses on the counseling implications for cultural, social, and economic factors as they affect diverse groups, including African Americans, Native Americans, Hispanics, and others. Students pay attention to multicultural barriers and to the impact of the counselor's own world view on the counseling relationship. The course examines adaptation of counseling techniques and theories to the needs of minority clients.

HMSV 2160 - Advanced Group Skills

4.5 - 0.0 - 4.5

Prerequisite: (1) HMSV 2110 — must be completed prior to taking this course.

This course is an advanced course in theory and practice of group counseling. Students continue to learn about the process of group counseling. Included in the discussion is an exploration of group dynamics in working with families along with reviewing theories of family therapy with an emphasis on the systemic model of therapy.

HMSV 2450 - Crisis Intervention

4.5 - 0.0 - 4.5

Prerequisite: (2) HMSV 1120 and ENGL 1020 — must be completed prior to taking this course.

The focus of this course is twofold: 1) to explore theories about crisis intervention and how to apply that theory in the field; and 2) to systematically improve the students' interview, communication, evaluation, and helping skills within the framework of crisis intervention and management.

HMSV 2900 - Special Topics in Human Services

Variable

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This course permits instruction in special content areas not included in other courses of the Human Services program.

HMSV 2991 - Practicum I - General Human Services

0.0 - 15.0 - 5.0

Prerequisite: (2) Completion of all first-year courses as listed in the catalog; and special admission requirements — must be completed prior to taking this course.

This course provides field opportunities to expand and apply students' practical and classroom experience. Students must complete field experience and a practicum seminar in conjunction with the assigned practicum.

HMSV 2992 - Practicum II - General Human Services

0.0 - 15.0 - 5.0

Prerequisite: (1) HMSV 2991 — must be completed prior to taking this course.

This course provides opportunities and experiences to integrate and apply classroom and textbook knowledge in addition to

experiences from the first practicum. Students must complete field experience and a practicum seminar in conjunction with the assigned practicum.

HMSV 2993 - Practicum III - General Human Services
0.0 - 15.0 - 5.0

Prerequisite: (1) HMSV 2992 — must be completed prior to taking this course.

This course provides experience in a more specialized area of human services. Students continue to integrate and apply classroom knowledge and experiences as well as experiences from the first two practica. Students must complete a practicum seminar in conjunction with the assigned practicum.

HMSV 2994 - Practicum I - Chemical Dependency Counseling
0.0 - 15.0 - 5.0

Prerequisite: (2) Completion of all first-year courses as listed in the catalog; and special admission requirements — must be completed prior to taking this course.

This course provides an opportunity to have a practical work experience with chemical dependency counseling. The College assigns students to agencies, institutions, or treatment centers serving and treating chemically dependent clients. Students must complete a practicum seminar in conjunction with the assigned practicum.

HMSV 2995 - Practicum II - Chemical Dependency Counseling
0.0 - 15.0 - 5.0

Prerequisite: (1) HMSV 2994 — must be completed prior to taking this course.

This course provides the opportunity to expand students' practical work experience in chemical dependency counseling. The College assigns students to agencies, institutions, or treatment centers serving and treating chemically dependent clients. Students must complete a practicum seminar in conjunction with the assigned practicum.

HMSV 2996 - Practicum III - Chemical Dependency Counseling
0.0 - 15.0 - 5.0

Prerequisite: (1) HMSV 2995 — must be completed prior to taking this course.

This course provides the opportunity to expand students' practical work experience in chemical dependency counseling. The College assigns students to agencies, institutions, or treatment centers serving and treating chemically dependent clients. Students must complete a practicum seminar in conjunction with the assigned practicum.

HUMS - Humanities

HUMS 1000 - Humanities through the Arts ☺
4.5 - 0.0 - 4.5

Students explore the range of humanity's creative responses to the fundamental intellectual and artistic questions that have continually preoccupied reflective individuals.

HUMS 1100 - Classical Humanities ☺
4.5 - 0.0 - 4.5

Recommended: ENGL 1010 and ENGL 1020 — recommended prior to taking this course, but not required.

This course is an interdisciplinary examination of the ancient Greek and Roman cultures.

HUMS 1110 - Origins of the Humanities ☺
4.5 - 0.0 - 4.5

This course explores the ancient non-Western cultures and societies that gave rise to Western civilization. Topics include art, literature, and philosophy in the ancient cultures of the Near East, Asia, and the Mediterranean.

HUMS 1120 - The Humanities in the Medieval - Renaissance World ☺
4.5 - 0.0 - 4.5

Recommended: ENGL 1010 and ENGL 1020 — recommended prior to taking this course, but not required.

This course is an interdisciplinary overview of the development of European culture focusing on human accomplishments in painting, sculpture, architecture, music, literature, religion, and philosophy. This course concentrates on the evolution of the Western civilization from the Medieval period through the Renaissance. (Formerly Humanities I: Medieval - Renaissance)

HUMS 1130 - The Humanities in the Modern World ☺
4.5 - 0.0 - 4.5

Recommended: ENGL 1010 and ENGL 1020 — recommended prior to taking this course, but not required.

This course is an interdisciplinary overview of the development of Western culture from the Baroque period through the present. (Formerly Humanities II: Modern World)

HUMS 1150 - The Humanities in the Non-Western World ☺
4.5 - 0.0 - 4.5

Recommended: ENGL 1010 and ENGL 1020 — recommended prior to taking this course, but not required.

This course is a comparative study of non-Western cultures focusing on human accomplishments in painting, sculpture, architecture, music, literature, religion, and philosophy. It focuses on the past and contemporary cultural achievements of the people of the Middle East, Africa, Asia, and Oceania. (Formerly Multi-Cultural Humanities II: The Humanities in the Non-Western World)

HUMS 2310 - Film History and Appreciation ☺
4.5 - 0.0 - 4.5

Prerequisite: (1) Level I English; or HUMS 1000; or instructor approval — must be completed prior to taking this course.

This course explores the development of the film genre as an art form, an industry, and a system of representation and communication as well as examines film theory and ideology. It covers how film works technically, stylistically, aesthetically, and culturally.

HUMS 2900 - Special Topics in the Humanities**Variable**

This course permits instruction in special content areas not included in other humanities courses. Topics may expand upon the relationships between culture and the visual or performing arts and the investigation of non-Western cultures.

HVAC - Heating, Air Conditioning, and Refrigeration**HVAC 1000 - Refrigeration Electrical Theory and Application**
5.0 - 3.0 - 6.0

This course consists of lectures, discussions, and demonstrations in the general area of electrical theory and practice used in HVAC systems. It makes a general study of the electron theory as it relates to the electrical circuit and covers various circuits, resistance capacitance, symbols, and ladder diagrams. Students conduct lab experiments to provide understanding of electrical theory. The course places great emphasis upon safety, as students are working with actual controls and voltages.

HVAC 1010 - Refrigeration Service Principles and Basic Automatic Controls**5.0 - 3.0 - 6.0**

This course provides experience in actual refrigeration service practice and stresses controls, system maintenance, and subassembly replacement. Students work out typical service problems and learn the fundamentals of controls, definitions, measurements, electric controls, safety controls, and refrigerant controls.

HVAC 1020 - Refrigeration Shop Practices**4.5 - 0.0 - 4.5**

This course provides practice in using tools in basic refrigeration jobs, such as tube bending, flaring, swaging, and soldering. Students become acquainted with standard shop tools and equipment so they can meet or exceed industry standards.

HVAC 1210 - Gas Heat**4.5 - 0.0 - 4.5**

Prerequisite: (1) HVAC 1000 — must be completed prior to taking this course.

Students examine, service, and troubleshoot various types of gas furnaces. The course covers heating fundamentals, including combustion and heat transfer, and explains heating components, including spark ignition. Special attention is given to safety.

HVAC 1211 - Electric Heat**4.5 - 0.0 - 4.5**

Prerequisite: (1) HVAC 1210 — must be completed prior to taking this course.

Students make a comprehensive study of electric furnace wiring for residential and light commercial installations. The course covers operating and safety controls in-depth and gives considerable time to proper care and use of test instruments, troubleshooting, and safety requirements.

HVAC 1330 - Commercial Refrigeration Installation**4.5 - 0.0 - 4.5**

Prerequisite: (3) HVAC 1000; HVAC 1010; and HVAC 1020 — must be completed prior to taking this course.

Students install a complete refrigeration system (low-temperature/medium-temperature) using hard-drawn copper tubing. Students also wire, leak check, evacuate, and charge the unit using the correct refrigerant. Upon completion of this unit, the refrigerator must run, cool, and defrost according to manufacturer's specifications.

HVAC 1331 - Commercial Refrigeration Service**4.5 - 0.0 - 4.5**

Prerequisite: (2) HVAC 1000 and HVAC 1010 — must be completed prior to taking this course.

Pre/Co Requisite: (1) HVAC 1020 — must be taken either prior to or at the same time as this course.

Students study various systems and solve typical service problems. Students repair refrigerant leaks, replace components, evacuate and dehydrate systems, install oil and refrigerant charges, and test and adjust systems.

HVAC 1500 - Air Conditioning, Domestic Refrigeration, and Appliance Repair**4.5 - 0.0 - 4.5**

Prerequisite: (2) HVAC 1000 and HVAC 1010 — must be completed prior to taking this course.

Pre/Co Requisite: (1) HVAC 1020 — must be taken either prior to or at the same time as this course.

This course begins with a review of the refrigerant cycle and system components and covers terminology used in the trade, principles of refrigeration, and identification of basic system components. Students practice with tools and shop equipment of the trade, including instruction in standard procedures and safety measures. They study and service self-contained air-cooled residential systems. The course covers appliance repairs such as washers, dryers, and microwaves, and gives special attention to safety.

HVAC 1540 - All-Weather Systems (Conventional)**4.5 - 0.0 - 4.5**

Prerequisite: (1) HVAC 1210 — must be completed prior to taking this course.

The course emphasizes combination heating and cooling systems. The class and laboratory time deals primarily with natural gas heating and cooling systems. It also covers humidification, electronic air cleaning, and air filtering.

HVAC 2220 - All-Weather Systems (Heat Pumps)**4.5 - 0.0 - 4.5**

Prerequisite: (1) HVAC 1211 — must be completed prior to taking this course.

This course covers the refrigerant cycle and the reverse cycle principle, including the reversing valve. It discusses special components and accessories used with heat pumps and devotes a considerable amount of instruction to electric controls found on heat pump systems and to the various services involved.

HVAC 2221 - Installation and Service Problems**4.5 - 0.0 - 4.5**

Prerequisite: (1) HVAC 1210 — must be completed prior to taking this course.

Students make a thorough study of problems related to gas heat installation. The course covers the areas of venting, combustion air, gas piping, and troubleshooting. Efficiency tests are conducted in the lab. The course places special emphasis on safety.

HVAC 2310 - Refrigeration Certification**2.0 - 0.0 - 2.0**

This course covers the usage of EPA-approved equipment to remove, recycle, and reclaim refrigerant. Students take the EPA test with a pass or fail of 75 percent minimum.

HVAC 2320 - Advanced Commercial Refrigeration**4.5 - 0.0 - 4.5**

Prerequisite: (2) HVAC 1000 and HVAC 1010 — must be completed prior to taking this course.

Students study various types of installations with emphasis on the product to be cooled, the desired temperature to be maintained, and humidity conditions. Students solve problems involving system balance and component capacity, use of heat load charts, pipe sizing tables, manufacturers' data, and specification sheets, along with procedures for load calculations used in commercial refrigeration. Lab work consists of wiring and monitoring live units.

HVAC 2420 - Advanced Residential Air Conditioning**4.5 - 0.0 - 4.5**

Prerequisite: (2) HVAC 1540 and CNST 1020 — must be completed prior to taking this course.

Students calculate heating and cooling needs of various structures using computerized calculators. The course covers equipment selection, duct design, static pressure and airflow.

HVAC 2550 - Air Conditioning (Commercial)**4.5 - 0.0 - 4.5**

Prerequisite: (1) HVAC 1540 — must be completed prior to taking this course.

This course covers single- and three-phase power and includes compressors, condensers, coils, valves, and controls for commercial equipment. Students study and service unitary, remote, water, and air-cooled water tower systems.

HVAC 2560 - Sheet Metal Layout**4.5 - 0.0 - 4.5**

This course defines the basic fittings used in residential air conditioning and heating systems. Students participate in identification of typical hand tools, project layout, fabrication, machine operation and final assembly of 12 completed modules.

HVAC 2570 - Automated Building Controls**4.5 - 0.0 - 4.5**

Prerequisite: (1) HVAC 2550 — must be completed prior to taking this course.

Students are introduced to the microprocessor and various HVAC systems and their components. Students learn special commands and programming of the microprocessor controller.

HVAC 2900 - Special Topics in HVAC**Variable**

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This course permits instruction in special content areas not included in other courses in the Heating, Air Conditioning, and Refrigeration program.

HVAC 2981 - Internship**0.0 - 15.0 - 3.0**

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

The internship provides experience in systems identification of components systems, temperature ranges, systems cleaning, refrigeration charging operations, leak checking and repairing, customer relations, and billing. The course includes student performance evaluations and on-site inspection. Based on state guidelines, students must complete 40 hours of work for each credit hour.

INCT - Industrial and Commercial Trades**INCT 0900 - Introduction to the Trades****2.0 - 0.0 - 2.0**

This course introduces the trades by examining the various employment paths available. It includes classroom discussion, on-site tours, and guest presenters. It also covers tools, fasteners, equipment, basic measurement, and shop safety.

INCT 1000 - Industrial Safety and Health**4.5 - 0.0 - 4.5**

This course covers the basics of industrial safety and health. Topics covered are OSHA-required and include introduction to OSHA, managing safety and health, hazard communication, fire protection, emergency action plans, electrical safety, PPE, material handling, and machine guarding. This course also covers OSHA elective areas such as BBP, fall protection, welding, LOTO, and confined spaces. Students who successfully complete and attend all OSHA-required and elective sections of this course are eligible to receive the OSHA 30-hour general industry card.

INCT 1010 - Introduction to the Trades II**Variable**

This course is designed to introduce students to skills generally required for entry-level employment in the trades. Topics include basic safety, hand tools, power tools, construction math, print reading, rigging, communication, and employability skills.

INCT 1020 - Lead Safe Practices I**1.0 - 0.0 - 1.0**

This course provides eight hours of instruction in lead safety training as it applies to remodeling repairs and painting. It uses curriculum developed by the EPA and HUD and is an approved EPA/HUD RRP English initial certification course.

INCT 1100 - Logistics and Warehousing for Applied Technologies

4.5 - 0.0 - 4.5

This course is an introduction to the logistics and warehousing career field. Students study the planning, management, and movement of people, materials, and products by road, air, rail, pipeline, and water. This course is designed as an introduction to the activities associated with transportation, warehousing/distribution/material handling, and inventory management, with particular attention to applications in the applied technologies area. Additional information includes industry history, legal and regulatory issues, documentation requirements, and safety and security concerns. This course prepares students to test for the nationally recognized certification as a Certified Logistics Associate (CLA).

INCT 1212 - Motor and Machine Controls

9.0 - 0.0 - 9.0

Prerequisite: (1) ELTR 1200 or UTIL 1020 with a grade of C or better in either; or ELAP 1220 — must be completed prior to taking this course.

This course introduces state-of-the-art motor control components and provides students with a basic knowledge of control circuitry. Students build on their experiences from Basic Electricity by designing, building, and troubleshooting more complex circuits. The designed circuits control live, three-phase, line voltage equipment. Students use devices such as contactors, motor-starters, relays, timers, mechanical, and proximity switches. They also learn about and utilize electronic motor controls and programmable devices such as variable frequency drives.

INCT 1301 - Home and Building Maintenance Carpentry

6.5 - 0.0 - 6.5

This course includes an introduction to maintenance carpentry. Topics include basic carpentry tools, tool safety, drywall hanging and patching, and suspended ceiling installation. The course emphasizes insulation and weatherization.

INCT 1304 - Small Engine Repair

4.0 - 1.5 - 4.5

This course covers the individual systems in small gas engines that work together to produce power. Students learn the six systems of internal combustion gasoline-powered engines: fuel, exhaust, ignition, combustion, cooling, and lubrication. This course also covers safety, proper use of hand tools, and special tools used in the repair and maintenance of small engines.

INCT 1500 - Introduction to Distribution

4.5 - 0.0 - 4.5

Students interested in learning about the importance of distribution in manufacturing need a good overview of distributors and distributorships. This course provides this by examining the role of distributors in bringing goods to market, adding value through distributor services, and tracking products from procurement through final sale and installation. It also introduces basic accounting principles and contract law necessary for distribution.

INCT 2050 - Problem-Solving

3.0 - 0.0 - 3.0

This course builds troubleshooting expertise for maintenance professionals and decision-makers at all levels. It examines creative and critical thinking, problem solving, and troubleshooting.

INCT 2060 - Mechanical Power Systems

4.0 - 0.0 - 4.0

This course covers mechanical power system essentials. Topics include belts, pulleys, sheaves, lubrication, gears, sprockets, gear reducers, bearings, couplings, and chain drives.

INCT 2070 - Hydraulics and Pneumatics

4.0 - 0.0 - 4.0

This course covers the basics of fluid power, both hydraulic and pneumatic. It also covers transmission of fluid energy, identification of components, and controls.

INCT 2231 - Programmable Logic Controllers I

4.5 - 0.0 - 4.5

Prerequisite: (1) INCT 1212 with a grade of C or better — must be completed prior to taking this course.

This course introduces programmable logic controllers. It covers various programmable control devices. It covers system components, installation, and introductory programming terms. Students learn to monitor, upload, and download programs to processors. NOTE: Students registering for this class and planning to go on to INCT 2232 Programmable Logic Controllers II must register for both classes. INCT 2231 and INCT 2232 run 5.5 weeks consecutively during the same quarter.

INCT 2232 - Programmable Logic Controllers II

4.5 - 0.0 - 4.5

Prerequisite: (1) INCT 2231 with a grade of C or better — must be completed prior to taking this course.

This course focuses on troubleshooting machine problems using the programmable logic controller. It covers search functions, timers, counters, and editing of existing programs. Students learn to diagnose machine failures through the processor program.

INCT 2235 - Programmable Logic Controllers Applications

9.0 - 0.0 - 9.0

Prerequisite: (1) INCT 2232 with a grade of C or better — must be completed prior to taking this course.

Recommended: PRMA 1050, INCT 2060, and INCT 2070 — recommended prior to taking this course, but not required.

This course builds on the knowledge and skills learned in previous programmable logic controller courses. It covers programming analog devices and the integration and programming of operator interfaces, such as digital displays and touch screens. Students study and practice the creation of machine files and documentation as well as the process of working from the rules of operation and creating a program. The course challenges students to write a program, test and de-bug the program, and commission a machine into final operation.

INCT 2900 - Special Topics in Industrial and Commercial Trades**Variable**

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This course permits instruction in special content areas not included in other courses of the Industrial and Commercial Trades program.

INCT 2981 - Internship**0.0 - 24.0 - 6.0**

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

The internship provides students the opportunity to apply their knowledge, learn new techniques, and get on-the-job training at an approved work site. To develop an internship to meet their academic and career goals, interested students must contact their program faculty. Based on state guidelines, students must complete 40 hours of work for each credit hour.

INFO - Information Technology**INFO 1001 - Information Systems and Literacy****4.5 - 0.0 - 4.5**

Recommended: A basic understanding of computer systems — recommended prior to taking this course, but not required.

This course introduces students to computer technology concepts and skills needed to be successful in their academic and professional lives. Topics include hardware, desktop and cloud-based applications, computer ethics, effective research techniques, security, and the Internet. NOTE: A basic understanding of computer systems is recommended prior to taking this course. Students desiring to take a basic introductory computer course should enroll in WORK 0900 Introduction to Microcomputer Technology. For students who feel they have mastered the concepts taught in this course, an INFO 1001 competency test is available in the Testing Centers.

INFO 1002 - Introduction to Information Technology**4.5 - 0.0 - 4.5**

Prerequisite: (1) INFO 1001 — must be completed prior to taking this course.

This introductory course provides students with an opportunity to explore common disciplines in the field of information technology (IT). Students explore project management, web development, networking, data centers, security, databases, desktop support, graphic design, and programming concepts. NOTE: Students must receive a C or better in this course to enroll in a capstone course.

INFO 1003 - Problem Solving and Programming Logic**5.0 - 0.0 - 5.0**

This course provides students with a firm foundation in problem solving and programming concepts. This course presents the concepts of problem solving, and students learn how problems are solved on computers, mathematical concepts required for problem solving using a computer and logic needed to understand a problem. Students use flowcharts, pseudocode,

and algorithms to document and demonstrate a logical solution to a problem.

INFO 1007 - Introduction to Object-Oriented Computer Programming**3.0 - 0.0 - 3.0**

This class is for experienced programmers who want to transition from a system-building mindset to an object-oriented perspective - how to object think and program using object-oriented principles. It provides experienced programmers a firm foundation in concepts used in object-oriented computer programming. Students learn about attributes and methods, inheritance, polymorphism, real-world and case modeling, and object-oriented programming languages. Students who enroll in INFO 1007 should be proficient in a graphic user interface environment.

INFO 1008 - Business Office Communications**4.5 - 0.0 - 4.5**

Prerequisite: (1) ENGL 0960 or assessment testing — must be completed prior to taking this course.

This course explores the use of technology and methods for effective written and verbal communication in today's business environment. Students learn various written and verbal communication styles with emphasis on business office writing skills and English grammar. Technology topics include exploring applications commonly used in office communications as well as the detailed use of Microsoft Office Outlook software.

INFO 1009 - Introduction to Cloud Computing**4.5 - 0.0 - 4.5**

Prerequisite: (1) INFO 1003 — must be completed prior to taking this course.

Cloud computing refers to performing computer tasks using services, resources, and storage delivered entirely via the Internet. Cloud computing is the newest technology with movement away from applications needing to be installed on an individual's computer system toward the applications being hosted online. In this course, students gain understanding and knowledge of cloud computing and how it is changing the computer world. Topics to be discussed include types of clouds, Software as a Service (SaaS), Platform as a Service (Paas), and Infrastructure as a Service (IaaS). Students also learn about the different methods cloud computing is accessible to the user: public clouds, private clouds, and hybrid clouds.

INFO 1010 - Customer Service Skills**4.5 - 0.0 - 4.5**

Recommended: Level 1 English course — recommended either prior to or at the same time as this course, but not required.

This course provides an in-depth look at the soft skills and self-management skills needed to provide effective customer service and support in all business environments. (Cross-listed as FINA 1010)

INFO 1011 - Project Management**4.5 - 0.0 - 4.5**

Project management is the discipline of defining and managing the vision, tasks, and resources required to complete a project. This course provides a deep dive into the project management

process, resource management (time, money, and people), quality control, communications, and risk. Students complete projects utilizing project management software. (Formerly Project Management I)

INFO 1012 - Electronic Filing and Calculating

4.5 - 0.0 - 4.5

Prerequisite: (1) MATH 1220 — must be completed prior to taking this course.

Students utilize manual and electronic methods in completing a variety of practical applications. Projects include records management using the standard indexing rules developed by the Association of Records Managers and Administrators (ARMA). The course also covers financial records management, including using a desktop calculator for basic math problems, decimals, percents, fractions, combined operations, petty cash accounts, payroll, mark up and mark down, invoices, and banking records.

INFO 1013 - Keyboard Skillbuilding

1.5 - 1.5 - 2.0

This course includes diagnosis of current keyboarding skills, individualized practice, and evaluation of progress. Students use the alphabetic keyboard and numeric keypad. Students must have prior keyboarding experience. NOTE: Recommended speed for enrollment and optimal success is 30 wpm. Because students progressively improve keyboarding skills throughout the quarter, proficiency testing to receive credit for the course is not provided.

INFO 1022 - Business Telecommunication Systems

4.5 - 0.0 - 4.5

Students study the concepts, standards, and practices associated with supporting business telecommunication systems equipment. Students focus on topics such as the technologies behind digital and analog communication, IT networking basics as applied to telecommunication systems, digital phone technology, voice over internet protocol (VOIP) technology, and the tools used to develop knowledge, skills, and abilities to effectively contribute to a robust telecommunication system.

INFO 1023 - Networking Essentials

4.5 - 0.0 - 4.5

Prerequisite: (1) INFO 1001 — must be completed prior to taking this course.

This course is the foundational networking course and prepares students for the advanced IT courses. The fundamentals of national and international networked communications, including standards, data communications, local area networking, wide area networking, virtual computing, and wireless communications are covered. WAN technologies and hardware as well as emerging data network technologies, mobile, and nomadic computing are also covered.

INFO 1030 - Introduction to Service Desk Operations

4.5 - 0.0 - 4.5

This course provides students with insight to the concepts, standards and practices most often associated with the IT service desk function. Students focus on topics such as help desk structure, operations, roles and responsibilities, standards,

processes, tools and systems, customer support, and performance measures. Problem-based scenarios and simulations are two tools used to develop knowledge, skills and abilities to effectively contribute to a successful IT services desk.

INFO 1105 - IT Essentials PC Repair I

4.5 - 0.0 - 4.5

This course emphasizes the functionality of hardware and software components as well as suggested best practices in maintenance and safety issues. Through hands-on activities, students learn how to assemble and configure a computer, install operating systems and software, and perform basic troubleshooting of hardware problems. This course prepares students for Comp TIA A+ certification.

INFO 1110 - Windows Operating Systems I

4.5 - 0.0 - 4.5

Prerequisite: (1) INFO 1001 — must be completed prior to taking this course.

This course introduces students to Microsoft Windows desktop operating system. Students learn fundamental concepts to effectively use and manage the Microsoft Windows desktop operating system. Many of the objectives comply with industry standard certification exam objectives. NOTE: Students must receive a C or better in this course to enroll in a capstone course.

INFO 1111 - Linux Operating Systems I

4.5 - 0.0 - 4.5

This course introduces the Linux operating system. Students learn about navigation of the file structure, communication methods, text editors, script writing, and fundamental concepts of Linux required to use the system effectively. This course is the first step in preparing students to successfully achieve Linux+ certification. NOTE: Students must receive a C or better in this course to enroll in a capstone course.

INFO 1113 - AIX Operating System

4.5 - 0.0 - 4.5

This is a course for beginning UNIX students. It introduces students to the IBM AIX UNIX operating system. Topics include general operating system concepts, the traditional UNIX/AIX file system, basic and intermediate level commands, shell scripts, and interaction with the Korn shell.

INFO 1120 - Windows Operating Systems II

4.5 - 0.0 - 4.5

Prerequisite: (1) INFO 1110 — must be completed prior to taking this course.

This course provides an overview of managing the Windows desktop operating system. Students consider the operating system as a stand-alone system, as a client on a network, and as a network operating system. This course maps to many industry certification objectives.

INFO 1121 - Linux Operating Systems II

4.5 - 0.0 - 4.5

Prerequisite: (1) INFO 1111 — must be completed prior to taking this course.

This course describes advanced features of the Linux operating system. Topics include installing the Linux operating system, advanced shell programming, process creation and management, system administration duties, resource management, file systems, and other advanced Linux topics. This course is the final step toward student success in achieving Linux+ certification.

INFO 1125 - IT Essentials PC Repair II
4.5 - 0.0 - 4.5

Prerequisite: (1) INFO 1105 — must be completed prior to taking this course.

This course covers advanced, hands-on topics of hardware and software repair. Emphasis is on basic TCP/IP networking, wireless networking, and network troubleshooting. Through hands-on activities, students learn configuration procedures and more advanced administrative tasks, such as user management and security, and operating system installation. Topics of devices such as printers and scanners are also covered. Further prepares students for the Comp TIA A+ certification.

INFO 1135 - IT Communication Skills  
4.5 - 0.0 - 4.5

This course provides students with the knowledge and skills to effectively communicate with customers while performing IT service desk duties. Students learn communication skills, recognizing communication barriers, handling difficult situations, the value of a positive attitude, how to develop and conduct training, and how to draft technical written documents. Problem-based scenarios and simulations are two tools used to develop knowledge, skills and abilities to effectively communicate while employed as a service desk technician.

INFO 1200 - Cisco Network Fundamentals
9.0 - 0.0 - 9.0

This course introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. The principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for the curriculum. Students gain experience to build a simple LAN, perform configurations for routers and switches, and implement IP addressing schemes.

INFO 1201 - Cisco Routing
9.0 - 0.0 - 9.0

Prerequisite: (1) INFO 1200 — must be completed prior to taking this course.

This course describes the architecture, components, and operations of routers and switches in a small network. Students learn how to configure a router and a switch for basic functionality. By the end of this course, students are able to configure and troubleshoot routers and switches and resolve common issues with RIPv1, RIPv2, single-area and multi-area OSPF, virtual LANs, and inter-VLAN routing in both IPv4 and IPv6 networks.

INFO 1211 - Microsoft Word 
4.5 - 0.0 - 4.5

Prerequisite: (1) INFO 1001 — must be completed prior to taking this course.

This course explores the features of Microsoft Word to create, design, and produce professional documents. It emphasizes character, paragraph, and document formatting. Students explore features such as tables, columns, labels, envelopes, outlines, styles, borders, shading, AutoFormat, AutoText, and templates. Students learn to enhance the visual display and clarity of documents by using various customizing and enhancement features. In addition, the course also covers working with multiple documents, using basic file management techniques, inserting graphic elements, footnotes, cross-references, fill-in forms, and exploring the development of Web pages. Students must receive a C or better in this course to enroll in the Office Professional Capstone course. (Formerly INFO 1210 Microsoft Word I and INFO 1220 Microsoft Word II)

INFO 1212 - Spreadsheets  
4.5 - 0.0 - 4.5

Prerequisite: (1) INFO 1001 — must be completed prior to taking this course.

This course teaches students spreadsheet techniques using Microsoft Excel. Students learn to design, create, manipulate, and print worksheets; use templates; create graphs; conduct what-if analysis; use various functions; create static and dynamic Web pages; send workbooks via email; and work with multiple worksheet/workbooks. Students must receive a C or better in this course to enroll in the Office Professional Capstone course.

INFO 1213 - Database Fundamentals 
4.5 - 0.0 - 4.5

Prerequisite: (1) INFO 1001 — must be completed prior to taking this course.

Students are introduced to database operations using Microsoft Access. This course focuses on database concepts; creating and editing tables, queries, forms and reports; adding, editing, and filtering records; creating and editing one-to-many relationships; and importing and exporting data. Students must receive a C or better in this course to enroll in the Office Professional Capstone course.

INFO 1214 - Business Presentations and Publications 
4.5 - 0.0 - 4.5

Students learn to present data in a quick, concise, and effective manner using Microsoft PowerPoint presentation and Microsoft Publisher software. Using MS PowerPoint, students create and format text slides; insert images, video, and audio; create custom themes and slide masters; and prepare full multi-slide presentations. Students also explore other web-based presentation software tools and use the basic features to create presentations. This course also explores professional presentation skills such as behavior, dress, and speaking manner. Using MS Publisher, students create, edit, format, and publish business flyers, tri-fold brochures, and newsletters. The final project requires students to create and present a slideshow to the class. NOTE: Students must receive a C or better in this course to enroll in the Office Professional Capstone course.

INFO 1215 - Document Processing **4.5 - 0.0 - 4.5**

Prerequisite: (2) INFO 1008 and INFO 1013 — must be completed prior to taking this course.

The course provides thorough instruction in using word processing software to prepare a variety of business documents. It emphasizes planning and designing the layout of the document, correct formatting, proper spelling, grammar and punctuation, and increasing typing speed and accuracy.

INFO 1219 - Professional Practices **4.5 - 0.0 - 4.5**

Prerequisite: (2) INFO 1001 and ENGL Level 1 course — must be completed prior to taking this course.

This course provides the opportunity to acquire knowledge and skills in the area of office practices, to discuss trends, issues, and policies of today's business offices; and to use a digital notebook (Microsoft OneNote). Topics include administrative professional careers, professional image and office behavior, employer expectations, employee responsibilities and skills, personal communication skills, planning meetings and effective note-taking skills, understanding office financials, coordinating travel, personal organization, problem-solving and decision-making techniques, stress management control, and leadership skills and strategies. Functions learned using OneNote include creating and maintaining electronic notebooks to share information, managing tasks and projects, and collaborating with office staff.

INFO 1311 - Web Page Creation  **4.5 - 0.0 - 4.5**

Prerequisite: (1) INFO 1001 — must be completed prior to taking this course.

This course teaches students how to create basic websites using HTML and CSS specifications. It covers creating HTML pages that include links, images, tables, multimedia, and forms and discusses additional advanced features such as implementing Web interactivity using JavaScript and jQuery. Students use CSS to control the format and layout of Web pages and learn how to use responsive design for print, mobile devices, and tablets.

INFO 1314 - Photoshop **4.5 - 0.0 - 4.5**

Prerequisite: (1) INFO 1311 — must be completed prior to taking this course.

Students learn to create, modify, and optimize graphics for use on websites. They create banners, buttons, background images, and advertisements. The course uses Photoshop tools to create vector graphics, edit bitmap graphics, work with layers, create image rollovers, slice images, create image maps, and export graphics. It also covers animated GIF images.

INFO 1315 - Interface Design  **4.5 - 0.0 - 4.5**

Prerequisite: (2) INFO 1314 and INFO 1322 — must be completed prior to taking this course.

This course serves as an introduction to usability principles and user-centered interface design. Students explore design

concepts, typography, layout, and color theory for the Web. Students apply concepts while creating responsive designs using HTML/CSS, as well as using tools like Artisteer and Template Toaster. Students also create website templates and themes that can be exported to WordPress, Joomla, or Drupal.

INFO 1316 - Dreamweaver **4.5 - 0.0 - 4.5**

Prerequisite: (1) INFO 1314 — must be completed prior to taking this course.

This course presents the use of Dreamweaver to create, edit, and manage well-designed websites. Students learn how to use the software to incorporate the following HTML elements: tables, CSS, multimedia, forms, and other advanced Dreamweaver features.

INFO 1317 - WordPress Office Professional **4.5 - 0.0 - 4.5**

Prerequisite: (1) INFO 1001 — must be completed prior to taking this course.

Students learn how to create, manage, and publish websites using the WordPress Content Management System. Students plan and create websites, work with themes, format text, and use CSS. They also learn how to work with images, create links, add multimedia content, customize widgets, install plugins, apply interactive behaviors, create forms, and optimize a website for publishing. (Formerly WordPress Web Editor)

INFO 1320 - Internet Commerce **4.5 - 0.0 - 4.5**

Prerequisite: (1) INFO 1311 — must be completed prior to taking this course.

This course covers emerging online technologies and trends and their influence on the electronic commerce marketplace. Students learn various concepts, vocabulary, and procedures associated with all aspects of commerce and the Internet. Topics covered include the development of the Internet and commerce, Internet business strategies and revenue models, legal and ethical issues, features of websites and the tools used to build an e-commerce planning website, marketing issues, online payment options, security issues, and e-commerce planning strategies. Students apply these concepts by developing a working prototype for an electronic commerce website.

INFO 1322 - Basic WordPress **4.5 - 0.0 - 4.5**


Prerequisite: (1) INFO 1311 — must be completed prior to taking this course.

This course examines installing, configuring, and maintaining a website using WordPress Content Management System. Students plan and create websites and work with themes. They also learn how to add multimedia content, customize widgets, install plugins, apply interactive behaviors, and optimize a website for publishing. Customizing themes with child themes is also covered.

INFO 1401 - Introduction to Data Center Operations  
4.5 - 0.0 - 4.5

Prerequisite: (1) INFO 1003 — must be completed prior to taking this course.

This course introduces all aspects of a data center and its physical infrastructure. Students learn about data center design, support, management, and maintenance while working in a server environment. The course includes daily operations of a data center, which include monitoring power requirements and safety regulations.

INFO 1413 - Data Center Technician I  
4.5 - 0.0 - 4.5

Prerequisite: (1) CFOT 1000 — must be completed prior to taking this course.

Students are introduced to fundamental data center concepts aimed at the technician. Concepts include infrastructure, working in a data center, and maintenance techniques. Topics include physical infrastructure, cabling and network infrastructure, power infrastructures and cooling infrastructures.

INFO 1421 - Virtualization Technologies Monitoring  
4.5 - 0.0 - 4.5

Prerequisite: (1) INFO 1023 — must be completed prior to taking this course.

This course introduces both hardware and software methods used to implement virtualization. Students explore multiple vendor solutions and get hands-on experience with remote access configuration and monitoring found in today's enterprise IT and data center environments.

INFO 1422 - DC Storage Management  
4.5 - 0.0 - 4.5



Prerequisite: (1) INFO 1401 — must be completed prior to taking this course.

Students increase the scope of their IT skills transformation and learn the latest emerging storage-related technologies. Coverage of Third Platform technologies like cloud, big data, mobile, and social- and software- defined data centers are discussed. Other topics include infrastructure, intelligent storage systems, business continuity, security threats and controls, and key processes.

INFO 1423 - Data Center Technician II  
4.5 - 0.0 - 4.5

Prerequisite: (1) INFO 1413 — must be completed prior to taking this course.

This course continues the Data Center Technician I course, discussing power considerations, cooling, legislative compliance, standards, and auditing considerations. Students learn Data Center power and cooling requirements, legislation/standards for Data Centers, and disaster recovery and business continuity requirements.

INFO 1433 - DC Operations and Management  
4.5 - 0.0 - 4.5

Prerequisite: (1) INFO 1413 — must be completed prior to taking this course.

Data Centers play a significant role in today's business environment. This course is an overview of the purpose, function, and need of the Data Center. Students learn basic design and design philosophies, requirements of the facility, infrastructure, business needs, strategies for effective delivery of services, standards and compliance, effective management processes, and budgetary constraints.

INFO 1515 - Robotic Concepts in Prototyping
4.5 - 0.0 - 4.5


Recommended: INFO 1003 — recommended prior to taking this course, but not required.

This course gives students an introduction to the design, use and programming for robots. Topics include robot anatomy, sensing, degrees-of-freedom, the Cartesian coordinate system, lead-through, walk-through and off-line programming and control functionality. Students learn how to safely program robots for all kinds of automated tasks.

INFO 1521 - Java Programming I 
4.5 - 0.0 - 4.5

Prerequisite: (1) INFO 1003 — must be completed prior to taking this course.

This course introduces the Java object-oriented programming language. Topics and activities include Java language essentials, writing Java programs in order to solve a variety of basic problems, design and testing techniques, working with arrays and simple data structures, creating basic graphical interfaces using applications and applets, and working with input and output files.

INFO 1522 - C++ Programming I 
4.5 - 0.0 - 4.5

Prerequisite: (1) INFO 1003 — must be completed prior to taking this course.

This course introduces the C++ programming language. It emphasizes problem-solving using structured design and covers various features of the C++ language, such as conditions, logical expressions, selection control structures, looping, functions, and variable scope. Students use modular programming techniques to solve a variety of problems.

INFO 1523 - Visual Basic.NET I 
4.5 - 0.0 - 4.5

Prerequisite: (1) INFO 1003 — must be completed prior to taking this course.

This course introduces programming the graphical user interface using Visual Basic.NET. Students use Visual Basic.NET to develop applications with graphical windows, create applications that work with databases, create Web applications, and create applications that display graphics. It allows developers to create applications in a relatively short period of time. This course emphasizes gaining an understanding of proper design, placement of controls, and coding of the GUI.

INFO 1524 - COBOL I
5.0 - 0.0 - 5.0

Prerequisite: (1) INFO 1003 — must be completed prior to taking this course.

Students gain experience using programming techniques with the COBOL language. Students design, program, debug, and test business-oriented problems.

INFO 1526 - C# (C-Sharp) Programming I

4.5 - 0.0 - 4.5

Prerequisite: (1) INFO 1003 — must be completed prior to taking this course.

This course introduces programming the graphical user interface and console applications of Microsoft Visual C# (C-Sharp) programming using the current Visual Studio.NET environment. Students use Visual C# programming to develop a variety of applications with graphical client interfaces and use console programs to perform programming tasks. The course emphasizes proper windows design, placement of controls, and proper coding of the Visual C# programming language for business-type projects. Students who enroll in this course must have a thorough knowledge of the Windows environment (Formerly Visual C# Programming I)

INFO 1527 - Ruby Programming

4.5 - 0.0 - 4.5

Prerequisite: (1) INFO 1003 — must be completed prior to taking this course.

This course introduces the Ruby programming language. Through guided learning activities and project-oriented assignments, students advance through the dynamic and expressive grammar of the language and apply these basic concepts to develop pragmatic online and batch applications involving file systems, file I/O, and databases.

INFO 1529 - PHP Programming I

4.5 - 0.0 - 4.5

Prerequisite: (1) INFO 1003 — must be completed prior to taking this course.

This course introduces students to PHP programming. Emphasis is placed on gaining the proper design and coding in the scripting language environment. Topics include installation and configuration of PHP, Apache, and MySQL. Also covered are the basic building blocks of PHP, flow of control, functions, using arrays, and working with objects.

INFO 1531 - Java Programming II

4.5 - 0.0 - 4.5

Prerequisite: (1) INFO 1521 — must be completed prior to taking this course.

This course is for students experienced with Java and object-oriented programming. Topics include additional exception handling, data structures, database access and applications, multimedia, multithreading, and Internet/browser applications.

INFO 1532 - C++ Programming II

4.5 - 0.0 - 4.5

Prerequisite: (1) INFO 1522 — must be completed prior to taking this course.

This course covers data types, one- and multi-dimensional arrays, lists and strings, records (C++ structs), classes and data abstraction, object-oriented software development, pointers, dynamic data, linked structures, and recursion.

INFO 1533 - Visual Basic.NET II

4.5 - 0.0 - 4.5

Prerequisite: (1) INFO 1523 — must be completed prior to taking this course.

This course places additional emphasis on gaining an understanding of proper design, placement of controls, and coding of the GUI. It covers advanced topics such as database access and management, object-oriented programming using class structures, exception handling, and inheritance.

INFO 1534 - COBOL II

5.0 - 0.0 - 5.0

Prerequisite: (1) INFO 1524 — must be completed prior to taking this course.

Students expand their knowledge of COBOL with advanced techniques. Topics covered include sorting, sequential file updating, indexed file processing, VSAM files, subprograms, relational databases, and embedded SQL.

INFO 1536 - C# (C-Sharp) Programming II

4.5 - 0.0 - 4.5

Prerequisite: (1) INFO 1526 — must be completed prior to taking this course.

This course includes more advanced topics such as XML, database, text and binary file access, data structures, sets, and user interfaces. (Formerly Visual C# Programming II)

INFO 1537 - Ruby on Rails

4.5 - 0.0 - 4.5

Prerequisite: (1) INFO 1527 — must be completed prior to taking this course.

This course introduces the Ruby on Rails web application framework. Through guided learning activities and project-oriented assignments, students advance through each of the major components of the framework and apply these basic concepts to develop dynamic web applications.

INFO 1539 - PHP Programming II

4.5 - 0.0 - 4.5

Prerequisite: (1) INFO 1529 — must be completed prior to taking this course.

This course focuses on the design and coding of the PHP environment. Topics include advanced areas such as database access and management, working with files, forms, and SQL, and the interaction with MySQL and PHP.

INFO 1591 - Web Application Essentials

7.0 - 0.0 - 7.0

Prerequisite: (1) INFO 1311 or instructor approval — must be completed prior to taking this course.

The course serves as an introduction to the components and concepts necessary for full-stack web development. Students study front-end development concepts including HTML, CSS, and JavaScript. CSS concepts such as Sass and LESS are examined. Students also use MySQL in the command line and graphical tools such as phpMyAdmin and MySQL Workbench. Students complete multiple projects and work with a source control system.

INFO 1592 - Web Application Development I ☺**7.0 - 0.0 - 7.0**

Prerequisite: (1) INFO 1591 — must be completed prior to taking this course.

In this course students use a web application development framework to develop a web application from the planning and design state to implementation.

INFO 1593 - Web Application Development II ☺**7.0 - 0.0 - 7.0**

Prerequisite: (1) INFO 1592 — must be completed prior to taking this course.

In this course, students develop a web application from initial requirements gathering to development of a project plan and start to do development.

INFO 1594 - Web App Development III ☺**7.0 - 0.0 - 7.0**

Prerequisite: (1) INFO 1593 — must be completed prior to taking this course.

In this course, students continue working on developing a web application started in INFO 1593. By the end of this course, students have built a real-world web project, and created documentation for the application. Students present their final application to an independent panel of judges from the local community for input and feedback.

INFO 1600 - Emerging Technologies in IT ☺ ☹**Variable**

Recommended: INFO 1003 — recommended either prior to or at the same time as this course, but not required.

This course permits instruction in some of the most emerging topics in Information Technology.

INFO 1615 - Digital Electronics ☺**4.5 - 0.0 - 4.5**

Students are introduced to basic electronic components, digital devices, and basic circuits. This course emphasizes the concepts and principles through hands-on activities. Topics include basic electronic components, proper use of test equipment, basic electronics theory, prototyping methods and an introduction to microcontrollers. Students also learn to read schematic diagrams, build circuit prototypes, test and troubleshoot the prototypes, and construct circuits using a variety of tools and prototyping methods.

INFO 1620 - Introduction to Database Design ☺ ☹**4.5 - 0.0 - 4.5**

Prerequisite: (1) INFO 1003 — must be completed prior to taking this course.

This course is an introduction to database design, implementation, and management. It covers the basics of database design and manipulation. Topics include relationships, database normalization, constraints, data modeling, multi-user database architectures, and exploration of various DBMS software products. Students learn how to design and manipulate the database in order to maintain and present data that is accurate, meaningful, and supportive to a business environment.

NOTE: Students must receive a C or better in this course to enroll in a capstone course.

INFO 1805 - A+ Certified Professional**4.5 - 0.0 - 4.5**

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

Students gain a complete, step-by-step approach for learning the fundamentals of supporting and troubleshooting computer hardware and software. This course maps fully to CompTIA's latest A+ 220-801 and 220-802 exam objectives.

INFO 1831 - VMware vSphere ☺ ☹**4.5 - 0.0 - 4.5**

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

Students gain an understanding and hands-on experience in installing, configuring, and managing a VMware vSphere, which consists of VMware ESXi and VMware vCenter Server. Topics include the functionality in vSphere and cover topics such as Virtualization, vCenter server, virtual network and storage, data protection, access and authentication control, resource management and monitoring, and more.

INFO 1941 - 360 Web I ☺**14.0 - 0.0 - 14.0**

Prerequisite: (2) INFO 1311 and instructor approval — must be completed prior to taking this course.

The course serves as an introduction to the components and concepts necessary for full-stack web development. Students study front-end development concepts including HTML, CSS, and JavaScript. CSS concepts such as Sass and LESS are examined. Students also use MySQL in the command line and graphical tools such as phpMyAdmin and MySQL Workbench. Students complete multiple projects and work with a source control system.

INFO 1942 - 360 Web II ☺**14.0 - 0.0 - 14.0**

Prerequisite: (1) INFO 1941 — must be completed prior to taking this course.

This course gives students the opportunity to integrate the skills and knowledge acquired in INFO 1941. Students develop a web application from concept to production, scoping the project then developing, planning, designing, testing, and implementing the project plan.

INFO 1950 - The Business of Innovation ☺**4.5 - 0.0 - 4.5**

Recommended: INFO 1955 — recommended either prior to or at the same time as this course, but not required.

This course prepares students to be part of and lead innovation initiatives in organizations. Students explore concepts of creativity and innovation. Students also learn the importance of innovation to companies, develop ways to navigate resistance to innovation, and create innovative solutions and strategies to actual business challenges. Finally, students complete an innovation project targeted at giving a company a competitive advantage that distinguishes it in the marketplace.

INFO 1951 - Introduction to Prototype Design 🌀**4.5 - 0.0 - 4.5**

Students explore the fundamentals of prototype design. Students learn the three integrated concepts of design thinking, business acumen, and low-volume production to ideate, prototype, and manufacture a human-centered product. A comparison of careers and occupations that require prototyping skills is also explored.

INFO 1955 - How to Build Almost Anything 🌀**4.5 - 0.0 - 4.5**

Recommended: INFO 1001 or knowledge of the basics of personal computer use — recommended prior to taking this course, but not required.

This course covers the safe use of hand and power tools. Focus is on the proper setup and use of tools. In this class, students learn basic concepts of prototype construction using tools and materials found in the FABLAB laboratory. Students take part in a laboratory project involving all stationary and power tools. Material costs for projects are additional.

INFO 1957 - Wearable Technology**4.5 - 0.0 - 4.5**

This course explores the use and techniques to fabricate soft or wearable technology. Students are introduced to equipment, e-textiles, structure of simple soft circuits, and 2-D/3-D structures as they relate to textile production. A hands-on approach is used in the Fabrication Lab to bring movement and light of the senses into their designs and sketches.

INFO 1962 - How to Build an Electric Guitar**4.5 - 0.0 - 4.5**

Recommended: INFO 1001 or knowledge of the basics of personal computer use — recommended prior to taking this course, but not required.

In this class, students learn the concepts and topics of mechanical engineering, electronics, CAD design, manufacturing, chemistry, metrology, math, and physics by examining what is responsible for producing music with electronic stringed instruments while building, testing, and playing their own electric guitar. Students choose their guitar body, construct the neck, assemble their own guitars, solder all electronics, tune them using a chromatic tuner, and use them to play a simple song. Material costs for project are additional.

INFO 1965 - Rapid Prototyping 🌀**4.5 - 0.0 - 4.5**

Prerequisite: (1) INFO 1955 — must be completed prior to taking this course.

In this class, students learn about the digital tools and techniques relevant to the task of visualizing and prototyping 3-D designs in the Fab Lab. Students review the fundamentals and theory behind rapid prototyping methods; different types of application methods, tools, techniques, and materials; physical limitations of rapid prototyping; and its impact on the design process.

INFO 1968 - Basic Modelmaking and Design 🌀**4.5 - 0.0 - 4.5**

The primary purpose of this course is the building and testing of 3D models as a continuing and critical component of a successful

design process. Students learn to identify and use different methods and materials to build physical prototypes. These models are used to analyze product requirements in a way that is not possible on screen. As a result, they precede and complement most of the computer rendering and animations that happen in real-life projects.

INFO 2023 - Network and Certification Preparation Network+ Certification Prep**4.5 - 0.0 - 4.5**

Prerequisite: (1) INFO 1023 — must be completed prior to taking this course.

The Network+ Certification Prep course is a continuation of INFO 1023. This course allows students to gain the knowledge they need to become certified and the practical skills they need to be well on their way to a job in the IT networking field. Advanced topics like Wide Area Network, Network Customization, Hardening, Management and Optimization are covered in the class. Upon completion, students are well prepared to pass TestOut's Network Pro Certification exam, as well as CompTIA's Network+ N10-006 exam.

INFO 2025 - Introduction to Embedded Systems**4.5 - 0.0 - 4.5**

Prerequisite: (2) INFO 1615 and instructor approval — must be completed prior to taking this course.

This course is an introduction to the Arduino microcontroller, interfacing to input and output devices such as sensors, LCD displays, motors, and an elementary introduction to programming. Students build projects that control volume, patterned games similar to Simon, LED lighting effects, conduct experiments with sound, control motors for objects like toy cars, and use Arduino to add sensors, trigger commands, and motors. The hands-on experience provides students with the confidence to design and build simple electronic projects.

INFO 2105 - Intermediate SolidWorks 🌀**4.5 - 0.0 - 4.5**

Prerequisite: (1) DRAF 2100 — must be completed prior to taking this course.

Students continue to focus on developing skills for the successful use of SolidWorks parametric software. Emphasis is on the mechanics of motion. Topics include the fundamental concepts of motion which include kinematics, work, energy, rotational motion, mass, gravity and momentum. Students analyze assemblies of moving parts in an effort to facilitate good product design.

INFO 2122 - Writing Scripts with BASH 🌀 🌀**4.5 - 0.0 - 4.5**

Prerequisite: (1) INFO 1111 — must be completed prior to taking this course.

This course is an introduction to writing shell scripts using Bourne again shell. Students gain hands-on experience with creating and running Bash shell scripts and functions. Bash script techniques include sequential branching and looping instructions, command substitution, and I/O redirection. Students learn to create new scripts as well as modify existing scripts. (Formerly UNIX Scripting I)

INFO2124 - JavaScript for Front-End Programming 📄 🌐**4.5 - 0.0 - 4.5**

Prerequisite: (1) INFO 1003 and INFO 1311 — must be completed prior to taking this course.

Students are introduced to client-side JavaScript, outlining the basic data structures and methods used to work with JavaScript with an emphasis on using browser developer tools and the popular jQuery library to facilitate development.

INFO2135 - Network Infrastructure 📄 🌐**4.5 - 0.0 - 4.5**

Prerequisite: (1) INFO 1023 — must be completed prior to taking this course.

This course is for support professionals who need to know how to install, configure, maintain, and troubleshoot a Microsoft Windows Server 2012r2 environment. It gives new and experienced users alike the opportunity for in-depth study of the core networking technologies. The approach is to work through hands-on labs done on servers in a virtual environment provided to the students. The focus on network infrastructure involves, but is not limited to, configuring DNS, DHCP, routing, NAT, VPNs, and a basic understanding of TCP/IP v4 and v6.

INFO 2142 - Windows Active Directory 📄 🌐**4.5 - 0.0 - 4.5**

Prerequisite: (1) INFO 2135 — must be completed prior to taking this course.

This Active Directory server administration course introduces the Microsoft Windows Server 2012r2 Active Directory and prepares students with the skills and knowledge necessary to implement, manage, maintain, and provision services and infrastructure in a Windows Server 2012r2 Active Directory environment.

INFO2145 - Windows Server Administration 📄 🌐**4.5 - 0.0 - 4.5**

Prerequisite: (1) INFO 2142 — must be completed prior to taking this course.

Microsoft Windows server administrators manage the infrastructure, Web, and IT application servers. This course introduces server administration using Microsoft Windows Server 2012r2, which includes responsibility for the operations and day-to-day management of an infrastructure of servers for a small or enterprise organization. It exposes students to scripts and batch files and remote administration. Other topics include managing the server operating system, file, and directory services; software distribution and updates; profiling and monitoring assigned servers; and troubleshooting.

INFO2160 - The Internet of Things 🌐**4.5 - 0.0 - 4.5**

Prerequisite: (3) INFO 1011, INFO 1915, and INFO 1955 — must be completed prior to taking this course.

Students are introduced to the network of physical objects which are embedded with electronics, software, sensors, and network connectivity that enable these objects to collect and exchange data. Concepts include networking everyday objects, embedding electronics, data collection, economic implications, data analysis, and user analysis.

INFO2220 - Cisco LAN Switching**9.0 - 0.0 - 9.0**

Prerequisite: (1) INFO 1201 — must be completed prior to taking this course.

This course describes the architecture, components, and operations of routers and switches in a larger, more complex network. Students learn how to configure routers and switches for advanced functionality. By the end of this course, students are able to configure and troubleshoot routers and switches and resolve common issues with OSPF, EIGRP, STP, and VTP in both IPv4 and IPv6 networks. Students also develop the knowledge and skills needed to implement DHCP and DNS operations in a network.

INFO2225 - CCNA Security**4.5 - 0.0 - 4.5**

Prerequisite: (1) INFO 2220; or instructor approval; or work experience — must be completed prior to taking this course.

This hands-on course provides an e-learning solution with an emphasis on practical experience to help students develop specialized security skills to advance their careers. The curriculum helps prepare students for the entry-level Cisco IOS Network Security (IINS) certification exam (640-553) leading to the Cisco CCNA Security certification.

INFO2230 - Cisco Accessing the WAN**9.0 - 0.0 - 9.0**

Prerequisite: (1) INFO 2220 — must be completed prior to taking this course.

This course discusses WAN technologies and network services required by converged applications in a complex network. Students are engaged in the selection criteria of network devices and WAN technologies to meet network requirements. Other topics include how to configure and troubleshoot network devices and resolve common issues with data link protocols, develop the knowledge to implement IPsec, and virtual private network (VPN) operations in a complex network.

INFO2242 - Business Office Collaboration Technology 📄 🌐**4.5 - 0.0 - 4.5**

Prerequisite: (4) INFO 1211; INFO 1212; INFO 1213; and INFO 1214 — must be completed prior to taking this course.

This course explores online applications used for collaboration in business environments to share documents and information. Students use the features of Microsoft SharePoint to add, manage, edit, and share Microsoft Office files in document libraries. Students also add and manage announcements, calendar events, and project tasks in Microsoft SharePoint lists for office communications and project coordination. In addition, students learn to convert alternate file formats, including PDF documents, to MS office formats. Special topics explore the use of Web conferencing, mobile and table devices, virtual offices, and cloud-based file sharing in business offices and document security issues. Students should have extensive experience using MS Office software.

INFO 2260 - Workplace Technologies **4.5 - 0.0 - 4.5**

Prerequisite: (1) INFO 1211; or both former courses INFO 1210 and INFO 1220 — must be completed prior to taking this course.

This course explores the newest technologies found in today's workplace and is written for office professionals and students seeking degrees outside of information technology. Topics include current operating systems, computer system parts, evaluating computer systems, applications and their uses, networking, digital lifestyles, and security. (Formerly Network Applications and Support in the Workplace)

INFO 2261 - Software Applications Support  **4.5 - 0.0 - 4.5**

Students study concepts associated with providing software application support while working on the IT service desk. Students focus on topics such as the Windows desktop software environment, using the event viewer and command-line tools to troubleshoot software issues, and using software logs, tools, and troubleshooting techniques. Problem-based scenarios and simulations are two tools used to practice software application support as a service desk technician.

INFO 2340 - Internet Scripting **4.5 - 0.0 - 4.5**

Prerequisite: (1) INFO 1311 — must be completed prior to taking this course.

This course is a survey of JavaScript, jQuery, and PHP which introduces Internet scripting concepts using JavaScript and the jQuery library, as well as PHP. Students explore using JavaScript, jQuery, and jQueryUI to create basic client-side interactions. Students also use PHP to explore basic server-side interactions. Students use basic PHP and JavaScript to perform rudimentary customization of a web application.

INFO 2351 - Introduction to XML  **4.5 - 0.0 - 4.5**

Prerequisite: (1) INFO1311 — must be completed prior to taking this course.

This course teaches students how to retrieve and manage data while constructing well-formed and valid XML documents. Current W3C recommendations for the use of DTD, schemas, XSL, XSLT, and XSL-FO are also explored to demonstrate the multi-functional use of XML.

INFO 2362 - Building Secure Environments  **4.5 - 0.0 - 4.5**

Prerequisite: (1) INFO 1023 — must be completed prior to taking this course.

This course examines a variety of communication protocols, the client/server applications that use them, and their vulnerabilities. Students explore methods to mitigate vulnerabilities of Internet/Intranet applications while maintaining Web servers and workstations usability. Discussion centers on best practices and students use a variety of methods to build, test, and defend all computers in the enterprise environment. (Formerly Web and Server Applications Security)

INFO 2439 - Mobile Application Development  **4.5 - 0.0 - 4.5**

Prerequisite: (1) INFO 2340 — must be completed prior to taking this course.

This course introduces the basic concepts of mobile web and hybrid application development for small-form factor devices using HTML5, CSS3, and JavaScript. Students create mobile applications for mobile platforms, such as Apple iOS (iPad and iPhone) and Google Android devices. The Adobe PhoneGap Build and Apache Cordova mobile application development frameworks are used for native mobile application builds. Students are introduced to various cloud database services and instructed on best practices for leveraging these services within their mobile development programming interface. Additionally, students learn the fundamentals for distributing mobile applications in various mobile application marketplaces.

INFO 2521 - Intel Assembly Language I**4.5 - 0.0 - 4.5**

Prerequisite: (1) INFO 1522 — must be completed prior to taking this course.

Students develop knowledge and abilities in relation to common cross-platform data representations, computer architecture, and machine and assembly language principles and techniques. Topics include assembly language directives, operators, and program structure. Students use Intel x86 Assembly Language to develop simple applications.

INFO 2530 - Data Structures Using Java **4.5 - 0.0 - 4.5**

Prerequisite: (1) INFO 1531 — must be completed prior to taking this course.

This course continues the study and development of programming in the Java language. Students learn to write Java programs to solve a variety of business applications. Students use data structures for linked lists, stacks, queues and searching, and sorting algorithms. Students program, debug, and test specified business applications.

INFO 2531 - Intel Assembly Language II**4.5 - 0.0 - 4.5**

Prerequisite: (1) INFO 2521 — must be completed prior to taking this course.

This course covers macros to create both system-level software tools and application programs to manipulate computer hardware and to create an interaction between assembly language programs, operating systems (MS Windows, MS-DOS, and others), and application programs developed in C++ and other high-level languages.

INFO 2538 - Systems Analysis and Design **4.5 - 0.0 - 4.5**

Prerequisite: (1) INFO 1521, INFO 1523, INFO 1526, INFO 1527, or INFO 1529 — must be completed prior to taking this course.

Students take a hands-on approach to system analysis and design of information systems. They examine and use formal techniques for developing a start-to-finish project. Tasks include designing the best approach to problem identification; analysis of

possible solutions using information-gathering techniques; and implementation using business rules, data manipulation, data storage, and data retrieval. Students conduct research, write, analyze, and create professional reports and documentation to support analysis and design.

INFO 2621 - DB2 Database Management

4.5 - 0.0 - 4.5

Prerequisite: (1) INFO 1620; — must be completed prior to taking this course.

This course introduces students to the DB2 management system. Students design, create and manage databases on the DB2 management system. An introduction to data modeling and design is also presented. Students use SQL (Structured Query Language) to access their databases.

INFO 2630 - Structured Query Language (SQL)

4.5 - 0.0 - 4.5

Prerequisite: (1) INFO 1620 — must be completed prior to taking this course.

Students gain the skills needed to access and manipulate data in a relational database management system. The course covers basic- through advanced-level SQL commands and explores various DBMS SQL environments.

INFO 2635 - MySQL Programming

4.5 - 0.0 - 4.5

Prerequisite: (1) INFO 2630 — must be completed prior to taking this course.

This course provides a foundation in programming in the MySQL database environment. Students create stored program code, triggers, and functions; use built-in MySQL functions; and learn to optimize SQL statements and stored programs.

INFO 2640 - Oracle SQL and PL/SQL Programming

4.5 - 0.0 - 4.5

Prerequisite: (1) INFO 2630 — must be completed prior to taking this course.

Students gain skills to access and manipulate data in the Oracle database management system. Topics include basic through advanced level SQL commands and PL/SQL procedural commands. Students create blocks of code using scalar and composite variables and cursors; create procedures using control and loop structures; learn exception-handling techniques; and create functions, packages, and triggers.

INFO 2641 - SQL Server Design and Implementation

4.5 - 0.0 - 4.5

Prerequisite: (1) INFO 2630 — must be completed prior to taking this course.

This course introduces the SQL server relational database management system. Topics include SQL server licensing, installation, deployment, configuration, creating databases, querying databases, security, monitoring, optimization, backup, recovery, data integration, and monitoring. Students explore various SQL server tools. Course provides training requirements for the Microsoft SQL Server certification.

INFO 2642 - Transact SQL

4.5 - 0.0 - 4.5

Prerequisite: (1) INFO 2630 — must be completed prior to taking this course.

Students gain the skills needed to access and manipulate data in the SQL SERVER Database management system. This covers basic- through advanced-level SQL commands. It is for students pursuing the Microsoft Business Intelligence Certification.

INFO 2643 - Implementing Data Warehouses

4.5 - 0.0 - 4.5

Prerequisite: (1) INFO 2641 — must be completed prior to taking this course.

Students gain the skills needed to design, develop, implement, and maintain a data warehouse using Microsoft SQL Server Integration Services. The course covers basic- through advanced-level data warehouse implementation. It is for students pursuing the Microsoft Business Intelligence Certification.

INFO 2644 - Database Reporting

4.5 - 0.0 - 4.5

Prerequisite: (1) INFO 2642 — must be completed prior to taking this course.

Students gain the skills needed to design, develop, implement, and maintain database reports using Microsoft SQL Server Reporting Services. The course covers basic- through advanced-level report creation. It is for students pursuing the Microsoft Business Intelligence Certification.

INFO 2645 - Database Analysis Services

4.5 - 0.0 - 4.5

Prerequisite: (1) INFO 2641 — must be completed prior to taking this course.

Students gain the skills needed to design the Multidimensional Business Intelligence Semantic Modes using SQL Server Analysis Services. The course covers basic- through advanced-level skills for creating Multidimensional BISM. It is for students pursuing the Microsoft Business Intelligence Certification.

INFO 2805 - Network and Information Security Basics

4.5 - 0.0 - 4.5

This course is a survey of network and information security. Topics include threat assessment, risk management, establishing and managing network security policy, user training, security models, objectives, architectures, and the investigative process. It covers information security topics, such as constitutional issues, applicable laws, and right and rules of evidence. Students also discuss confidentiality, integrity, availability, accountability, and auditing.



INFO 2806 - Network Attacks, Intrusions, and Penetration Testing

4.5 - 0.0 - 4.5

This course covers attack and intrusion methods and how to defend against them. By studying network security from the point of view of the cracker and hacker, students get hands-on exposure to penetration testing and intrusion detection systems as well as methods used to circumvent systems, malicious code and its impact on systems, and defense against attacks.

INFO 2808 - Boundary Protection  **4.5 - 0.0 - 4.5**

This course introduces the various methodologies for defending a network. Students focus on the concepts of firewalls, including packet filtering, proxy firewalls, application gateways, circuit gateways, and stateful inspection; however, firewalls are most effective when backed by thoughtful security planning, well-designed security policies, and integrated support from anti-virus software, intrusion detection systems, and related tools. This course explores firewalls in the context of these critical elements, providing an overview that focuses on both managerial and technical aspects of security.

INFO 2809 - Information Systems, Forensics, and Legal Topics  **4.5 - 0.0 - 4.5**

This course presents computer forensics concepts, tools, and data analysis. Students explore civil and common law issues that apply to information systems and gain practical experience in evidence detection and preservation as well as the concepts of establishing communications with company leadership and investigative agencies.

INFO 2810 - Security Capstone  **4.5 - 0.0 - 4.5**

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This course provides realistic, hands-on, scenario-based environments in which to combine and implement concepts and tools covered in previous courses. Students conduct risk analyses and threat assessments, and they complete security plans that include auditing, monitoring, incident response, forensics, and penetration testing. NOTE: This capstone course for the Network Security diploma should be taken last as it encompasses the concepts, processes, and experience gained from the previous security courses. Work experience can be evaluated to meet course requirements.

INFO 2900 - Special Topics in Information Technology Variable

This course permits instruction in special content areas not included in other courses in the Information Technology program.

INFO 2940 - Database and Web Programming Capstone **4.5 - 0.0 - 4.5**

Prerequisite: (2) Instructor approval, and a grade of C or better in courses required by the student's degree major or the student's VIT program plan — must be completed prior to taking this course.

This course gives students the opportunity to integrate the skills and knowledge acquired throughout the information technology curriculum. Students develop, manage, and execute a programming project from conception to delivery for production. This is the final course for the Programming for Database and Web option. NOTE: This course should be taken during the final quarter of the program.

INFO 2942 - Desktop Support Capstone **4.5 - 0.0 - 4.5**

Prerequisite: (2) Instructor approval, and a grade of C or better in courses required by the student's degree major or the student's VIT program plan — must be completed prior to taking this course.

During this course, students combine the knowledge and skills gained from the core coursework in the Desktop Support Specialist program and apply them to simulated, practical exercises. Students integrate theory into practice to assess situations, diagnose problems, and apply a proven troubleshooting process to resolve technical issues.

INFO 2944 - Web Development Capstone **4.5 - 0.0 - 4.5**

Prerequisite: (2) Instructor approval and a grade of C or better in courses required by the student's degree major or the student's VIT program plan — must be completed prior to taking this course.

This course gives students the opportunity to integrate the skills and knowledge acquired throughout the Web curriculum. Students develop, manage, and execute a Web project from concept to completion. NOTE: This course should be taken during the final quarter of the program.

INFO 2945 - Database Administration Capstone **4.5 - 0.0 - 4.5**

Prerequisite: (2) Instructor approval, and a grade of C or better in courses required by the student's degree major or the student's VIT program plan — must be completed prior to taking this course.

This course gives students the opportunity to integrate the skills and knowledge acquired throughout the database curriculum. Students develop, manage, and administer a database project from conception to delivery for production. This is the final course for the Database Administration option.

INFO 2946 - Server Administration Capstone **4.5 - 0.0 - 4.5**

Prerequisite: (2) Instructor approval and a grade of C or better in core courses required by the degree — must be completed prior to taking this course.

This is a capstone course in which students apply the knowledge gained in previous classes to explore and implement problem-solving techniques and approaches that lead to solutions for hardware and software problems in a simulated work environment. Students work with others to coordinate, document, and implement solutions. Student communicate and work in multiple settings. All solutions are implemented using a virtual server environment.

INFO 2948 - Office Professional Capstone **5.0 - 0.0 - 5.0**

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This course allows students to apply all skills and knowledge gained from previous office technology courses. Students focus on advanced-level usage of the Microsoft Office Suite to work

independently and in teams on tasks common in a business environment. Students prioritize and manage project tasks; research ideas; and find information to make informed decisions, problem solve, and develop critical-thinking skills. Students also practice their presentation and leadership skills by creating and delivering presentations. Students must have extensive MS Office experience and should take this course toward the end of their program.

INFO 2949 - Prototype Design Capstone 📄

4.5 - 0.0 - 4.5

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

The capstone course integrates key skills obtained throughout the Prototype Design degree program from ideation to functional prototype. Through hands-on projects, students apply skills in business, design, and prototyping to work alongside MCC industry partners while producing fully-functioning prototypes.

INFO 2980 - Office Technology Practicum

0.0 - 6.0 - 2.0

Prerequisite: (1) Instructor approval - this course should be taken during the final quarter of the program — must be completed prior to taking this course.

Students use the skills and knowledge gained through the program to complete hands-on, on-the-job projects in a business environment. Emphasis is placed on essential skills, professionalism, and accuracy as well as working as a member of an office team. Based on state guidelines, students must complete 40 hours of work for each credit hour in the course. NOTE: Previous on-the-job training or past or present work experience may not be applied to fulfill the requirements of this course.

INFO 2981 - Internship

Variable

Prerequisite: (1) Instructor approval - this course should be taken during the final quarter of the program — must be completed prior to taking this course.

The internship provides students with the opportunity to apply their knowledge, learn new techniques, and get on-the-job training at approved work sites. Interested students must contact their faculty advisors to develop internships to meet their academic and career goals. Based on state guidelines, students must complete 40 hours of work for each credit hour.

INFO 2984 - INFO Student Assistant

Variable

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This course provides practical experience for students majoring in one of the Information Technology programs. Students apply the knowledge and skills gained in previous courses to assist other students in a lab setting. Tasks assigned are based on the students' majors of study.

INFO 2990 - Data Center Operations Capstone 📄

4.5 - 0.0 - 4.5

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This capstone course provides students the opportunity to apply their data center knowledge and skills by designing and creating a new data center layout for a company. This design consists of floor layout of cabinets, cooling, power, fire protection, and security. Students identify power requirements per cabinet and server, insure cooling requirements, identify backup power requirements, and document the layout and requirements of their data center.

INSU - Insurance

INSU 1000 - Principles of Health and Life Insurance 📄

4.5 - 0.0 - 4.5

This course is a comprehensive survey of the technical and socioeconomic aspects of the life and health insurance business and is registered with the Nebraska Department of Insurance as satisfying pre-licensing standards. It includes coverage, marketing, underwriting, pricing, funding alternatives, contracts, claims, program design concepts, and administrative systems and procedures. NOTE: Lab fee covers course completion and documentation fees required by the Nebraska Department of Insurance. Students are required to schedule their own licensure exams and satisfy other licensing requirements.

INSU 1100 - Principles of Property and Casualty Insurance

📄

4.5 - 0.0 - 4.5

This course is an introduction to the field of property and casualty insurance and is registered with the Nebraska Department of Insurance as satisfying pre-licensing standards. The needs of individuals or organizations for various categories of protection are discussed and the course covers fire, accident, theft, property damage, and liability insurance as well as the legal environment of insurance products. The course also introduces the basic concepts of product design, underwriting, pricing, marketing, and claim administration. NOTE: Lab fee covers course completion and documentation fees required by Nebraska Department of Insurance. Students are required to schedule their own licensure exams and satisfy other licensing requirements. (Cross-listed as FINA 1100)

INSU 2421 - Insurance Law

4.5 - 0.0 - 4.5

This course is a study of laws and state regulation of insurance. Topics include the insurance contract, the role of insurance agents, insurable interest, insurer's defenses, forfeiture and exclusion of risk, election and waiver, no-fault statutes, and the various types of insurance. (Cross-listed as LAWS 2421)

INSU 2900 - Special Topics in Insurance

Variable

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This course permits instruction in special content areas that are not included in other insurance courses.

INTD - Interior Design

INTD 1100 - Illustration Techniques for Interiors 2.0 - 3.0 - 3.0

Corequisite: (1) INTD 1210 — must be taken at the same time as this course.

This course teaches basic skills in using equipment and interpreting symbols and language used in illustrating interiors and furniture in plan, elevation, and 3-D manual drawing.

INTD 1210 - Foundations for Interior Design 4.5 - 0.0 - 4.5

Corequisite: (1) INTD 1100 — must be taken at the same time as this course.

This course is an introduction to basic design fundamentals of the interior environment. Areas of emphasis include the study and application of principles and elements of design, materials and finishes, furnishings, building systems, lighting, sustainable design, and space planning. Projects are assigned to complete using a variety of techniques.

INTD 1220 - Residential Design 4.5 - 0.0 - 4.5

Prerequisite: (1) INTD 1210 — must be completed prior to taking this course.

This course is a study of residential interior design with emphasis on circulation, social, private, and work spaces. Analysis and application of space planning, codes, lighting, electrical and mechanical, fixtures, ergonomics, materials and finishes, and basic construction techniques are demonstrated through portfolio-ready items.

INTD 1230 - Kitchen and Bath Design 2.0 - 3.0 - 3.0

Prerequisite: (1) INTD 1220 — must be completed prior to taking this course.

This course provides an introduction to kitchen and bath design with emphasis on the application of NKBA guidelines. Students are exposed to planning guidelines, fixtures and appliances, plumbing, electrical and lighting basics, universal and ergonomic design, cabinetry, and materials and finishes appropriate to kitchen and bath design. Students demonstrate principles learned through conceptual studies and portfolio-ready projects.

INTD 1260 - Color Theory 4.0 - 1.5 - 4.5

This course is a study of the principles of color and application theories. Color relationships and application geared to selected creative disciplines are explored through class application projects. Projects use a variety of techniques to develop assigned problems.

INTD 1310 - Fundamentals of Textiles 4.5 - 0.0 - 4.5

This course features an introductory study of the field of textiles. It includes the knowledge and understanding of fibers, yarn, fabric construction, finishes, and color and design techniques used to create a textile product. The course emphasizes identifying the characteristics of each component and how they affect the possibilities and limitations of the product when used to address a given design problem.

INTD 1320 - Interior Finishes and Materials 4.5 - 0.0 - 4.5

Prerequisite: (1) INTD 1310 — must be completed prior to taking this course.

This course applies knowledge and understanding of interior materials, finishes, and products through the use of sampling techniques. The goal is to develop hands-on skills in identifying, selecting, and specifying materials and finishes for functional and aesthetic residential and commercial interiors.

INTD 1410 - History of Architecture and Interiors 4.0 - 0.0 - 4.5

This course is a study of architecture, ornament, and interior styles from antiquity through modern time. Students become familiar with the various styles, their basic respective characteristics, and their relationship to interior environments.

INTD 1420 - History of Furniture 4.5 - 0.0 - 4.5

This course is a study of furniture styles from antiquity through modern times. Students become familiar with various historical movements or periods in furniture design and learn to recognize characteristics of each style.

INTD 2100 - Room Rendering 3.0 - 4.5 - 4.5

Prerequisite: (1) INTD 1230 — must be completed prior to taking this course.

This course explores the use and techniques of free-hand sketching utilizing basic drawing skills, principles of conceptual sketching, value studies, and evaluation of various art media. It reviews one- and two-point perspective drawing techniques and explores the subject of computer-generated 3-D programs. Students create portfolio items by drafting, drawing, and selected art media and techniques.

INTD 2200 - Digital Design Principles for Interior Designers 3.5 - 3.0 - 4.5

Prerequisite: (1) INTD 2100 — must be completed prior to taking this course.

This course teaches students how to create a digital portfolio from existing projects. Basic principles of image capture and manipulation and layout design are presented.

INTD 2250 - Commercial Design 3.0 - 3.0 - 4.0

Prerequisite: (1) INTD 1230 — must be completed prior to taking this course.

This course is an introduction to the study of commercial interior design. Students consider special needs and specifications for commercial interiors. They demonstrate proficiency through the development of individual portfolio items.

INTD 2520 - Professional Practice
3.0 - 0.0 - 3.0

Prerequisite: (1) INTD 1320 — must be completed prior to taking this course.

This course includes the study of the responsibilities and duties of the professional interior designer as related to the business aspect of interior design. Upon completion of this course, students are familiar with the procedures of establishing a business, legal responsibilities, ethics and conduct, marketing, trade sources, contracts, and the project management process.

INTD 2900 - Special Topics in Interior Design
Variable

Prerequisite: (1) Completion of 30.0 or more hours in the Interior Design program — must be completed prior to taking this course.

This course permits instruction in or independent study of special content areas not included in other courses in the Interior Design program.

INTD 2940 - Interior Design Capstone
2.0 - 3.0 - 3.0

Prerequisite: (1) INTD 2250 — must be completed prior to taking this course.

This capstone course is a review of fundamental knowledge learned through previous courses in the Interior Design program. Development, refinement, and critique of portfolio elements into a presentation-ready package are stressed. This course emphasizes resume and interview skills for entry-level interior design work. Students also refine interior design skills through more specialized and detailed space planning projects based on the NCIDQ exam process.

INTD 2981 - Internship
0.0 - 12.0 - 3.0

Prerequisite: (1) Completion of 30.0 or more hours in the Interior Design program — must be completed prior to taking this course.

Students are given the opportunity to observe and/or take part in the entire design, sales, and business follow-through involved in a design job. They also gain product knowledge, observe proper application to design, and gain experience working with people. Based on state guidelines, students must complete 40 hours of work for each credit hour.

JAPN - Japanese

JAPN 1010 - Beginning Japanese I
7.5 - 0.0 - 7.5

This course is the first of two sequential quarter courses that comprise a traditional first-year college Japanese course. Students begin to learn basic skills in pronunciation, speaking, listening, reading, writing, vocabulary, and comprehension.

JAPN 1020 - Beginning Japanese II
7.5 - 0.0 - 7.5

Prerequisite: (1) JAPN 1010 or its equivalent — must be completed prior to taking this course.

This course is the second of two sequential quarter courses that comprise a traditional first-year college Japanese course. Students continue to learn basic skills in pronunciation, speaking, listening, reading, writing vocabulary, and comprehension.

JAPN 2010 - Intermediate Japanese I
4.5 - 0.0 - 4.5

Prerequisite: (1) JAPN 1020 or its equivalent — must be completed prior to taking this course.

This course is the first of four sequential quarter courses that comprise a traditional second-year college Japanese course. Students learn intermediate and everyday functional skills in speaking, listening, reading, writing, comprehension, and vocabulary.

JAPN 2020 - Intermediate Japanese II
4.5 - 0.0 - 4.5

Prerequisite: (1) JAPN 2010 or its equivalent — must be completed prior to taking this course.

This course is the second of four sequential quarter courses that comprise a traditional second-year college Japanese course. Students learn intermediate and everyday functional skills in speaking, listening, reading, writing, comprehension, and vocabulary.

JAPN 2030 - Intermediate Japanese III
4.5 - 0.0 - 4.5

Prerequisite: (1) JAPN 2020 or its equivalent — must be completed prior to taking this course.

This course is the third of four sequential quarter courses that comprise a traditional second-year college Japanese course. Students learn intermediate and everyday functional skills in speaking, listening, reading, writing, comprehension, and vocabulary.

JAPN 2040 - Intermediate Japanese IV
4.5 - 0.0 - 4.5

Prerequisite: (1) JAPN 2030 or its equivalent — must be completed prior to taking this course.

This course is the final of four sequential quarter courses that comprise a traditional second-year college Japanese course. Students learn intermediate and everyday functional skills in speaking, listening, reading, writing, comprehension, and vocabulary.

JAPN 2900 - Special Topics in Japanese
Variable

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This course permits instruction in special content areas not included in other Japanese courses. Topics may include advanced grammar, intensive conversation and pronunciation, business practices, culture, and customs.

LANG - Languages and Language Interpretation

LANG 1110 - Introduction to Language Interpretation 4.5 - 0.0 - 4.5

The first in a series of online interpreter training courses, this course provides a general introduction to the profession of oral language interpreting. Topics include communication theory, language register, modes of interpretation, and the multicultural workplace. Through interactive exercises, students gain an understanding of the profession to support them in a more specialized study of language interpreting. Bilingual skills are not needed for this introductory course.

LANG 1120 - Interpreting Ethics 4.5 - 0.0 - 4.5

The second in a series of online classes designed to prepare individuals to interpret in a variety of settings, this course provides a thorough introduction to the various codes of ethics that exist for interpreters. Students explore ethical standards in community, medical, and legal settings and develop strategies to put ethical policies into practice in the workplace. Students do not have to be bilingual in order to take this introductory course.

LANG 1130 - Emphasis Seminar 4.5 - 0.0 - 4.5

Prerequisite: (2) Fluency in both English and another language — must be completed prior to taking this course.

Good for the experienced and new interpreter alike, this course gives students a taste of work in each area of interpreting emphasis: community, legal, and medical. Students practice consecutive and simultaneous interpretation and sight translation with typical texts and oral exchanges from each area of emphasis and discuss the benefits of working in each area.

LANG 2110 - Fundamentals of Community Interpretation 4.5 - 0.0 - 4.5

Prerequisite: (3) LANG 1110; LANG 1120; and LANG 1130 — must be completed prior to taking this course.

Students gain an understanding of the community services typically available in the United States and the role of the interpreter in each setting. Students study and practice basic techniques and modes of interpretation with relevant texts and oral passages by using monolingual and bilingual dictionaries, developing personalized glossaries, and familiarizing themselves with equipment to help improve their interpretation skills.

LANG 2120 - Community Interpretation - Terminology and Sight Translation 4.5 - 0.0 - 4.5

Prerequisite: (3) LANG 1110; LANG 1120; and LANG 1130 — must be completed prior to taking this course.

Students explore the lexicon of a variety of settings and learn high-frequency terminology used in each. This course involves extensive practice in sight translation skills.

LANG 2130 - Consecutive Interpretation - Community 4.5 - 0.0 - 4.5

Prerequisite: (3) LANG 1110; LANG 1120; and LANG 1130 — must be completed prior to taking this course.

Students practice their consecutive interpretation skills in situations common in community settings. They apply useful note-taking techniques and perform memory-building exercises. Self-evaluation of practice activities is an essential element.

LANG 2140 - Simultaneous Interpretation - Community 4.5 - 0.0 - 4.5

Prerequisite: (3) LANG 1110; LANG 1120; and LANG 1130 — must be completed prior to taking this course.

Students begin this course with training techniques, including shadowing, dual tasking, and paraphrasing. They progress to simultaneous interpretation of oral exchanges common in community settings. Students develop personalized glossaries of relevant terminology and evaluate their performance throughout the course.

LANG 2210 - Fundamentals of Legal Interpretation 4.5 - 0.0 - 4.5

Prerequisite: (3) LANG 1110; LANG 1120; and LANG 1130 — must be completed prior to taking this course.

Students gain an understanding of the U.S. judicial system and the protocol common in various legal settings. Students study and practice basic techniques and modes of interpretation with relevant texts and oral passages by using monolingual and bilingual dictionaries, developing personalized glossaries, and familiarizing themselves with equipment to help improve their interpretation skills.

LANG 2220 - Legal Terminology and Sight Translation 4.5 - 0.0 - 4.5

Prerequisite: (3) LANG 1110; LANG 1120; and LANG 1130 — must be completed prior to taking this course.

Students explore the origins of legal terminology and learn high-frequency terminology used in civil and criminal proceedings. This course involves extensive practice in sight translation of various types of course documents.

LANG 2230 - Consecutive Interpretation - Legal 4.5 - 0.0 - 4.5

Prerequisite: (3) LANG 1110; LANG 1120; and LANG 1130 — must be completed prior to taking this course.


Students practice their consecutive interpretation skills in situations common in legal settings. They apply useful note-taking techniques and perform memory-building exercises. Self-evaluation of practice activities is an essential element.

LANG 2240 - Simultaneous Interpretation - Legal 4.5 - 0.0 - 4.5

Prerequisite: (3) LANG 1110; LANG 1120; and LANG 1130 — must be completed prior to taking this course.

Students begin this course with training techniques, including shadowing, dual tasking, and paraphrasing. They progress to simultaneous interpretation of oral exchanges common in legal settings. Students develop personalized glossaries of relevant

terminology and evaluate their performance throughout the course.

LANG 2310 - Fundamentals of Medical Interpretation 
4.5 - 0.0 - 4.5

Prerequisite: (3) LANG 1110; LANG 1120; and LANG 1130 — must be completed prior to taking this course.

Students gain an understanding of the U.S. healthcare system and the protocol common in various medical settings. They study and practice basic techniques and modes of interpretation with relevant texts and oral passages by using monolingual and bilingual dictionaries, developing personalized glossaries, and familiarizing themselves with equipment to help improve their interpretation skills.

LANG 2320 - Medical Terminology and Sight Translation 
4.5 - 0.0 - 4.5


Prerequisite: (3) LANG 1110; LANG 1120; and LANG 1130 — must be completed prior to taking this course.

Students explore the origins of medical terminology and learn high-frequency terminology used in common healthcare settings. This course involves extensive practice in sight translation of various types of healthcare documents.

LANG 2330 - Consecutive Interpretation - Medical 
4.5 - 0.0 - 4.5

Prerequisite: (3) LANG 1110; LANG 1120; and LANG 1130 — must be completed prior to taking this course.

Students practice their consecutive interpretation skills in situations common in medical settings, apply useful note-taking techniques, and perform memory-building exercises. Self-evaluation of practice activities is an essential element.

LANG 2340 - Simultaneous Interpretation - Medical 
4.5 - 0.0 - 4.5

Prerequisite: (3) LANG 1110; LANG 1120; and LANG 1130 — must be completed prior to taking this course.

Students begin this course with training techniques including shadowing, dual tasking, and paraphrasing. They progress to simultaneous interpretation of oral exchanges common in medical settings. Students develop personalized glossaries of relevant terminology and evaluate their performance throughout the course.

LANG 2900 - Special Topics in Languages
Variable

This course permits instruction in special content areas not included in other courses in the Languages and Language Interpretation program. Topics may include language interpretation, intensive conversation, and advanced grammar.

LAWS - Legal Studies

LAWS 1100 - The Paralegal Profession
4.5 - 0.0 - 4.5

This course is a survey of the legal environment, including law office procedures, duties and limitations of paralegals, professional responsibilities and expectations, interpretation of

statutes and regulations, client relationships, legal ethics, and confidentiality. It also focuses on drafting projects featuring Microsoft Word software.

LAWS 1101 - Introduction to Law 
4.5 - 0.0 - 4.5

This course includes an overview of the fields of law and their history, the areas of law and ethics applicable to the legal professional, basic legal principles, legal terminology, the judicial system, legislation, criminal versus civil procedures, and the elements of a trial.

LAWS 1110 - Litigation
4.5 - 0.0 - 4.5

Prerequisite: (1) LAWS 1101 with a grade of C or better; or instructor approval — must be completed prior to taking this course.

This course is a survey of the process of pursuing a civil action through the legal system. Topics include choice of courts, jurisdiction, venue, pleadings and related motions, discovery, pre-trial actions and preparation, and trial and appellate procedures. The course emphasizes the paralegal's role in gathering and organizing materials, interviewing and investigating, drafting complaints, answering interrogatories, pleadings, the trial notebook featuring Microsoft Word software, and assisting during the trial.

LAWS 1111 - Microsoft Word for the Law Office 
4.5 - 0.0 - 4.5


Prerequisite: (1) INFO 1001 or bachelor's degree — must be completed prior to taking this course.

Students learn basic and advanced Microsoft Word features and functions to create, edit, store, and maintain common legal and business documents. This course focuses on practical word processing in legal organizations, emphasizing methods to help paralegals and others who work with computers in a legal environment to become more efficient and productive.

LAWS 1230 - Legal Research and Writing I
4.5 - 0.0 - 4.5

Prerequisite: (3) ENGL 1020, LAWS 1110, and LAWS 1111; or instructor approval — must be completed prior to taking this course.

This course introduces the various types of research for which the paralegal is typically responsible, including computer-aided legal research, procedures, and case documentation. Utilizing Microsoft Word software, students learn to develop written memoranda and legal documents for attorneys based on their research.

LAWS 1500 - Introduction to US Immigration Law 
4.5 - 0.0 - 4.5

An overview of U.S. immigration law, policy and procedure. The course includes an introduction to the laws, agencies and tribunals that govern U.S. immigration and citizenship. Topics include major legislative history and policy, family and employment-based immigration law, removal proceedings, naturalization and common ethical issues encountered in immigration advocacy and compliance. Enrollment in the course

does not qualify any person to engage in the practice of immigration law. This course is not intended for individuals enrolled in the paralegal program. Paralegal students who have completed LAWS 2327 may substitute that course for LAWS 1500.

LAWS 1501 - Immigration Regulatory Agencies ☺

4.5 - 0.0 - 4.5

Prerequisite: (1) LAWS 1500 or LAWS 2327 — must be completed prior to taking this course.

The course surveys the six federal agencies involved in immigration law, policy and procedure: Department of Homeland Security, U.S. Citizenship and Immigration Services, U.S. Immigration and Customs Enforcement, U.S. Customs and Border Protection, U.S. Department of Labor and U.S. Department of State. It provides an overview of the role of the U.S. Department of Justice and U.S. Attorney General as well as the Executive Office Immigration Review, which conducts immigration court proceedings, appellate reviews, and administrative hearings. Enrollment in this course does not qualify any person to engage in the practice of immigration law. This course is not intended for individuals enrolled in the paralegal program.

LAWS 1503 - Immigration and Families ☺

4.5 - 0.0 - 4.5

Prerequisite: (2) LAWS 1500 or LAWS 2327; and LAWS 1501 — must be completed prior to taking this course.

This course provides an overview of the Immigration and National Act and federal regulations for sponsoring family members for lawful permanent residence. Topics include an overview of family immigration, affidavit of support requirements, eligibility for adjustment of status, consular processing, grounds of inadmissibility, and waivers of inadmissibility. This course surveys federal immigration laws that provide immigration benefits, battered immigrant spouses and children, victims of trafficking, and special immigrant juveniles. Enrollment in the course does not qualify any person to engage in the practice of immigration law. This course is not intended for individuals enrolled in the paralegal program.

LAWS 1505 - Removal and Advocacy in Immigration Court ☺

4.5 - 0.0 - 4.5

Prerequisite: (2) LAWS 1500 or LAWS 2327; and LAWS 1501 — must be completed prior to taking this course.

This course provides an overview of the process of removing non-citizens - both those legally present and those without valid documentation - from the United States based upon allegations and charges of inadmissibility and removability that provide grounds to do so under the Immigration and Nationality Act and its interaction with other laws. The focus is on representation of non-citizens in immigration court, and emphasizes such topics as detention, relief for those who face persecution and torture as well as other defenses from removal, the development of case strategy, compilation of evidence and use of legal resources, and the representation before, during and after immigration hearings. Enrollment in this course does not qualify any person to engage

in the practice of immigration law. This course is not intended for individuals enrolled in the paralegal program.

LAWS 1509 - Ethics and Immigration Advocacy and Compliance ☺

4.5 - 0.0 - 4.5

Prerequisite: (2) LAWS 1500 or LAWS 2327; and LAWS 1503 or LAWS 1505 — must be completed prior to taking this course.

This course focuses on immigration fraud, the unauthorized practice of law, and state legislation on immigration reform. Topics include an overview of notary, immigration specialist, and immigration consultant fraud; the Board of Immigration Appeals accredited agency and accredited representative programs; and contemporary issues in immigration reform. This course also surveys Form I-9 compliance, e-verify, Social Security No Match letters, and Department of Homeland Security Enforcement through ICE raids and audits. Enrollment in the course does not qualify any person to engage in the practice of immigration law. This course is not intended for individuals enrolled in the paralegal program.

LAWS 1581 - Service Learning ☺

0.0 - 18.0 - 4.5

Prerequisite: (6) LAWS 1500 or LAWS 2327; LAWS 1501; LAWS 1503; LAWS 1505; LAWS 1509; and instructor approval — must be completed prior to taking this course.

Service learning offers an opportunity for students to provide an important service to the community and to learn about immigration law, policy, and procedure. This course offers the opportunity to learn where immigrants to the United States are coming from, the reasons for coming to the United States, and the obstacles they face upon arrival. Students have opportunities to select various projects on immigration compliance and advocacy and proposed immigration reforms. Enrollment in the course does not qualify any person to engage in the practice of immigration law. This course is not intended for individuals enrolled in the paralegal program.

LAWS 2240 - Legal Research and Writing II

4.5 - 0.0 - 4.5

Prerequisite: (1) LAWS 1230 — must be completed prior to taking this course.

Students continue to develop knowledge of the various legal research tools along with greater emphasis on computer-aided legal research, development of legal writing techniques, principles of editing, and preparation of legal briefs.

LAWS 2320 - Torts

4.5 - 0.0 - 4.5

Prerequisite: (1) LAWS 1110 — must be completed prior to taking this course.

This course is a study of the concept of legal wrongs and their treatment in law to include intentional torts, negligence, and strict liability as applied to persons, property, and business. Topics include assault and battery, false imprisonment, invasion of privacy, trespasses, breach of contract, contributory negligence, assumption of risk, no-fault systems, and workers' compensation.

LAWS 2322 - Family Law**4.5 - 0.0 - 4.5**

Prerequisite: (1) LAWS 1110 — must be completed prior to taking this course.

This course studies laws affecting family-related matters, such as divorce, separation, child custody and support, adoption, guardianship, and paternity. It includes document drafting of orders, affidavits, decrees, and complaints.

LAWS 2323 - Employment Law**4.5 - 0.0 - 4.5**

Prerequisite: (1) LAWS 1110 — must be completed prior to taking this course.

This course studies laws, regulations, and agencies governing employment practices, discrimination, labor unions, child labor, employee benefits, occupation safety and health, equal employment opportunity, and affirmative action.

LAWS 2324 - Criminal Law and Procedures**4.5 - 0.0 - 4.5**

Prerequisite: (1) LAWS 1110 — must be completed prior to taking this course.

This course studies the history and philosophy of criminal law, including the definition and classification of crimes and the criminal justice system, constitutional limitations, and criminal procedure and its applications.

LAWS 2325 - Bankruptcy, Credit, and Collections Law**4.5 - 0.0 - 4.5**

Prerequisite: (1) LAWS 1110 — must be completed prior to taking this course.

This course studies the laws governing bankruptcy, voluntary and involuntary petitions, liens, preferences, powers of trustee, rights of debtors and creditors, liquidations, and the discharge of bankruptcy. It reviews the legal avenues for the collection of debts, including garnishments and seizures.

LAWS 2326 - Evidence and Discovery**4.5 - 0.0 - 4.5**

Prerequisite: (1) LAWS 1110 — must be completed prior to taking this course.

This course includes an examination of the rules governing admissibility of evidence that must be followed in the examination of witnesses and in the production of documents, including the concepts of relevance, expert witness, hearsay, materiality, and privilege. It also covers the tools and procedures of pre-trial discovery, including depositions, interrogatories, production of documents, physical and mental examinations, and requests for admissions.

LAWS 2327 - Immigration Law**4.5 - 0.0 - 4.5**

Prerequisite: (1) LAWS 1110 — must be completed prior to taking this course.

This course covers both employment-related immigration as well as family-based immigration. The course introduces students to the process, the federal forms used, and the interpretation of the laws covering the immigration procedural and substantive laws.

LAWS 2420 - Estate Administration**4.5 - 0.0 - 4.5**

Prerequisite: (1) LAWS 1110 — must be completed prior to taking this course.

This course is a study of the law pertinent to wills, estates, and trusts, including intestate succession, codicils, probate, types of trusts, and duties of trustees.

LAWS 2421 - Insurance Law**4.5 - 0.0 - 4.5**

Prerequisite: (1) LAWS 1110 — must be completed prior to taking this course.

This course is a study of laws and state regulation of insurance, including the insurance contract, the role of insurance agents, insurable interest, insurer's defenses, forfeiture and exclusion of risk, election and waiver, no-fault statutes, and the various types of insurance. (Cross-listed as INSU 2421)

LAWS 2422 - Law of Corporations**4.5 - 0.0 - 4.5**

Prerequisite: (1) LAWS 1110 or BSAD 1100 — must be completed prior to taking this course.

This course is a study of the laws governing formation, structure, regulation, and dissolution of corporations, including shareholder and director liability; types of financial structure; takeovers, mergers, and acquisitions; foreign existence and operation; and comparison of the corporate structure with other business entities. It emphasizes the legal assistant's role in gathering facts, organizing data, and drafting documents typically encountered in the corporate environment.

LAWS 2900 - Special Topics in Legal Studies**Variable**

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This course permits instruction in special content areas that are not appropriately treated in other legal studies courses.

LAWS 2981 - Internship I**0.0 - 20.0 - 4.0**


Prerequisite: (2) LAWS 1230 and instructor approval — must be completed prior to taking this course.

Students begin work in a law office or other organization where they work under the supervision of an attorney. The variety of work assignments include such items as digesting depositions, organizing documents for discovery, drafting filings and pleadings, and reporting the status of cases. Students keep a notebook to log the kinds of tasks performed, and the work supervisor and Legal Studies program coordinator periodically review the notebook entries to assure that competencies appropriate to the role of the paralegal are being developed. Based on state guidelines, students must complete 40 hours of work for each credit hour.

LAWS 2982 - Internship II**0.0 - 20.0 - 4.0**

Prerequisite: (3) LAWS 2240; LAWS 2981; and instructor approval — must be completed prior to taking this course.

During this internship, students continue to work under the supervision of an attorney and to record tasks in a notebook. Work assignments become progressively more difficult, and students are expected to expand the range of their competencies and corresponding abilities to work independently with less supervision and assistance. Based on state guidelines, students must complete 40 hours of work for each credit hour.

LAWS 2985 - Internship: Immigration Advocacy 
0.0 - 18.0 - 4.5

Prerequisite: (5) LAWS 1500 or LAWS 2327; LAWS 1501; LAWS 1503; LAWS 1505; and LAWS 1509 — must be completed prior to taking this course.

The certificate in Immigration Law, Policy, and Procedure program internship may be taken when the student has completed 18.0 credit hours of the program requirements at MCC. The internship offers experience as well as educational and skill-enhancing opportunities. Students may perform the internship in a traditional public or private organization or a business where the student can apply the principles, procedures, and rules learned that relate to U.S. immigration law, policy, and procedure. Interns perform substantive work alongside individuals experienced in national security, visa categories, amnesty, legislation, employment, policy and economics. Interns acquire experience in immigration advocacy compliance, policy and procedure, and develop or build on marketable skills. The internship experience is recorded in an electronic portfolio submitted online and reviewed by the internship supervisor and faculty sponsor. Based on State guidelines, students must perform 40 hours of work for each 1.0 credit hour. Enrollment in the course does not qualify any person to engage in the practice of immigration law. This course is not intended for individuals enrolled in the paralegal program.

MATH - Mathematics

MATH 0900 - Basic Arithmetic
3.0 - 0.0 - 3.0

Prerequisite: (1) Within two years prior to beginning the course, MCC placement test — must be completed prior to taking this course.

This course addresses study skills for mathematics, student learning styles, and math anxiety. Topics include operations with whole numbers, properties of the real number system, and an introduction to fractions. NOTE: MATH 09XX courses carry credit for MCC only; the credit does not transfer nor does it apply toward graduation.

MATH 0910 - Developmental Mathematics 
5.0 - 0.0 - 5.0

Prerequisite: (1) Within two years prior to beginning the course, either successful completion of MATH 0900 with a grade of P, or MCC placement test — must be completed prior to taking this course.

This course presents basic computational skills for either review or initial mastery by the students. Topics include fractions;

decimals; the solutions of ratio, proportion, and percent problems; operations with integers; and basic study skills for mathematics problem-solving and estimation. Topics may also include geometry, measurement, and basic algebraic concepts. NOTE: MATH 09XX courses carry credit for MCC only; the credit does not transfer nor does it apply toward graduation.

MATH 0930 - Beginning Algebra Part I
4.0 - 0.0 - 4.0

Prerequisite: (1) Within two years prior to beginning the course, either successful completion of MATH 0910 with a grade of P, or MCC placement test — must be completed prior to taking this course.

This course is for students who need to learn basic algebra skills. Topics include positive and negative real numbers, solving linear equations and inequalities, and applications of linear equations. (Formerly MATH 0920) NOTE: MATH 09XX courses carry credit for MCC only; the credit does not transfer nor does it count toward graduation.

MATH 0931 - Beginning Algebra Part II
4.5 - 0.0 - 4.5


Prerequisite: (1) Within two years prior to beginning the course, either successful completion of MATH 0930 with a grade of P, or MCC placement test — must be completed prior to taking this course.

Topics include integer exponents, operations with polynomials, factoring, rational expressions, equations of lines, and graphing of equations and inequalities. NOTE: MATH 09XX courses carry credit for MCC only; the credit does not transfer nor does it apply toward graduation.

MATH 0960 - Accelerated Beginning Algebra 
6.0 - 0.0 - 6.0

Prerequisite: (1) Within two years prior to beginning the course, either successful completion of MATH 0910 or MATH 0930 with a grade of P, or MCC placement test — must be completed prior to taking this course.

This is a fast-paced course for students who need to review basic algebra skills. It contains all of the content of both MATH 0930 Beginning Algebra Part 1 and MATH 0931 Beginning Algebra Part II. Topics include positive and negative real-numbers, solving linear equations and inequalities along with their applications, integer exponents, operations with polynomials, factoring, rational expressions, equations of lines, and graphing of linear equations and inequalities.

MATH 1220 - Business Mathematics 
4.5 - 0.0 - 4.5

Prerequisite: (1) Within two years prior to beginning the course, either successful completion of MATH 0910 or higher with a grade of P or C or better, or MCC placement test — must be completed prior to taking this course.

This course explores the development and application of the mathematical skills needed to solve problems related to business occupations. Topics include percentages, checking accounts and services, payroll, payroll taxes, cash and trade discounts, markdowns, property and sales taxes, simple and compound interest, installment purchases, loan payment plans, and

annuities. NOTE: MATH 1220 and MATH 1240 do not require MATH 0930, 0931, or 0960 as a prerequisite; however, MATH 0910 skills are necessary. MATH 1220 and MATH 1240 satisfy the math requirements in certain programs only. Check to see what the program advises to fulfill the general education math requirement. In most cases, these courses do not transfer to other institutions as math credit.

MATH 1240 - Applied Mathematics

4.5 - 0.0 - 4.5

Students develop and apply the mathematical skills needed to solve problems related in industrial occupations. Students enroll in the mastery-based modular course with the intent of completing one of two strands. Placement is determined by the instructor and is based on the students' majors. Each strand satisfies the objectives for the course, but is contextualized to meet students' individual needs. Topics include applications of arithmetic skills, measurement, elementary algebra, geometry, and trigonometry.

MATH 1242 - Applied Math for the Hospitality Industry

4.5 - 0.0 - 4.5

Prerequisite: (1) Within two years prior to beginning the course, either successful completion of MATH 0910 or higher with a grade of P or C or better, or MCC placement test — must be completed prior to taking this course.

This course covers the development and application of the mathematical skills needed to understand the financial concepts and solve problems related to the hospitality industry. Topics include basic math principles, conversions, yields, recipe costing, recipe conversions, selling prices, baking formulas, checking accounts and services, payroll, and payroll taxes.

MATH 1260 - Geometry

4.5 - 0.0 - 4.5

Prerequisite: (1) Within two years prior to beginning the course, either successful completion of MATH 0930 or higher with a grade of P or C or better, or MCC placement test — must be completed prior to taking this course.

This course covers geometric topics of logic, measurement, plane figure relationships, and figures in space.

MATH 1310 - Intermediate Algebra

4.5 - 0.0 - 4.5

Prerequisite: (1) Within two years prior to beginning the course, either successful completion of MATH 0931 or MATH 0960 with a grade of P; or instructor approval for those with MATH 0931 or MATH 0960 placement scores for selected online sections of MATH 1310 — must be completed prior to taking this course.

This course extends basic algebra skills and provides the background necessary for further mathematics courses. Topics include linear, quadratic, polynomial, radical, and rational equations; systems of linear equations; rational exponents and polynomial factoring; rational and radical expressions; complex numbers; and graphs of linear and quadratic functions.

MATH 1410 - Statistics

4.5 - 0.0 - 4.5

Prerequisite: (1) Within two years prior to beginning the course, either successful completion of MATH 1310 or higher with a grade of C or better, or placement via ACT or MCC placement test — must be completed prior to taking this course.

This course requires students to develop a critical and functional understanding of data. Topics include frequency distributions, measures of central tendency and dispersion, probability and probability distribution, sampling concepts, estimating means, variances, standard deviations, proportions and percentages, hypothesis testing, and correlation and linear regression. Software and calculators are used as appropriate throughout the course.

MATH 1420 - College Algebra

5.0 - 0.0 - 5.0

Prerequisite: (1) Within one year prior to beginning the course, successful completion of MATH 1310 with a grade of C or better, placement via ACT, or MCC placement test — must be completed prior to taking this course.

This course covers advanced algebra topics that include rational expressions; solving quadratic, rational, radical, and polynomial equations; relations and functions; quadratic and polynomial functions; systems of equations and inequalities; exponential and logarithmic functions; and conic sections.

MATH 1430 - Trigonometry

4.5 - 0.0 - 4.5

Prerequisite: (1) Within two years prior to beginning the course, successful completion of MATH 1310 with a grade of C or better or MCC placement test — must be completed prior to taking this course.

Topics include trigonometric ratios, triangles, vectors, circular functions, trigonometric identities, inverse trigonometric functions, trigonometric equations, and complex numbers. NOTE: The prerequisites include grades of C or better in MATH 1420 and MATH 1430 for MATH 2410. The two courses can be taken in either order prior to enrolling in Calculus I; however, it is recommended that students enroll in MATH 1420 prior to enrolling in MATH 1430.

MATH 1930 - Applied Calculus

4.5 - 0.0 - 4.5

Prerequisite: (1) Within two years prior to beginning the course, successful completion of MATH 1420 with a grade of C or better or MCC placement test — must be completed prior to taking this course.

This course presents differential and integral calculus and applications to solutions of real problems involving rates of change, optimization, revenue, cost, marginal analysis, demand and profit functions, and economic growth rate. Students should check their program requirements as MATH 1930 Applied Calculus does not substitute for MATH 2410 Analytic Geometry and Calculus I.

MATH 2410 - Analytic Geometry and Calculus I

7.5 - 0.0 - 7.5

Prerequisite: (2) Within two years prior to beginning the course, either successful completion of MATH 1420 and MATH 1430 with a grade of C or better in both courses, or MCC placement test — must be completed prior to taking this course.

This course covers the mathematical tools used to analyze the continuous rate of change between variables. It reviews some principles of pre-calculus and investigates limits, differentiation, and integration. The course includes applications of both differentiation and integration. NOTE: The prerequisites include grades of C or better in MATH 1420 and MATH 1430 for MATH 2410. The two courses can be taken in either order prior to enrolling in Calculus I; however, it is recommended that students enroll in MATH 1420 prior to enrolling in MATH 1430.

MATH 2411 - Calculus II

7.5 - 0.0 - 7.5

Prerequisite: (1) MATH 2410 — must be completed prior to taking this course.

Topics include logarithmic, exponential, inverse trigonometric and hyperbolic functions with their derivatives, and related integrals. The course includes techniques of integration, improper integrals, and infinite series. It covers polar coordinates and relates them to calculus.

MATH 2412 - Calculus III

6.0 - 0.0 - 6.0

Prerequisite: (1) MATH 2411 — must be completed prior to taking this course.

Topics include polar, cylindrical, and spherical coordinates. The course covers parametric equations and vectors in the plane and in space, including solid analytic geometry. It also includes vector-valued functions, functions of several variables, and multiple integrations.

MATH 2510 - Differential Equations

4.5 - 0.0 - 4.5

Prerequisite: (1) MATH 2411 — must be completed prior to taking this course.

Pre/Co Requisite: (1) MATH 2412 — must be taken either prior to or at the same time as this course.

This course covers solutions for first- and second-order ordinary differential equations and first-order non-linear differential equations with applications. It also covers power series, Fourier series, and Laplace Transform Methods.

MATH 2900 - Special Topics in Mathematics Variable

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This course permits instruction in special content areas not included in other math courses. Topics may include applied statistics, discrete mathematics, or number theory.

MDST - Medical Assisting

MDST 1010 - Clinical Procedures I

6.0 - 0.0 - 6.0

Prerequisite: (1) Successful completion of the first quarter of the Medical Assisting program — must be completed prior to taking this course.

This course provides theoretical and clinical applications to instruct students on patient care procedures performed in the physician's office. These procedures include, but are not limited to, administering medication, taking vital signs, collecting and processing specimens, performing EKGs, preparing patients for examinations, procedures and treatments, and assisting with minor surgical procedures. This is an entry-level course.

MDST 1020 - Administrative Procedures I

4.5 - 0.0 - 4.5

Prerequisite: (1) Acceptance into the Medical Assisting program — must be completed prior to taking this course.

This course teaches students word processing skills, medical transcription, appointment scheduling, and the scheduling of inpatient and outpatient procedures.

MDST 1030 - Medical Disorders

3.5 - 0.0 - 3.5

Prerequisite: (1) Acceptance into the Medical Assisting program — must be completed prior to taking this course.

This course provides students with the opportunity to study and learn basic information about common medical conditions that are frequently first diagnosed in the ambulatory healthcare setting. Understanding how diseases affect the human body is essential to providing patient care. The course introduces disease processes as well as infectious diseases, congenital diseases, and neoplasm in conjunction with the body systems that they affect.

MDST 1040 - Clinical Terminology I

4.5 - 0.0 - 4.5

Prerequisite: (1) Acceptance into the Medical Assisting program — must be completed prior to taking this course.

This course provides an introduction to the medical terminology used in the clinical healthcare setting. Students study with a systems approach and focus on root, prefixes, and suffixes commonly used in medical terms. The course emphasizes correct spelling and pronunciation and correct usage of medical terms and common abbreviations as they relate to the care of patients in the healthcare office. Upon completion, students learn 350 medical word roots, prefixes, and suffixes and are able to combine these to form over 11,000 complex medical terms used in the healthcare setting.

MDST 1050 - Clinical Terminology II

4.5 - 0.0 - 4.5

Prerequisite: (1) Successful completion of program first quarter courses — must be completed prior to taking this course.

This course expands on basic clinical terminology by studying the medical terminology that relates to each system of the body, medical and surgical procedures, and lab reports. It instructs

students in proper charting techniques, discharge summaries, and transcription of medical reports and administrative correspondence.

MDST 2010 - Clinical Procedures II

6.0 - 0.0 - 6.0

Prerequisite: (1) Successful completion of the second quarter of the Medical Assisting program — must be completed prior to taking this course.

This course provides theoretical and clinical applications to instruct students on patient care procedures performed in the physician's office. These procedures include, but are not limited to, administering medication, taking vital signs, collecting and processing specimens, performing EKGs, preparing patients for examinations, procedures and treatments, and assisting with minor surgery procedures. This is a practitioner-level course.

MDST 2020 - Administrative Procedures II

4.5 - 0.0 - 4.5

Prerequisite: (1) Successful Completion of first quarter courses — must be completed prior to taking this course.

This course is a continuation of Administrative Procedures I. It includes a more in-depth discussion of insurance and its impact on healthcare. It also addresses diagnostic and procedural coding, completion of insurance forms, credit and collections, submission of third-party claims, payroll processing, bookkeeping principles, accounts payable, and accounts receivable.

MDST 2030 - Laboratory Techniques

3.5 - 0.0 - 3.5

Prerequisite: (1) Successful completion of the second quarter of the Medical Assisting program — must be completed prior to taking this course.

This course provides students with theoretical and simulated clinical experience with the preparation and collection of specimens for laboratory analysis. It emphasizes frequently performed laboratory tests done in the physician's office, including urinalysis, blood counts, and simple chemistries.

MDST 2110 - Pharmacology for Medical Assistants and Allied Health Professionals I

4.5 - 0.0 - 4.5

Prerequisite: (1) Successful completion of first quarter courses — must be completed prior to taking this course.

This course provides students with a basic understanding of pharmacology terms and related issues necessary for the clinical office or outpatient care setting. This course provides students with an introduction to therapeutic drug treatment regimens. It emphasizes understanding of pharmacodynamics, drug side effects, administration procedures, and dosage computations.

MDST 2120 - Pharmacology for Medical Assistants and Allied Health Professionals II

4.5 - 0.0 - 4.5

Prerequisite: (1) Successful completion of second quarter courses — must be completed prior to taking this course.

This course provides students with the opportunity to apply different drug regimens, list the effects of medications on all of the body systems, state special considerations for age-specific

medication administration, and identify drugs used to treat various disease processes. Students must also be able to identify and understand, at a minimum, the top 50 common medications used in the clinical and outpatient setting and how they relate to the human body and disease.

MDST 2980 - MDST Externship

0.0 - 0.0 - 18.5

Prerequisite: (1) Successful completion of the first three quarters in the Medical Assisting program — must be completed prior to taking this course.

This course is to provide students with the time to practice and perfect the didactic and clinical skills learned and provides a professional clinical office setting with qualified personnel to support students in their externship portion of the program. This course provides a learning experience that applies knowledge in performing administrative and clinical procedures and in developing professional attitudes for interacting with other professionals and consumers in the healthcare field. The experience remains parallel in content and concept with the material presented in the didactic and classroom laboratory sessions.

MUSC - Music

MUSC 1010 - Introduction to Music I

4.5 - 0.0 - 4.5

This course surveys music - its elements, composers, instruments, terminology, styles, and forms - from antiquity to 1800, providing a broad exposure for those unacquainted with the art of music.

MUSC 1020 - Introduction to Music II

4.5 - 0.0 - 4.5

This course surveys music from 1800 to the present including compositions representative of blues, jazz, rock, and contemporary forms. It also examines music of non-Western cultures.

MUSC 1050 - Music Appreciation

4.5 - 0.0 - 4.5

Students with no prior formal musical education learn to become informed listeners as they learn basic elements of music, such as rhythm, melody, and harmony, and advanced concepts, such as meaning and style.

MUSC 1110 - Music Fundamentals I

4.5 - 0.0 - 4.5

This course teaches musical notation and the musical elements of pitch, melody, rhythm, harmony, and form to students unacquainted with the language of music.

MUSC 1120 - Music Fundamentals II

4.5 - 0.0 - 4.5

Prerequisite: (1) MUSC 1110 — must be completed prior to taking this course.

This course builds on musical terminology and basic music concepts and requires students to apply them in transposition, composition, and performance. The course also focuses on ear-

training. It includes listening examples to assist students in developing a musically trained ear.

NURS - Nursing

NURS 1110 - Adult Nursing I

3.0 - 9.0 - 6.0

Prerequisite: (5) Acceptance into the Practical Nursing program; CHEM 1010; ENGL 1010; MATH 1310; and PSYC 1120 — must be completed prior to taking this course.

This adult medical surgical course introduces basic concepts of client care. It presents the concepts of psychosocial and physiologic aspects of aging with an emphasis on caring for the institutional elderly client and caring for the surgical client. Students learn concepts on the musculoskeletal, peripheral vascular system, eye, ear, nose, and throat. This course includes didactic and a clinical component.

NURS 1120 - Adult Nursing II

4.0 - 12.0 - 8.0

Prerequisite: (4) NURS 1110; NURS 1510; NURS 1200; and NURS 1300 — must be completed prior to taking this course.

This course presents cardiovascular disorders, respiratory disorders, cancer, and hematologic and lymphatic disorders. Students discuss gastrointestinal diseases along with disorders of the male and female reproductive system and sexually transmitted diseases. This course includes didactic and a clinical component.

NURS 1130 - Adult Nursing III

5.0 - 10.5 - 8.5

Prerequisite: (2) NURS 1110 and NURS 1950 — must be completed prior to taking this course.

This course is a continuation of study of the nursing care and interventions provided for a client with a specific disease process occurring in the following systems of the body: neurological system, endocrine system, fluids and electrolytes, the renal system, and acid-base balance. Use of the nursing process continues to be an integral part of the course. The course discusses content on professional issues including leadership concepts and includes didactic and a clinical component.

NURS 1200 - Professional Role of the Nurse I

1.0 - 0.0 - 1.0

Prerequisite: (5) Acceptance into the Practical Nursing program; CHEM 1010; ENGL 1010; MATH 1310; and PSYC 1120 — must be completed prior to taking this course.

This course assists students in identifying the role of the nurse as a member of the health team. It emphasizes the history of nursing, legal and ethical concepts, cultural influences, the nursing process, communication, fundamentals of the teaching and learning process, and the healthcare delivery system.

NURS 1300 - Mental Health Nursing I

1.0 - 0.0 - 1.0

Prerequisite: (5) Acceptance into the Practical Nursing program; CHEM 1010; ENGL 1010; MATH 1310; and PSYC 1120 — must be completed prior to taking this course.

This course acquaints students with the concept of mental health as well as alterations in mental health. Topics include a review of select developmental theories and stages of the life cycle. The course explores stress, specific anxiety disorders, defense mechanisms, specific mental health alterations and current treatments, abuses, eating disorders, spirituality, death, and grief.

NURS 1400 - Family Nursing I

2.0 - 3.0 - 3.0

Prerequisite: (2) NURS 1120 and NURS 1950 — must be completed prior to taking this course.

This course focuses on the common health and wellness needs of individuals in the child-bearing and child-rearing years. Topics include the pregnancy process and concepts of maternal and child nursing as it relates to facilitation of the attainment of health and wellness for the ante-partum, intra-partum, post-partum, and normal newborn. The course discusses normal growth and development and select health problems from infancy through adolescence. This course includes didactic and a clinical component.

NURS 1510 - Concepts of Health Assessment and Therapeutic Interventions I

2.5 - 3.0 - 3.5

Prerequisite: (5) Acceptance into the Practical Nursing program; CHEM 1010; ENGL 1010; MATH 1310; and PSYC 1120 — must be completed prior to taking this course.

This course assists students in establishing a foundation for providing basic nursing care to the adult client. It introduces physical assessment and evidence-based practice to select nursing skills. It demonstrates comprehension of underlying principles and mastery of skills in the lab setting.

NURS 1950 - Pharmacology

4.0 - 0.0 - 4.0

Prerequisite: (4) NURS 1110; NURS 1200; NURS 1300; and NURS 1510 — must be completed prior to taking this course.

This course assists students in developing an understanding of how drugs assist the client with health alterations to attain or maintain optimum health. The nursing process is an integral component of this course.

NURS 2140 - Adult Nursing IV

3.5 - 4.5 - 5.0

Prerequisite: (2) NURS 2410 and NURS 2520 — must be completed prior to taking this course.

This course is a continuation and advancement of pathophysiological manifestations, treatment modalities, and nursing interventions through utilization of the critical-thinking process and subsequent safe-decision outcomes. It includes a clinical component.

NURS 2150 - Adult Nursing V

3.0 - 6.0 - 5.0

Prerequisite: (2) NURS 2140 and NURS 2310 — must be completed prior to taking this course.

This course is a continuation and advancement of previous content and includes the following content areas as well as treatment modalities and nursing interventions: perioperative

nursing, emergency, trauma, mass casualty, neurological disorders, musculoskeletal and connective tissue diseases, endocrine disorders, infectious disease, immune dysfunctions, end of life, and transplantation. It utilizes the critical-thinking process with subsequent safe-decision outcomes. The course includes a clinical component.

NURS 2210 - Professional Role of the Nurse II
1.0 - 0.0 - 1.0

Prerequisite: (2) NURS 2140 and NURS 2310 — must be completed prior to taking this course.

Corequisite: (1) NURS 2410 — must be taken at the same time as this course.

Pre/Co Requisite: (1) NURS 2520 — must be taken either prior to or at the same time as this course.

This course assists students in identifying the role of the registered nurse as a member of the healthcare team. It emphasizes the role of the registered nurse, legal and ethical concepts, cultural influences, the nurse process, the teaching and learning process, and the healthcare delivery system.

NURS 2310 - Mental Health Nursing II
3.5 - 4.5 - 5.0

Prerequisite: (2) NURS 2410 and NURS 2520 — must be completed prior to taking this course.

This course examines mental health, mental illness, nurse-client relationships, and self-awareness. Through the use of the nursing process, therapeutic communication, and caring behaviors, the course promotes the path to wellness in individuals, families, and groups. It examines the role of the psychiatric nurse as a member of the mental health team and considers current issues and trends in mental health and the impact on practice. The course integrates pathophysiology, nutrition, and pharmacology and provides clinical experiences in acute or chronic health facilities and community-based experiences.

NURS 2410 - Family Nursing II
3.0 - 6.0 - 5.0

Prerequisite: (1) Acceptance into the second-year nursing program — must be completed prior to taking this course.

This course focuses on complex health and wellness needs of individuals and families throughout the life span.

NURS 2520 - Concepts of Health Assessment and Therapeutic Interventions II
0.5 - 2.0 - 1.0

Prerequisite: (1) Acceptance into the second-year nursing program — must be completed prior to taking this course.

This course assists students in developing assessment skills of the professional registered nurse. It introduces physical assessment skills related to light palpation percussion and the use of the otoscope and ophthalmoscope. Students learn the therapeutic interventions related to intravenous therapy. The course demonstrates comprehension of underlying principles and mastery of skills in the lab setting.

ORNT - Orientation

ORNT 1010 - Student Success Seminar I
2.0 - 0.0 - 2.0

Recommended: RDLS 1200 — recommended at the same time as this course, but not required.

Students reflect on their past learning, engage in community-building activities, and practice strategies for successful decision making, goal setting and academic skill development.

ORNT 1020 - Student Success Seminar II
2.0 - 0.0 - 2.0

Prerequisite: (1) ORNT 1010 — must be completed prior to taking this course.

Through research and reflection, students examine career and transfer opportunities, establish personal and professional goals and create a clear path for achieving their goals.

PHED - Physical Education

PHED 1000 - Physical Education for Health
1.0 - 1.5 - 1.5

This course provides information regarding muscle type and function. It gives attention to both aerobic and anaerobic physical training techniques consistent with a healthy lifestyle. Students develop and follow a personalized goal-directed exercise program. The course covers motivational techniques and dietary considerations.


PHED 1010 - Physical Education for an Active Lifestyle
1.0 - 4.5 - 2.5

This course provides information regarding muscle type and function. It gives attention to both aerobic and anaerobic physical training techniques consistent with an active lifestyle. Students develop and follow a personalized goal-directed exercise program. The course covers motivational techniques and dietary considerations.


PHED 2900 - Special Topics in Physical Education
Variable

This course permits instruction in special content areas not included in other physical education courses.

PHIL - Philosophy

PHIL 1010 - Introduction to Philosophy 
4.5 - 0.0 - 4.5

This course focuses on topics fundamental to living an aware life. What is the nature of human freedom? What are its limits? What is the good life? What is a just society like? What are the limits of human knowledge? The course explores questions such as these.

PHIL 1030 - Professional Ethics 
4.5 - 0.0 - 4.5

Society depends upon multiple professional services and supports. The professional provider has an obligation to be proficient at that profession and to incorporate moral principles

and values in activities involving advertising, decision-making, and delivery systems. Professional adherence to ethical principles nurtures a society where citizens can pursue happiness. Upon completion of this course, students can apply critical reasoning to moral dilemmas. Students gain functional knowledge of the great ethical theories and concepts and relate this knowledge to professional and corporate codes of ethics in establishing an ethical foundation of business practice.

PHIL 1100 - Critical Reasoning

4.5 - 0.0 - 4.5

Students apply the skills of critical reasoning to everyday language. Students analyze arguments and evaluate information to discriminate arguments from non-arguments.

PHIL 2030 - Introduction to Ethics

4.5 - 0.0 - 4.5

This course provides students with the critical reasoning skills necessary to analyze philosophical moral theories and identify logical fallacies and obstacles to moral reasoning. This course demonstrates the value of exploring opposing views relating to contemporary and historical controversial issues. Students use critical reasoning, philosophical inquiry, and ethical theory to resolve practical moral problems.

PHIL 2200 - Introduction to Comparative Religion

4.5 - 0.0 - 4.5

World religions are methodologically examined by comparing religious systems and patterns of the great religious traditions, indigenous religions, and new religious movements with regard to their origins, worldviews, beliefs, religious practices, exegesis (sacred texts, myths, and symbols), historical changes, and contemporary issues.

PHIL 2400 - Philosophy and Literature

4.5 - 0.0 - 4.5

Prerequisite: (1) One class in English (ENGL), Philosophy (PHIL), or Humanities (HUMS); or instructor approval — must be completed prior to taking this course.

This course examines a variety of literature (narratives, poetry, and essays) in relation to the relevant topics in ethics, metaphysics, and aesthetics. The choice of narratives (fiction, drama, and film), poetry, and essays are compared to the relevant concepts in ethics (social justice, moral dilemmas), metaphysics (materialism, idealism, realism), and aesthetics (classical and modern theories of art).

PHIL 2600 - Contemporary Issues in Philosophy

4.5 - 0.0 - 4.5

Students examine the current issues in philosophy, specifically those related to technology. The relationship between machines and humans, problems in determining ethical standards in virtual reality, gender/race and cyberspace, and the role of power in knowledge and technological advances are topics of analysis and discussion. Students recognize the importance of critical awareness in the fast-changing world of the twenty-first century.

PHIL 2900 - Special Topics in Philosophy

Variable

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This course permits instruction in special content areas not included in other philosophy courses. Topics may include contemporary issues, the philosophy of art and literature, and the foundations of science and technology.

PHOT - Photography

PHOT 1005 - Basic Photography I - Digital

5.0 - 3.0 - 6.0

Students are introduced to digital photographic image-making and printing. Emphasis is on camera operation, photographic composition, and technical and conceptual understanding of the photographic medium. All work is evaluated regularly in critiques. Students must have access to a digital camera with manual aperture and shutter controls for this class and an external hard drive. Type of camera used is up to the instructor's discretion.

PHOT 1010 - Basic Photography II - Film

5.0 - 3.0 - 6.0

Prerequisite: (1) Successful completion of PHOT 1005 with a grade of C or better — must be completed prior to taking this course.

This course serves as a continuation of the concepts learned earlier and introduces students to traditional photographic processes using black and white film and darkroom practices to produce a portfolio of black and white prints. Instructors regularly evaluate all work in critiques.

PHOT 1015 - Photographic Concepts

5.0 - 3.0 - 6.0

Prerequisite: (1) Successful completion of PHOT 1010 with a grade of C or better — must be completed prior to taking this course.

This course acquaints students with photographic imagery of the past and present. It emphasizes photography's interrelationship with society and culture, art and technology, and the principles of visual design.

PHOT 1020 - Color Photography

5.0 - 3.0 - 6.0

Prerequisite: (2) PHOT 1010 and ARTS 1020 with a grade of C or better in both — must be completed prior to taking this course.

This is an introductory course in color photography covering subtractive color theory, the use of color negative, and color printing procedures.

PHOT 1025 - Digital Photography

5.0 - 3.0 - 6.0

Prerequisite: (1) Successful completion of PHOT 1005 with a grade of C or better — must be completed prior to taking this course.

This course surveys digital imaging and electronic darkroom methods relevant to photography. Students continue to capture digital images and receive an introduction to image-editing

applications and digital printing processes. Students produce a portfolio of creative work based on aesthetic and conceptual criteria.

PHOT 1500 - Moving Image Lab
5.0 - 3.0 - 6.0

This course is an overview of methods used in moving-image production. By investigating the pre-production, production, and post-production processes, students achieve an understanding of how these principles integrate with still photography, video production, and multimedia.

PHOT 1535 - Large Format Photography
5.0 - 3.0 - 6.0

Prerequisite: (2) Successful completion of both PHOT 1010 and PHOT 1015 with a grade of C or better — must be completed prior to taking this course.

This advanced-level course continues the investigation and application of black and white photography by using professional 4x5 camera and fiber-based black and white printing applications.

PHOT 1540 - Photojournalism
5.0 - 3.0 - 6.0

Prerequisite: (3) Successful completion of PHOT 1005, PHOT 1025, and PHOT 1500 with a grade of C or better — must be completed prior to taking this course.

This course serves as an introduction to journalistic photography and studies newspaper, magazine editorial, and documentary photography. Students complete individual assignments and express and illustrate the working process of news, magazine, and documentary photography.

PHOT 1545 - Photographic Lighting
5.0 - 3.0 - 6.0

Prerequisite: (3) Successful completion of PHOT 1015, PHOT 1020, and PHOT 1025 with grades of C or better — must be completed prior to taking this course.

Students are introduced to studio flash photographic lighting. Topics include working with digital technology, using lighting equipment in a studio setting and designing the appropriate lighting for the subject. All work is completed using the student's personal digital camera and printed in the digital lab.

PHOT 1550 - Experimental Photography
5.0 - 3.0 - 6.0

Prerequisite: (2) Successful completion of both PHOT 1025 and PHOT 1535 with a grade of C or better — must be completed prior to taking this course.

This course is for students who have mastered the basic technical processes of black and white photography (film developing, printmaking, and print presentation) and wish to learn a variety of historical and alternative processes as a means of reaching new visual goals. It emphasizes nontraditional approaches to seeing and utilizing students' innate creativity to generate an expressive image as well as the ability to use historical photographic processes in a contemporary context.

PHOT 2015 - Intermediate Photographic Concepts
5.0 - 3.0 - 6.0

Prerequisite: (3) Successful completion of PHOT 1015, PHOT 1020, and PHOT 1025 with grades of C or better — must be completed prior to taking this course.

This course teaches the practical steps necessary to move from the formation of an idea to the professional execution of that idea. It addresses contemporary issues in the realm of fine art and commercial photography.

PHOT 2025 - Intermediate Digital Photography
5.0 - 3.0 - 6.0

Prerequisite: (3) Successful completion of PHOT 1015, PHOT 1020, and PHOT 1025 with a grade of C or better — must be completed prior to taking this course.

Students refine and extend techniques involving scanning and digital camerawork, control of image quality, and color-managed output options. The course emphasizes greater understanding and more precise control of image input, asset management, and computer-based printing. Students produce a portfolio of creative work based on aesthetic and conceptual criteria.

PHOT 2525 - Advanced Digital Photography
5.0 - 3.0 - 6.0

Prerequisite: (2) Successful completion of PHOT 1545 and PHOT 2025 with a grade of C or better — must be completed prior to taking this course.

Students continue to enhance image-making possibilities in a digital media environment. The course builds on the skills and knowledge developed in preliminary digital photography classes. It emphasizes developing a professional workflow employing a variety of advanced techniques and resulting in high-level creative control over image output.

PHOT 2535 - Advanced Large Format Photography
5.0 - 3.0 - 6.0

Prerequisite: (2) Successful completion of both PHOT 1535 and PHOT 2015 with a grade of C or better — must be completed prior to taking this course.

This course continues and refines the use of the 4x5 camera as a professional image-making tool. Students select between traditional black and white, traditional color, and digital photographic practices to produce a portfolio of exhibition-quality prints. Throughout the quarter, instructors and students evaluate work on technical, conceptual, and aesthetic considerations in a series of one-on-one group critiques.

PHOT 2545 - Advanced Photographic Lighting
5.0 - 3.0 - 6.0

Prerequisite: (3) Successful completion of PHOT 1545, PHOT 2015, and PHOT 2025 with a grade of C or better — must be completed prior to taking this course.

This advanced-level course continues the use of professional equipment. It focuses more on complex and complicated situations and subjects.

PHOT 2550 - Advanced Experimental Photography 5.0 - 3.0 - 6.0

Prerequisite: (1) Successful completion of PHOT 1550 with a grade of C or better — must be completed prior to taking this course.

This course is a continuation of the process-related image-making techniques. It emphasizes use of enlarged large-format negatives and digital negatives for use with hand-painted emulsions. The class also explores techniques that create one-of-a-kind images directly onto glass and metal plates. Students further develop these processes with increased attention on perfecting and repeating processes with the outcome of students sharing their work through a suite of prints. The course emphasizes technical proficiency, image content, and conceptualization.

PHOT 2560 - Portfolio Development and Professional Practice 5.0 - 3.0 - 6.0

Prerequisite: (2) Successful completion of both PHOT 2015 and PHOT 2025 with a grade of C or better — must be completed prior to taking this course.

Through critical feedback, this course prepares students to build a comprehensive, professionally oriented body of work using skills, processes, and concepts acquired in earlier photography courses. Additionally, the course covers ethical, legal, financial, and aesthetic issues pertinent to contemporary photography.

PHOT 2900 - Special Topics in Photography Variable

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This course permits instruction in special content areas not included in other photography courses.

PHOT 2981 - Internship Variable

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

Students work in a professional photography or video workplace. Types of work involved may include photography, assisting with cameras, darkroom work, equipment handling, set preparation, video production and post-production, and audio production and post-production. Based on state guidelines, students must complete 40 hours of work for each credit hour.

PHYS - Physics

PHYS 110A - Principles of Physics IA 2.0 - 1.5 - 2.5

Prerequisite: (2) College-level reading, writing, and math proficiency; and MATH 1310 or higher — must be completed prior to taking this course.

Corequisite: (1) PHYS 110AL — must be taken at the same time as this course.

This course is the first half of an algebra-based college physics sequence. The course is taught as three courses (PHYS 110A, 110B, and 110C), all of which must be successfully completed to

transfer as a semester-length course. Topics include kinetics, vectors, Newton laws, work, and energy. Students registering for this course must also register for PHYS 110AL, which is the laboratory component of the course. Students taking PHYS 110A as an online course do not need to sign up for the PHYS 110AL as it is included in the course.

PHYS 110AL - Principles of Physics IA Lab 0.0 - 0.0 - 0.0

Prerequisite: (2) College-level reading, writing, and math proficiency; and MATH 1310 or higher — must be completed prior to taking this course.

Corequisite: (1) PHYS 110A — must be taken at the same time as this course.

This is the lab component for PHYS 110A. Lab activities for this course focus on kinetics, vectors, Newton laws, work, and energy. Students registering for this course must also register for PHYS 110A, which is the lecture component of the course. Students taking PHYS 110A as an online course do not need to sign up for the PHYS 110AL as it is included in the course.

PHYS 110B - Principles of Physics IB 2.0 - 1.5 - 2.5

Prerequisite: (2) College-level reading, writing, and math proficiency; and PHYS 110A — must be completed prior to taking this course.

Corequisite: (1) PHYS 110BL — must be taken at the same time as this course.

This course is the first half of an algebra-based college physics sequence. The course is taught as three courses (PHYS 110A, 110B, and 110C), all of which must be successfully completed to transfer as a semester-length course. Topics for this portion of the course include momentum, rotational motion, gravitation, and fluids. Students registering for this course must also register for PHYS 110BL, which is the laboratory component of the course. Students taking PHYS 110B as an online course do not need to sign up for the PHYS 110BL as it is included in the course.

PHYS 110BL - Principles of Physics IB Lab 0.0 - 0.0 - 0.0

Prerequisite: (2) PHYS 110A; and college-level reading, writing, and math proficiency — must be completed prior to taking this course.

Corequisite: (1) PHYS 110B — must be taken at the same time as this course.


This is the lab component for PHYS 110B. Lab activities for this course focus on momentum, rotational motion, gravitation, and fluids. Students registering for this course must also register for PHYS 110B, which is the lecture component of the course. Students taking PHYS 110B as an online course do not need to sign up for the PHYS 110BL as it is included in the course.

PHYS 110C - Principles of Physics IC 2.0 - 1.5 - 2.5

Prerequisite: (2) College-level reading, writing, and math proficiency; and PHYS 110B — must be completed prior to taking this course.

Corequisite: (1) PHYS 110CL — must be taken at the same time as this course.

This course is the first half of an algebra-based college physics sequence. The course is taught as three courses (PHYS 110A, 110B, and 110C), all of which must be successfully completed to transfer as a semester-length course. Topics for this portion of the course include kinetic theory, heat, and thermodynamics. Students registering for this course must also register for PHYS 110CL, which is the laboratory component of the course. Students taking PHYS 110C as an online course do not need to sign up for the PHYS 110CL as it is included in the course.

PHYS 110CL - Principles of Physics IC Lab 
0.0 - 0.0 - 0.0

Prerequisite: (1) PHYS 110B; and college-level reading, writing, and math proficiency — must be completed prior to taking this course.

Corequisite: (1) PHYS 110C — must be taken at the same time as this course.

This is the lab component for PHYS 110C. Lab activities for this course focus on kinetic theory, heat, and thermodynamics. Students registering for this course must also register for PHYS 110C, which is the lecture component of the course. Students taking PHYS 110C as an online course do not need to sign up for the PHYS 110CL as it is included in the course.

PHYS 111A - Principles of Physics IIA
2.0 - 1.5 - 2.5

Prerequisite: (2) College-level reading, writing, and math proficiency; and PHYS 110C — must be completed prior to taking this course.

Corequisite: (1) PHYS 111AL — must be taken at the same time as this course.

This course is a continuation of the algebra-based sequence of college physics. The course is taught as three courses (PHYS 111A, 111B, and 111C), all of which must be successfully completed to transfer as a semester-length course. Topics include waves, sound, and electricity. Students registering for this course must also register for PHYS 111AL, which is the laboratory component of the course.

PHYS 111AL - Principles of Physics IIALab
0.0 - 0.0 - 0.0

Prerequisite: (2) PHYS 110C; and college-level reading, writing, and math proficiency — must be completed prior to taking this course.

Corequisite: (1) PHYS 111A — must be taken at the same time as this course.

This is the lab component for PHYS 111A. Lab activities for this course focus on waves, sound, and electricity. Students registering for this course must also register for PHYS 111A which is the lecture component of the course.

PHYS 111B - Principles of Physics IIB
2.0 - 1.5 - 2.5

Prerequisite: (2) College-level reading, writing, and math proficiency; and PHYS 111A — must be completed prior to taking this course.

Corequisite: (1) PHYS 111BL — must be taken at the same time as this course.

This course is a continuation of the algebra-based sequence of college physics. The course is taught as three courses (PHYS 111A, 111B, and 111C), all of which must be successfully completed to transfer as a semester-length course. Topics include electricity and magnetism. Students registering for this course must also register for PHYS 111BL, which is the laboratory component of the course.

PHYS 111BL - Principles of Physics IIB Lab
0.0 - 0.0 - 0.0

Prerequisite: (2) PHYS 111A; and college-level reading, writing, and math proficiency — must be completed prior to taking this course.

Corequisite: (1) PHYS 111B — must be taken at the same time as this course.

This is the lab component for PHYS 111B. Lab activities for this course focus on electricity and magnetism. Students registering for this course must also register for PHYS 111B, which is the lecture component of the course.

PHYS 111C - Principles of Physics IIC
2.0 - 1.5 - 2.5

Prerequisite: (2) College-level reading, writing, and math proficiency; and PHYS 111B — must be completed prior to taking this course.

Corequisite: (1) PHYS 111CL — must be taken at the same time as this course.

This course is a continuation of the algebra-based sequence of college physics. The course is taught as three courses (PHYS 111A, 111B, and 111C), all of which must be successfully completed to transfer as a semester-length course. Topics include light, optics, and select topics in modern physics. Students registering for this course must also register for PHYS 111CL, which is the laboratory component of the course.

PHYS 111CL - Principles of Physics IIC Lab
0.0 - 0.0 - 0.0

Prerequisite: (2) PHYS 111B; college-level reading, writing, and math proficiency — must be completed prior to taking this course.

Corequisite: (1) PHYS 111C — must be taken at the same time as this course.

This is the lab component for PHYS 111C. Lab activities for this course focus on light, optics, and selected topics in modern physics. Students registering for this course must also register for PHYS 111C, which is the lecture component of the course.

PHYS 1010 - Applied Physics
2.5 - 6.0 - 4.5

Prerequisite: (2) College-level reading, writing, and math proficiency; and MATH 0931 or MATH 0960 — must be completed prior to taking this course.

Corequisite: (1) PHYS 1010L — must be taken at the same time as this course.

This course provides a general understanding of the basic principles and practical applications of mechanics, heat, electricity, magnetism, and light. Beginning 14/FA, students registering for this course must also register for PHYS 1010L, which is the laboratory component of the course.

PHYS 1010L - Applied Physics Lab**0.0 - 0.0 - 0.0**

Prerequisite: (2) MATH 0931 or MATH 0960; and college-level reading, writing, and math proficiency — must be completed prior to taking this course.

Corequisite: (1) PHYS 1010 — must be taken at the same time as this course.

This is the lab component of PHYS 1010. Lab activities are designed to focus on the basic principles and practical applications of mechanics, heat, electricity, magnetism, and light. Students registering for this course must also register for PHYS 1010, which is the lecture component of the course.

PHYS 210A - General Physics IA**2.0 - 1.5 - 2.5**

Prerequisite: (2) College-level reading, writing, and math proficiency; and MATH 2410 — must be completed prior to taking this course.

Corequisite: (1) PHYS 210AL — must be taken at the same time as this course.

This course is the first of a calculus-based college physics sequence. The course is taught as three courses (PHYS 210A, 210B, and 210C), all of which must be successfully completed to transfer as a semester-length course. Topics include kinematics, vectors, Newton laws, work, and energy. Students registering for this course must also register for PHYS 210AL, which is the laboratory component of the course.

PHYS 210AL - General Physics IA Lab**0.0 - 0.0 - 0.0**

Prerequisite: (2) MATH 2410; and college-level reading, writing, and math proficiency — must be completed prior to taking this course.

Corequisite: (1) PHYS 210A — must be taken at the same time as this course.

This is the lab component for PHYS 210A. Lab activities for this course focus on kinematics, vectors, Newton laws, work, and energy. Students registering for this course must also register for PHYS 210A, which is the lecture component of the course.

PHYS 210B - General Physics IB**2.0 - 1.5 - 2.5**

Prerequisite: (2) College-level reading, writing, and math proficiency; and PHYS 210A — must be completed prior to taking this course.

Corequisite: (1) PHYS 210BL — must be taken at the same time as this course.

This course is the first of a calculus-based college physics sequence. The course is taught as three courses (PHYS 210A, 210B, and 210C), all of which must be successfully completed to transfer as a semester-length course. Topics include momentum, rotational motion, gravitation, and fluids. Students registering for this course must also register for PHYS 210BL, which is the laboratory component of the course.

PHYS 210BL - General Physics IB Lab**0.0 - 0.0 - 0.0**

Prerequisite: (2) PHYS 210A; and college-level reading, writing, and math proficiency — must be completed prior to taking this course.

Corequisite: (1) PHYS 210B — must be taken at the same time as this course.

This is the lab component for PHYS 210B. Lab activities for this course focus on momentum, rotational motion, gravitation, and fluids. Students registering for this course must also register for PHYS 210B, which is the lecture component of the course.

PHYS 210C - General Physics IC**2.0 - 1.5 - 2.5**

Prerequisite: (2) College-level reading, writing, and math proficiency; and PHYS 210B — must be completed prior to taking this course.

Corequisite: (1) PHYS 210CL — must be taken at the same time as this course.

This course is the first of a calculus-based college physics sequence. The course is taught as three courses (PHYS 210A, 210B, and 210C), all of which must be successfully completed to transfer as a semester-length course. Topics for this portion of the course include kinetic theory, heat, and thermodynamics. Students registering for this course must also register for PHYS 210CL, which is the laboratory component of the course.

PHYS 210CL - General Physics IC Lab**0.0 - 0.0 - 0.0**

Prerequisite: (2) PHYS 210B; and college-level reading, writing, and math proficiency — must be completed prior to taking this course.

Corequisite: (1) PHYS 210C — must be taken at the same time as this course.

This is the lab component for PHYS 210C. Lab activities for this course focus on kinetic theory, heat, and thermodynamics. Students registering for this course must also register for PHYS 210C, which is the lecture component of the course.

PHYS 211A - General Physics IIA**2.0 - 1.5 - 2.5**

Prerequisite: (3) MATH 2410; PHYS 210C; and college-level reading, writing, and math proficiency — must be completed prior to taking this course.

Corequisite: (1) PHYS 211AL — must be taken at the same time as this course.

Pre/Co Requisite: (1) MATH 2411 — must be taken either prior to or at the same time as this course.

This course is a continuation of the calculus-based college physics sequence. The course is taught as three courses (PHYS 211A, 211B, and 211C), all of which must be successfully completed to transfer as a semester-length course. Topics for this portion include waves, sound, and electricity. Students registering for this course must also register for PHYS 211AL the laboratory component. NOTE: The corequisite MATH 2411 may be taken prior to or concurrently with PHYS 211A/B.

PHYS 211AL - General Physics IIA Lab**0.0 - 0.0 - 0.0**

Prerequisite: (2) PHYS 210C; and college-level reading, writing, and math proficiency — must be completed prior to taking this course.

Corequisite: (1) PHYS 211A — must be taken at the same time as this course.

This is the lab component for PHYS 211A. Lab activities for this course focus on waves, sound, and electricity. Students registering for this course must also register for PHYS 211A, which is the lecture component of the course.

PHYS 211B - General Physics IIB**2.0 - 1.5 - 2.5**

Prerequisite: (2) College-level reading, writing, and math proficiency; and PHYS 211A — must be completed prior to taking this course.

Corequisite: (1) PHYS 211BL — must be taken at the same time as this course.

This course is a continuation of the calculus-based college physics sequence. The course is taught as three courses (PHYS 211A, 211B, and 211C), all of which must be successfully completed to transfer as a semester-length course. Topics for this portion of the course include electricity and magnetism. Students registering for this course must also register for PHYS 211BL, which is the laboratory component of the course.

PHYS 211BL - General Physics IIB Lab**0.0 - 0.0 - 0.0**

Prerequisite: (2) PHYS 211A; and college-level reading, writing, and math proficiency — must be completed prior to taking this course.

Corequisite: (1) PHYS 211B — must be taken at the same time as this course.

This is the lab component for PHYS 211B. Lab activities for this course focus on electricity and magnetism. Students registering for this course must also register for PHYS 211B, which is the lecture component of the course.

PHYS 211C - General Physics IIC**2.0 - 1.5 - 2.5**

Prerequisite: (2) College-level reading, writing, and math proficiency; and PHYS 211B — must be completed prior to taking this course.

Corequisite: (1) PHYS 211CL — must be taken at the same time as this course.

This course is a continuation of the calculus-based college physics sequence. The course is taught as three courses (PHYS 211A, 211B, and 211C), all of which must be successfully completed to transfer as a semester-length course. Topics for this portion of the course include light, optics, and selected topics from modern physics. Students registering for this course must also register for PHYS 211CL, which is the laboratory component of the course.

PHYS 211CL - General Physics IIC Lab**0.0 - 0.0 - 0.0**

Prerequisite: (2) PHYS 211B; and college-level reading, writing, and math proficiency — must be completed prior to taking this course.

Corequisite: (1) PHYS 211C — must be taken at the same time as this course.

This is the lab component for PHYS 211C. Lab activities for this course focus on light, optics, and selected topics in modern physics. Students registering for this course must also register for PHYS 211C, which is the lecture component of the course.

PHYS 2500 - High Altitude Balloon Experience**1.5 - 0.0 - 1.5**

Prerequisite: (2) College-level reading, writing, and math proficiency; and PHYS 1010; or PHYS 110A, PHYS 110B; and PHYS 110C; or PHYS 210A, PHYS 210B, and PHYS 210C; or instructor approval — must be completed prior to taking this course.

This course introduces students to the world of high-altitude ballooning (HAB). It provides the background necessary to design a pod with scientific sensors and to participate in the launch and retrieval of a balloon with the payload attached. It is a five-week course with the schedule appropriate to an individual quarter.

PHYS 2900 - Special Topics in Physics**Variable**

This course permits instruction in special content areas not included in other physics courses, depending on interest and relevancy to curriculum.

PLAP - Plumbing Apprenticeship**PLAP 1110 - Plumbing IA****7.0 - 0.0 - 7.0**

This course is an introduction to the plumbing trade for plumbing apprentices. It covers the history of plumbing along with the commonly used materials, tools, and equipment. The course teaches apprentices math used in the plumbing trade.

PLAP 1120 - Plumbing IB**7.0 - 0.0 - 7.0**

Prerequisite: (1) PLAP 1110 — must be completed prior to taking this course.

This course is a continuation of the introductory material. The apprentice continues working on math for the plumbing trade.

PLAP 1121 - Plumbing IC**6.0 - 0.0 - 6.0**

Prerequisite: (1) PLAP 1120 — must be completed prior to taking this course.

This course is a continuation of first year plumbing apprenticeship classes. The course concentrates on the math skills used in the plumbing trade.

PLAP 1150 - Grey Water Recycling**3.0 - 0.0 - 3.0**

This course covers the proper way to collect and reuse grey water. Grey water collection serves two purposes: cutting down on both the amount of freshwater needed and the wastewater generated by a building.

PLAP 1210 - Plumbing IIA**7.0 - 0.0 - 7.0**

Prerequisite: (1) PLAP 1120 — must be completed prior to taking this course.

This course covers the sizing and design of water, waste, and vent systems in residential applications using MUD and Omaha Plumbing Code rules. Students become familiar with residential blueprints and isometric drawings used in residential applications.

PLAP 1220 - Plumbing IIB**7.0 - 0.0 - 7.0**

Prerequisite: (1) PLAP 1210 — must be completed prior to taking this course.

This course provides a better understanding of the Omaha Plumbing Code. Using the knowledge acquired, students apply the code requirements to field work and lab projects. Students also continue gaining proficiency using plumbing math.

PLAP 1221 - Plumbing IIC**6.0 - 0.0 - 6.0**

Prerequisite: (1) PLAP 1220 — must be completed prior to taking this course.

This course continues to build on the math skills covered in Plumbing IIA and IIB. The course covers the drawings used in the plumbing trade such as house, five-story and X-Y walls. The Omaha plumbing code and MUD rules and regulations are also covered.

PLAP 2310 - Plumbing IIIA**7.0 - 0.0 - 7.0**

Prerequisite: (1) PLAP 1221 — must be completed prior to taking this course.

Students develop proficiency in the use of the Omaha Plumbing Code. Students review and use the math skills necessary to be successful in the plumbing trade. MUD and ADA regulations are also covered.

PLAP 2320 - Plumbing IIIB**7.0 - 0.0 - 7.0**

Prerequisite: (1) PLAP 2310 — must be completed prior to taking this course.

Students continue both the review of the Omaha Plumbing Code from PLAP 2310 and the math covered in previous courses. Tyler projects, house drawings, and five-story drawings are also covered.

PLAP 2330 - Print Reading for Plumbers**3.5 - 0.0 - 3.5**

Prerequisite: (1) PLAP 2320 — must be completed prior to taking this course.

This course helps the apprentice gain the basic knowledge needed to read blueprints, create shop drawings, and make isometric illustrations of a plumbing system.

PLAP 2410 - Plumbing IVA**7.0 - 0.0 - 7.0**

Prerequisite: (1) PLAP 2320 — must be completed prior to taking this course.

This course continues with the interpretation and application of the Omaha Plumbing Code in the design of plumbing systems. It covers installation procedures for various plumbing systems, including water conditioning and swimming pools, as well as commercial blueprints.

PLAP 2420 - Plumbing IVB**7.0 - 0.0 - 7.0**

Prerequisite: (1) PLAP 2410 — must be completed prior to taking this course.

This course reviews the Omaha Plumbing Code, job-site safety, and math skills required for the plumbing trade. Review and application of classroom knowledge prepares the apprentice to successfully take the journeyman plumbers test.

PLBG - Plumbing Technology**PLBG 1010 - Introduction to Plumbing****6.0 - 1.5 - 6.5**

Students are introduced to the plumbing trade. The topics covered in this course include plumbing history, plumbing tools, materials, safety, math skills for the plumbing trade, work ethic, and careers in the industry.

PLBG 1020 - Basic Residential Plumbing**9.0 - 0.0 - 9.0**

Prerequisite: (1) PLBG 1010 — must be completed prior to taking this course.

Students continue to learn the residential side of plumbing, focusing mainly on wood structures, materials, and tools. The items discussed in this course direct attention on wood-framed structures such as single and multi-family dwellings along with the different types of materials and tools that are commonly used with these structures.

PLBG 1030 - Basic Commercial Plumbing**9.0 - 0.0 - 9.0**

Prerequisite: (1) PLBG 1020 — must be completed prior to taking this course.

Students study the commercial side of the plumbing trade. The focus is on metal stud framed, masonry, and concrete structures. The items discussed in the class direct attention to the metal, masonry, and concrete structures along with the different types of materials and tools that are common with these structures.

POLS - Political Science

POLS 1010 - Introduction to Urban Studies

4.5 - 0.0 - 4.5

This course is designed to provide basic information about the field of urban studies and includes in-depth analyses of the issues, concepts, theories, and discourses of urban studies. Topics covered include the process of urbanization, American and comparative urban settlement patterns, urban and local government administration, economic development and growth, political economy perspectives, suburbanization and sprawl, urban planning, and urban lifestyles.

POLS 1050 - State and Local Government

4.5 - 0.0 - 4.5

This course is a survey of state and local government. Political, economic, social and cultural factors are considered. It also includes an examination of the following topics: a comparative analysis of the structure and function of the 50 American state governments; policy determination process and the significant variables that pattern this process; broad introduction to the political structure and operations of state and local governments; role and power of state and local governments; government institutions; political parties and interest groups; public policy; and state constitutions.

POLS 2050 - American National Government

4.5 - 0.0 - 4.5

Recommended: College-level reading skills — recommended prior to taking this course, but not required.

This course is an introduction to American national government, including a study of the structural function of the political system and the elements of constitutionalism, republicanism, and federalism. It includes the party system and an analysis of the U.S. Constitution. The course is a descriptive, institutional approach with considerable attention to the policy-making process.

POLS 2060 - The Constitution

4.5 - 0.0 - 4.5

Recommended: College-level reading skills — recommended prior to taking this course, but not required.

This course focuses on some of the great issues that confront policy makers and citizens of the United States. The framework for study is the U.S. Constitution. Topics include executive privilege and delegation of powers; war powers and covert action; nomination, election, and succession of the president; criminal justice and a defendant's right to a fair trial; crime and insanity; crime and punishments; campaign spending; national security and freedom of the press; school prayer; gun control; right to assemble; right to live; right to die; immigration reform; affirmative action; and federalism.

POLS 2070 - Contemporary Social and Political Issues

4.5 - 0.0 - 4.5

Recommended: College-level reading skills — recommended prior to taking this course, but not required.

This course examines the social and political issues relevant to the 21st century through reading, discussion, and media. The

overall theme of the course is globalization and global understanding. Topics include peacemaking and nonviolence; women and world order; education, hunger, and food distribution; ecological balance; international law and organization; human rights and social justice; world political economy and economic justice; militarism and the arms race; religious perspectives on justice and peace; and culture, community values, and change.

POLS 2900 - Special Topics in Political Science Variable

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This course permits instruction in special content areas not included in other political science courses.

PRMA - Precision Machine Technology

PRMA 1050 - Print Reading

4.0 - 0.0 - 4.0

This course develops the skills required for visualizing and interpreting industrial prints and freehand technical sketching. Topics include identifying prints, drafting and print-reading procedures, machining specifications, geometric dimensioning, and tolerancing.

PRMA 1401 - Machine Tool I

9.0 - 0.0 - 9.0

This course introduces machines, tools, and processes associated with the machine trade. It covers fundamentals in bench layout, metal removal processes, drill presses, and horizontal and vertical saws. This course also covers the use of all precision measuring tools. NOTE: Completion of PRMA 1401 with a grade of C or better is required to advance to the next level class.

PRMA 1402 - Machine Tool II

9.0 - 0.0 - 9.0

Prerequisite: (1) PRMA 1401 with a grade of C or better — must be completed prior to taking this course.

Students construct basic machine projects using various pieces of shop equipment including milling machines, engine lathes, drill presses, and grinders. Students focus on safety as well as setup and accuracy of completed projects.

PRMA 1403 - Machine Tool III

9.0 - 0.0 - 9.0

Prerequisite: (1) PRMA 1402 with a grade of C or better — must be completed prior to taking this course.

Students construct advanced projects using various pieces of shop equipment including milling machines, engine lathes, drill presses, and grinders. Students focus on safety as well as setup and accuracy of completed projects.

PRMA 1404 - Machine Tool IV

9.0 - 0.0 - 9.0

Prerequisite: (1) PRMA 1403 with a grade of C or better — must be completed prior to taking this course.

Students construct advanced projects using various pieces of shop equipment including milling machines, engine lathes, drill presses, and grinders. The course focuses on safety as well as setup and accuracy of completed projects.

PRMA 2410 - CNC I
9.0 - 0.0 - 9.0

Prerequisite: (1) PRMA 1404 with a grade of C or better — must be completed prior to taking this course.

This course introduces CNC machines with emphasis on machine setup and operation of the CNC mill and CNC lathe. Students spend time learning and writing basic G-Code functions needed for straight-line milling, hole-making, tapping, and engraving.

PRMA 2412 - CNC II
4.0 - 0.0 - 4.0

Prerequisite: (2) PRMA 2410 and DRAF 1100 with grade of C or better in both — must be completed prior to taking this course.

This course introduces Cad/Cam software Mastercam. This course focuses on geometry creation, drawing of 2-D parts, saving programs, tool paths, creating lines and arcs, and bolt circles.

PRMA 2414 - CNC III
4.0 - 0.0 - 4.0

Prerequisite: (1) PRMA 2412 with a grade of C or better — must be completed prior to taking this course.

This course allows students to sharpen skills learned in CNC I and CNC II while working on advanced projects. The combination of both the mill and lathe are used. Students use Mastercam software to complete instructor approved projects.

PRMA 2500 - Tool and Die Technology
4.0 - 0.0 - 4.0

Prerequisite: (1) PRMA 2414 with a grade of C or better — must be completed prior to taking this course.

This course covers the fundamentals of basic die theory and design.

PRMA 2510 - Die Design and Construction
4.0 - 0.0 - 4.0

Prerequisite: (1) PRMA 2500 with a grade of C or better — must be completed prior to taking this course.

In this course, students design and construct a basic die.

PRMA 2900 - Special Topics in Precision Machine Technology
Variable

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This course permits instruction in special content areas not included in other courses of the Precision Machine Technology Program.

PROT - Process Operations Technology

PROT 1000 - Introduction to Process and Power Operations
Variable

This course introduces students to various equipment and components found in the process and power operations industry. Topics include preventive and predictive maintenance, safety, lubrication, precision measuring devices, compressors, pumps, valves, steam systems, heat exchangers, cooling systems, and process instrumentation.

PROT 1000 - Introduction to Process and Power Operations

This course introduces students to various equipment and components found in the process and power operations industry. Topics include preventive and predictive maintenance, safety, lubrication, precision measuring devices, compressors, pumps, valves, steam systems, heat exchangers, cooling systems, and process instrumentation.

PROT 1010 - Safety Topics for Process and Power Operations
Variable

This course provides instruction in various safety topics found in the process and power operations industry.

PROT 1020 - Introduction to Process Operations in Manufacturing Technology ☺
4.5 - 0.0 - 4.5

This course is designed to introduce students to the process, operations, and theory found in various manufacturing industries. Students become familiar with manufacturing design, production process and flow, production machine operations, and product logistics.

PROT 1030 - Introduction to Quality and Continuous Improvement ☺
4.5 - 0.0 - 4.5

This course introduces students to quality and continuous improvement as it relates to process, power, and manufacturing. Topics include drawings and symbols, properties and behavior of materials, quality management principles, techniques, and tools. Students gain skills in measurement and analysis along with components and system calibration.

PROT 1100 - Process Instrumentation and Control
3.5 - 3.0 - 4.5

This course introduces instruments and controls used to monitor, maintain, and control industrial processes. Topics include instruments used to measure, record, monitor, maintain and adjust temperatures, pressures, flows, and levels.

PROT 1110 - Reading and Understanding Process Diagrams
2.0 - 0.0 - 2.0

This course introduces students to symbols, labels, and diagrams used in the process and power industry. This course also introduces students to reading and understanding process diagrams.

PROT 1250 - Basic Electricity for Power and Process**5.0 - 3.0 - 6.0**

This course consists of lectures, discussions, demonstrations, and coaching in the general area of electrical theory and practice used in process control systems. It studies electron theory as it relates to ac and dc circuits. Students study various circuits, resistance, capacitance, inductance, symbols, and wiring diagrams. Lab assignments and virtual training provide students an understanding of electrical theory, measuring, and control devices. The course emphasizes safety, as students are working with actual controls and voltages.

PROT 1302 - Stationary Engineering I**3.0 - 0.0 - 3.0**

This course provides basic instruction in low- and high-pressure boilers in the stationary engineering field. This is the first of two courses designed to help students obtain a City of Omaha, Third Grade Stationary Engineers Certificate. (Formerly INCT 1302)

PROT 1320 - Fuel Handling**3.0 - 0.0 - 3.0**

This course introduces students to skills generally required for entry-level employment in a steam power plant. Topics include the safety, systems, equipment, and procedures required in handling coal, oil, gas, or nuclear fuel to generate electricity in a power plant.

PROT 2020 - Manufacturing Prototyping**4.5 - 0.0 - 4.5**

Prerequisite: (2) PROT 1020 and INFO 1951 — must be completed prior to taking this course.

This course introduces the basic concepts of additive manufacturing (AM) in the past, present and future. Students produce parts and assemblies using diverse prototyping technologies. Emphasis is placed on human-centered design, low volume production, the intersection of quality, cost, speed and materials, environmental impacts, and the scale of production.

PROT 2200 - Dynamics of Process Control**3.5 - 3.0 - 4.5**

Prerequisite: (3) CHEM 1210 and CHEM 1211, or CHEM 1212; and MATH 1410; and PHYS 1010 — must be completed prior to taking this course.

This course introduces students to the application of physics, chemistry, and math as they apply to the concepts of process control. Topics include relationships dealing with energy, heat, temperature, pressure, solids, liquids, gasses, fluid systems, and heat transfer found in various processing plants.

PROT 2210 - Ethanol Process Fundamentals**2.5 - 3.0 - 3.5**

This course introduces students to theory and process fundamentals used in ethanol and other process industries. Topics include distillation, evaporation, dehydration, and separation as they apply to processing plants.

PROT 2302 - Stationary Engineering II**4.0 - 0.0 - 4.0**

This course provides advanced instruction in steam boilers, HVAC equipment, and related systems in the stationary engineering field. (Formerly INCT 2302)

PROT 2310 - Steam Plant Operation I**4.5 - 0.0 - 4.5**

This course introduces students to skills generally required for entry-level employment in a steam power plant. Topics include the generation of steam, valves, and piping used in the power plant; thermodynamics and heat transfer; pump theory and design; and water purification and treatment.

PROT 2320 - Steam Plant Operation II**4.5 - 0.0 - 4.5**

This course introduces students to skills generally required for entry-level employment in a steam power plant. Topics include boiler theory, boiler design, boiler components and types, combustion systems, boiler accessories, boiler operation and maintenance, steam turbines, condensers and cooling towers, auxiliary steam plant equipment, and environmental control systems.

PROT 2330 - Steam Plant Operation III**6.0 - 0.0 - 6.0**

This course introduces students to skills generally required for entry-level employment in a steam power plant. Topics include diesel engine theory and design, gas turbine theory and design, air-compressor theory and design, refrigeration theory and chiller design, electric generator theory and design, electrical distribution, electrical systems management, and fire safety.

PROT 2410 - Nuclear Plant Operation I**4.5 - 0.0 - 4.5**

Prerequisite: (4) CHEM 1010; PROT 2320; PROT 2330; and MATH 1410 — must be completed prior to taking this course.

This course introduces students to skills generally required for entry-level employment in a nuclear power plant and provides students with the general systems and components associated with a nuclear power plant. This course follows the associate degree program recommendations outlined in the Uniform Curriculum Guide for Nuclear Power Plant Operator, Non-Licensed Operations Personnel developed by the Nuclear Energy Institute.

PROT 2420 - Nuclear Plant Operation II**3.0 - 0.0 - 3.0**

Prerequisite: (1) PROT 2410 — must be completed prior to taking this course.

This course introduces students to skills generally required for entry-level employment in a nuclear power plant. Topics include basic atomic structure, basic nuclear interactions and reactions, the basic fission process, and basic reactor operation. This course follows the associate degree program recommendations outlined in the Uniform Curriculum Guide for Nuclear Power Plant Operator, Non-Licensed Operations Personnel developed by the Nuclear Energy Institute.

PROT 2900 - Special Topics in Process Operations Technology
Variable

This course permits instruction in special content areas related to the Process Operations Technology program.



PROT 2981 - PROT Internship
0.0 - 18.0 - 4.5

The internship provides students the opportunity to apply their knowledge, learn new techniques, and get on-the-job training in the process, power and manufacturing industries. Based on state guidelines, students must complete 40 hours of work for each credit hour in the course.

PSYC - Psychology

PSYC 1000 - Psychology for Everyday Living 
4.5 - 0.0 - 4.5

This course provides a survey of the major themes in psychology and explores applications for daily living. Topics include adult development, personal problem-solving and motivation, anger management, parenting, stress management, and intimacy issues. NOTE: PSYC 1000 is highly recommended for vocational technical careers.

PSYC 1010 - Introduction to Psychology  
4.5 - 0.0 - 4.5

This course is an introduction to the science of psychology, including the application of critical thinking to the study of learning theory, memory, personality, growth and development, biological and neurological aspects, abnormal behavior, therapies, intelligence, motivation, emotion, sensation, perception, and theoretical perspectives.

PSYC 1110 - Parenting and Family Problem Solving 
4.5 - 0.0 - 4.5

This course introduces students to effective parenting skills and strategies for solving family problems. It emphasizes parent-child relations, developmental milestones, family systems theory, family communication, family composition, and issues related to abuse and neglect. Students explore parenting challenges, such as single parenthood, divorce, custody issues, step-family systems, and conflict management. Other topics include same-sex parenting, inter-racial families, and families faced with natural disasters and other catastrophes.

PSYC 1120 - Human Growth and Development 
4.5 - 0.0 - 4.5

This course addresses the stages of the human life span: prenatal, infancy, toddlerhood, middle childhood, adolescence, adulthood, and gerontology. For each stage of the life span, the course examines cognitive, language, emotional, social, personality, and physical development. In addition, students explore the procedures used to conduct research about human development.


PSYC 1130 - Cognitive Development 
4.5 - 0.0 - 4.5

This course examines current cognitive theories utilized in the field of education. The course is an in-depth study of the stage theories and their application to experiential and developmental environments. As students study stages of development, they learn implications for adaptation in the educational classroom setting. Students gain experience in assessing cognitive levels, reporting such findings, and planning curriculum to enhance development.

PSYC 2140 - Behavior Modification and Principles of Learning 
4.5 - 0.0 - 4.5


Recommended: Reading assessment and college-level reading skills — recommended prior to taking this course, but not required.

This course exposes students to the history and various theoretical approaches to the study of learning and behavior modification. Students have opportunities to learn applied behavior modification techniques including observing and recording behavior and formulating and writing behavioral objectives. This course includes an examination of motivation, attitude formation, and cognitive intervention approaches.

PSYC 2150 - Survey of Human Sexuality 
4.5 - 0.0 - 4.5

Prerequisite: (1) PSYC 1010 or SOCI 1010 — must be completed prior to taking this course.

This course is a survey of the topic of human sexuality. It presents materials concerning the biological, psychological, and socio-cultural facets of sexual behavior. (Cross-listed as SOCI 2150)

PSYC 2350 - Fundamentals of Abnormal Psychology 
4.5 - 0.0 - 4.5

Prerequisite: (1) PSYC 1010 or PSYC 1120 — must be completed prior to taking this course.

This course examines historical and contemporary views and issues of abnormal behavior. It also explores methods of explaining, diagnosing, and treating disordered behavior.

PSYC 2450 - Social Psychology 
4.5 - 0.0 - 4.5

Prerequisite: (1) PSYC 1010 or SOCI 1010 — must be completed prior to taking this course.

This is an introductory course in social psychology that demonstrates the interaction of social groups and individual behavior. (Cross-listed as SOCI 2450)

PSYC 2550 - Popular Readings in Social Science 
4.5 - 0.0 - 4.5

Recommended: Reading assessment and college-level reading skills — recommended prior to taking this course, but not required.

This course explores the psychological and sociological authenticity of selected popular psychology, social issues, and self-help books. It emphasizes theoretical foundation, sociological conditions and variables, and therapeutic or pseudo-

therapeutic advantages and disadvantages of each book.
(Cross-listed as SOCI 2550)

PSYC 2650 - Research Methods 
4.5 - 0.0 - 4.5

This is an introductory course in research methods and design. The course is comprehensive. Students examine the entire research process including formulating research questions, sampling, measurement (surveys, scaling, qualitative, and quantitative), research design (experimental and quasi-experimental), data analysis, and research writing. It also addresses the major theoretical and philosophical underpinnings of research including the idea of validity in research, reliability of measures, and ethics. The course materials and text use an informal, conversational style to engage both the beginning and the more experienced students of research methods in several areas of study (e.g., psychology, business, nursing, social work, political science, and education).

PSYC 2900 - Special Topics in Psychology
Variable

This course permits instruction in special content areas that are not included in other psychology courses.

RDLS - Reading and Learning Skills

RDLS 0096 - Reading Comprehension for ESL
3.0 - 0.0 - 3.0

Prerequisite: (1) Assessment testing in reading — must be completed prior to taking this course.

This course actively engages English language learners in an individualized program that builds competence and comfort in reading, speaking, and listening in English. Students learn as they read and use the English language, simultaneously building English communication skills and addressing reading challenges. ESL students gain skills in appropriate English communication structure, vocabulary, reading comprehension, and pronunciation.

RDLS 0097 - Reading Comprehension for ESL-II
3.0 - 0.0 - 3.0

Prerequisite: (1) Required based on placement testing, two previous re-enroll grades, or instructor recommendation — must be completed prior to taking this course.

This course is a continuation of the RDLS 0096 Reading Comprehension for ESL course. The course is an individualized program that builds competence and comfort in reading, speaking, and listening in English. Students learn as they read and use the English language, simultaneously building English communication skills and addressing reading challenges. ESL students gain skills in appropriate English communication structure, vocabulary, reading comprehension, and pronunciation.

RDLS 0098 - Power Reading I
3.0 - 0.0 - 3.0

Prerequisite: (1) Assessment testing — must be completed prior to taking this course.

This course actively engages students in an individualized program that builds a solid foundation of skills needed in reading for information. By using the effective Read Right program, the

course helps students quickly, efficiently, and permanently improve reading skills and eliminate basic reading problems so they can easily and comfortably understand text. Improved reading skills make it easier for students to attain success in other academic classes, including English, math, general education and occupational courses, while building self-esteem and confidence.

RDLS 0099 - Power Reading II
3.0 - 0.0 - 3.0

Prerequisite: (1) Assessment testing or successful completion of RDLS 0098 — must be completed prior to taking this course.

This course builds the reading skills needed to enter RDLS 0100, College Reading Strategies. It actively engages students in an individualized program that builds a solid foundation of skills needed in reading for information. By using the effective Read Right program, the course helps students quickly, efficiently, and permanently improve reading skills and eliminate basic reading problems so they can easily and comfortably understand text. Improved reading skills make it easier for students to attain success in other academic classes, including English, math, general education and occupational courses, while building self-esteem and confidence.

RDLS 0100 - College Reading Strategies
4.5 - 0.0 - 4.5

Prerequisite: (1) Assessment testing or ENGL 0950 — must be completed prior to taking this course.

This course is designed to provide students with the tools necessary to maximize understanding of a variety of academic materials. Students learn vocabulary strategies, textbook strategies, and critical reading application strategies. This course includes a research analysis component for databases and other online sources.

RDLS 1150 - College Vocabulary 
4.5 - 0.0 - 4.5

This course helps students broaden their vocabularies in order to communicate more effectively in their academic, professional, and personal lives. Topics include Latin and Greek roots, prefixes, and suffixes often found in English words, context clues, academic vocabulary, and higher-level general vocabulary needed for successful college-level reading and writing. This course requires numerous written assignments, so students must have basic writing skills, including grammar and spelling, in order to successfully use new vocabulary words in proper context. RDLS 1150 is only offered online.

RDLS 1160 - Reading Rapidly and Effectively 
2.0 - 0.0 - 2.0

Prerequisite: (1) Ability to navigate the Internet — must be completed prior to taking this course.

This course is for anyone who wishes to improve reading speed and comprehension. The course consists of two components: 1) online modules that contain short readings and quizzes and 2) completing lessons using The Ultimate Speed Reader software program. Most students who complete this course at least double their reading speed while maintaining or improving their comprehension. Students also learn techniques, such as

skimming and scanning, to increase effective reading efficiency and flexibility. This class does not meet as a group at a set time or place, so it fits well with any student's schedule. NOTE: Students who enroll in RDLS 1160 must have access to The Ultimate Speed Reader software. They may either purchase it to use at home or use it in any campus Learning and Tutoring Center.

RDLS 1200 - College Success Strategies

4.5 - 0.0 - 4.5

Students learn how their attitude, hard work, and personal qualities can be utilized to aid them in becoming effective and successful learners. Course topics emphasize college culture/orientation, self-knowledge, and study strategies so students can develop the tools and strategies needed to successfully meet academic, career, and personal goals that allow them to reach their full potential.

REES - Real Estate

REES 1000 - Real Estate Principles

4.5 - 0.0 - 4.5

This course gives a general survey of real estate principles and practices. Topics include real property rights, real estate transactions, property ownership, real estate financing appraisal, brokerage, legal instruments, real estate markets, planning, and regulation.

REES 1100 - Real Estate Law

4.5 - 0.0 - 4.5

Recommended: REES 1000 — recommended prior to taking this course, but not required.

This course familiarizes students with the basic Nebraska Real Estate Act as it applies to ownership, conveyance, and rights in real property. It also familiarizes students with the role of the agent in the relationship between the broker and client.

REES 2100 - Real Estate Finance

4.5 - 0.0 - 4.5

Prerequisite: (1) REES 1000 or licensure — must be completed prior to taking this course.

This course covers the various methods of financing real property and the financial institutions that provide the funds for financing residential, commercial, and income properties.

REES 2110 - Building and Property Management

4.5 - 0.0 - 4.5

Prerequisite: (1) REES 1000 or licensure — must be completed prior to taking this course.

This course offers practical skill building for real estate salespersons, brokers, and others. It gives attention to the management of income-producing real property, including leases, contracts, merchandising, tenant selection, relations with owners and tenants, collections, maintenance, accounting ethics, and legal and professional relationships.

REES 2120 - Real Estate Sales and Brokerage

4.5 - 0.0 - 4.5

Prerequisite: (1) REES 1000 or licensure — must be completed prior to taking this course.

This course introduces students to the operational functions of the real estate licensee. It examines the role of the licensee in bringing parties together and creating a market for real property. Students become familiar with the marketing procedures within the real estate industry and the economic factors that cause activity in the real estate market.

REES 2130 - Real Estate Appraisal

4.5 - 0.0 - 4.5

Prerequisite: (1) REES 1000 or licensure — must be completed prior to taking this course.

This course analyzes and qualifies forces that create, maintain, and destroy real property values. Specifically, the course focuses on the appraisal process and methods of arriving at a logical estimated value based upon market comparison, income, and cost approaches to value.

REES 2200 - Real Estate Investments

4.5 - 0.0 - 4.5

Prerequisite: (1) REES 1000 or real estate licensure — must be completed prior to taking this course.

This course covers the risk analysis tools and techniques that can be used to determine the productivity of residential and commercial real estate. The course covers concise and practical hands-on approaches that lead to sound investment decisions in consideration of applicable tax laws and current regulations.

REES 2900 - Special Topics in Real Estate

Variable

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This course permits instruction in special content areas that are not included in other real estate courses.

REES 2981 - Internship

0.0 - 15.0 - 3.0

Prerequisite: (2) REES 1000 and instructor approval — must be completed prior to taking this course.

Students apply the principles learned in REES 1000 and REES 2112 while working in a real estate office under the supervision of a licensed agent. Duties include preparing listing packets and purchasing kits; performing clerical functions, such as mailings, scheduling appointments, and showings; and attending sales meetings and all closings. Students record tasks in a notebook for review by the supervisor and faculty sponsor to assure they develop the appropriate competencies. Based on state guidelines, students must complete 40 hours of work for each credit hour.

RESP - Respiratory Care Technology

RESP 1000 - Orientation to Respiratory Care

3.0 - 0.0 - 3.0

Prerequisite: (1) Acceptance into the Respiratory Care Technology program — must be completed prior to taking this course.

This course provides exploration into the field of respiratory care for students who are seeking a career in the profession.

Emphasis is placed on the role of the respiratory care practitioner in dealing with the legal and psychological aspects of patient care. The student is acquainted with the medical terminology associated with the field of respiratory care. Other topics include employment opportunities, communication skills, and medical ethics.

RESP 1010 - Introduction to Respiratory Care

3.5 - 3.0 - 4.5

Prerequisite: (1) RESP 1000 — must be completed prior to taking this course.

This course provides information about the manufacture, transport, and storage of medical gases. Oxygen therapy techniques are introduced. Students are instructed in the application of the following therapy modalities: aerosol and humidity therapy, incentive spirometry, resuscitation devices.

RESP 1020 - Cardiopulmonary Anatomy and Physiology

4.5 - 0.0 - 4.5

Prerequisite: (3) BIOS 1310 or BIOS 2320; CHEM 1010; and acceptance into the Respiratory Care Technology program — must be completed prior to taking this course.

This course is a study of advanced cardiopulmonary anatomy and physiology. Special emphasis is placed on airway structures, the mechanics of ventilation, blood gas transport, and acid-base balance.

RESP 1030 - Respiratory Care Procedures I

3.5 - 3.0 - 4.5

Prerequisite: (2) RESP 1010 and RESP 1020 — must be completed prior to taking this course.

This course is a study of general medical-surgical respiratory care procedures. Topics include patient physical assessment, bedside pulmonary mechanics, basic respiratory pharmacology, airway management, chest physiotherapy, and arterial blood gas analysis.

RESP 1031 - Current Concepts I

2.0 - 0.0 - 2.0

Prerequisite: (2) RESP 1010 and RESP 1020 — must be completed prior to taking this course.

Emphasis in this course is on obstructive lung disease. Included are common therapeutic modalities used in their treatment, laboratory values, patient assessment techniques, disease prevention, and disease management. The course includes discussions of current medical literature, physician lectures, and case presentations.

RESP 1040 - Respiratory Care Procedures II

3.5 - 3.0 - 4.5

Prerequisite: (2) RESP 1020 and RESP 1030 — must be completed prior to taking this course.

The emphasis of this course is to develop skills in ventilatory management. Emphasis is placed on IPPB therapy, CPAP therapy, assessment of respiratory failure, continuous mechanical ventilation techniques, physiologic aspects of mechanical ventilation, and invasive and non-invasive monitoring techniques.

RESP 1041 - Current Concepts II

2.0 - 0.0 - 2.0

Prerequisite: (2) RESP 1991 and RESP 1031 — must be completed prior to taking this course.

This course allows students to build upon experiences in both the clinic and the classroom setting. Using critical-thinking skills, the student will be able to recognize the clinical signs and symptoms and treatment strategies for cystic fibrosis, pulmonary edema, neoplastic lung disease, AIDS, pulmonary abscesses, and pneumonia. Principles of chest radiography will be introduced and will be referred to throughout the discussion of the pulmonary disorders.

RESP 1042 - Pharmacology for Respiratory Care

3.0 - 0.0 - 3.0

Prerequisite: (2) RESP 1030 and RESP 1031 — must be completed prior to taking this course.

Emphasis in this course is on respiratory care pharmacology. The course includes general principles and administration of medications used to treat respiratory diseases as well as interaction, pharmacologic action and effect, contraindications, and side effects. Drug dosage calculations will also be reviewed during the course.

RESP 1991 - Clinical Practicum I

0.0 - 16.5 - 5.5

Prerequisite: (2) RESP 1010 and RESP 1020 — must be completed prior to taking this course.

The student is assigned 16.5 hours per week to clinical practice in affiliated hospitals and healthcare agencies. Along with an orientation to clinical policies and facilities, emphasis is placed upon the basics of oxygen therapy, patient assessment techniques, incentive spirometry, medical aerosol and metered dose inhaler therapy, and medical asepsis.

RESP 1992 - Clinical Practicum II

0.0 - 16.5 - 5.5

Prerequisite: (2) RESP 1031 and RESP 1991 — must be completed prior to taking this course.

The student is assigned 16.5 hours per week to clinical practice in affiliated hospitals and healthcare agencies. Emphasis is placed on chest physiotherapy, airway management, arterial blood gas puncture, bedside monitoring techniques, hyperinflation techniques, and aerosol and humidity therapy.

RESP 1993 - Clinical Practicum III

0.0 - 16.5 - 5.5

Prerequisite: (2) RESP 1041 and RESP 1992 — must be completed prior to taking this course.

The student is assigned 16.5 hours per week to clinical practice in affiliated hospitals and healthcare agencies. The course provides the introduction to the adult critical care setting with emphasis on ventilator management and airway care. An observational surgery rotation is also contained in this clinical practicum.

RESP 2100 - Advanced Respiratory Care
3.5 - 3.0 - 4.5

Prerequisite: (2) RESP 1040 and RESP 1992 — must be completed prior to taking this course.

This course covers advanced cardiopulmonary physiology and its application to the management of the patient in cardio-respiratory failure. The course provides the student with instructional opportunities and laboratory experiences in pulmonary function testing and pulmonary home healthcare.

RESP 2101 - Current Concepts III
2.0 - 0.0 - 2.0

Prerequisite: (2) RESP 1992 and RESP 1041 — must be completed prior to taking this course.

This course assists the student in integrating critical thinking and reasoning in the pulmonary management of the acutely ill adult client. The course outlines specific pulmonary diseases and their treatment. The course also includes discussions of current medical literature and case study presentations on topics related to adult critical care.

RESP 2120 - Cardiology and Hemodynamics
3.0 - 0.0 - 3.0

Prerequisite: (2) RESP 1993 and RESP 2100 — must be completed prior to taking this course.

This course builds upon prior clinical experiences in the Adult Intensive Care Unit and integrates the technical knowledge used in the hemodynamic monitoring of the adult critical care patient. The course also provides insight into the structure and importance of a well-defined pulmonary rehabilitation program.

RESP 2121 - Current Concepts IV
2.0 - 0.0 - 2.0

Prerequisite: (2) RESP 1993 and RESP 2101 — must be completed prior to taking this course.

This course assists students in integrating advanced-level cardiopulmonary diagnostic testing into the care plan of the adult patient. It includes physician lectures, discussions directed from current medical literature, and case study presentations on topics requiring the use of both recall and critical-reasoning skills in a clinical setting.

RESP 2122 - Pediatric and Neonatal Respiratory Care
3.0 - 0.0 - 3.0

Prerequisite: (2) RESP 1993 and RESP 2100 — must be completed prior to taking this course.

This course includes the study of cardiopulmonary physiology from fetal through adolescent life. The course topics include cardiac defects, respiratory support, monitoring techniques, ventilator management, and diseases specific to neonatal and pediatric patients.

RESP 2131 - Current Concepts V
2.0 - 0.0 - 2.0

Prerequisite: (3) RESP 2121; RESP 2122; and RESP 2994 — must be completed prior to taking this course.

This course introduces the student to the concepts of health care research and preparation of continuing education programs for health care professionals. Opportunities for practical experience in teamwork dynamics, team facilitation, and group presentations are provided.

RESP 2132 - Respiratory Care Seminar
4.5 - 0.0 - 4.5

Prerequisite: (4) RESP 2100; RESP 2120; RESP 2122; and RESP 2994 — must be completed prior to taking this course.

This course provides a comprehensive review for the entry-level and advanced-level credentialing examinations administered by the National Board for Respiratory Care. Test matrices and exam content areas for selected exams will be presented.

RESP 2994 - Clinical Practicum IV
0.0 - 16.5 - 5.5

Prerequisite: (2) RESP 1993 and RESP 2101 — must be completed prior to taking this course.

The student is assigned 16.5 hours per week to clinical practice in affiliated hospitals and healthcare agencies. This clinical course is designed to extend upon RESP 1993 by providing clinical exposure in the adult critical care unit. Emphasis will be placed on ventilator theory and patient management in both the acute care and long-term care settings. Additional rotations are scheduled in electrocardiography and diagnostic pulmonary function testing. An introduction to computerized clinical simulation exercise is also scheduled.

RESP 2995 - Clinical Practicum V
0.0 - 16.5 - 5.5

Prerequisite: (3) RESP 2120; RESP 2122; and RESP 2994 — must be completed prior to taking this course.

The student is assigned 16.5 hours per week to clinical practice in affiliated hospitals and healthcare agencies. This clinical practicum is designed to provide the student with clinical exposure and opportunities to gain skills in a variety of areas, including experiences in sleep lab studies, pulmonary rehabilitation, HBO, pediatrics and neonatal respiratory care, and home healthcare.

SCET - Civil Engineering Technology

SCET 1000 - Civil Engineering Fundamentals
4.5 - 0.0 - 4.5

Students are introduced to a wide variety of topics related to the civil engineering field including historical and contemporary engineering applications. Students investigate a variety of testing, evaluation, and classifications of methods and materials. The analysis and interpretation of topographic maps and aerial photographs are also covered.

SCET 1090 - ArcGIS Fundamentals**4.5 - 0.0 - 4.5**

This course introduces students to the fundamentals of ArcGIS GIS software and general geographic information system concepts, including data editing, cartographic map production, and geospatial data analysis.

SCET 1120 - AutoCAD Essentials**9.0 - 0.0 - 9.0**

This course introduces basic computer-aided design 2-D drawing techniques using AutoCAD software. It includes drawing terminology, AutoCAD menus, text creation and editing, dimensioning, plotting and geometric construction, and file manipulation techniques. Students also learn model space and layout, viewports, polylines, multilines and splines, annotation with text, use of attributes for data storage, and extraction and xrefs.

SCET 1130 - REVIT (Structure)**4.5 - 0.0 - 4.5**

Students are introduced to the basic functions of building information modeling and REVIT concepts via hands-on experience with Autodesk REVIT Structure software. Students concentrate on structural building components (grids, columns, beams, slabs, foundations) and produce construction documents from 3-D models. (Formerly Beginning REVIT (Structure))

SCET 1150 - AutoCAD Civil 3-D Fundamentals**9.0 - 0.0 - 9.0**

Prerequisite: (1) SCET 1120 or instructor approval — must be completed prior to taking this course.

This course covers nearly all of the objects and commands needed to start using AutoCAD Civil 3-D. Students focus on tools designed specifically for civil engineers, including utility, site, and roadway plans; profile; and section sheets. (Formerly AutoCAD Civil 3-D)

SCET 1160 - Advanced AutoCAD Civil 3-D**9.0 - 0.0 - 9.0**

Prerequisite: (1) SCET 1150 or instructor approval — must be completed prior to taking this course.

This course allows students to advance their fundamental skills in AutoCAD Civil 3-D. Students work through advanced Civil 3-D engineering projects. Projects include surveying, roadway design, grading, pipe network topics, and storm analysis. This is a hands-on, project-based course.

SCET 1170 - Advanced REVIT Structure**4.5 - 0.0 - 4.5**

Prerequisite: (1) SCET 1130 — must be completed prior to taking this course.

In Advanced REVIT Structure, students are encouraged to advance their skill level beyond fundamental technical skills to an increased understanding of building information modeling in collaboration with other advanced users. The curriculum presents a set of advanced problems involving typical issues encountered in contract document production in a multi-user environment in the architecture, engineering and construction industries.

Students are further encouraged to explore personal areas of interest within the course objectives.

SCET 1200 - Surveying Fundamentals**5.5 - 0.0 - 5.5**

Prerequisite: (1) MATH 1430 — must be completed prior to taking this course.

Students learn fundamental concepts of surveying, computations, and field notes. This course covers theory and practice of measuring distance and elevation, as well as field practice. Students are introduced to land surveying transits, theodolites, and Global Positioning Systems (GPS).

SCET 2010 - Fluid Mechanics**4.5 - 0.0 - 4.5**

Prerequisite: (1) MATH 1430 or instructor approval — must be completed prior to taking this course.

Students learn about fluid properties, hydrostatics, and fluid flow properties; flow through pipes and open channels; flow measurements; and basic theoretical and applied fluid mechanics.

SCET 2250 - Advanced Surveying**5.5 - 0.0 - 5.5**

Prerequisite: (1) SCET 1200 — must be completed prior to taking this course.

Students learn land surveying theory and practices using a theodolite, total station and GPS unit. Topics studied are survey traverse and determination of azimuths and bearings, as well as coordinate geometry and curve computations. Students also learn topographic mapping, construction staking, and GPS basics, concepts and applications.

SCET 2300 - Structures I - Engineering Statics**4.5 - 0.0 - 4.5**

Prerequisite: (2) MATH 1430 and PHYS 1010; or instructor approval — must be completed prior to taking this course.

Students learn the basic principles of statics, free body diagrams, equilibrium, force systems, and friction.

SCET 2310 - Structures II - Strength of Materials**4.5 - 0.0 - 4.5**

Prerequisite: (1) SCET 2300 or instructor approval — must be completed prior to taking this course.

Students are introduced to the strength of materials including engineering materials and their properties, stress, and deformation. (Formerly Structures II)

SCET 2410 - Civil Site Design**4.5 - 0.0 - 4.5**

Prerequisite: (1) SCET 1000 or instructor approval — must be completed prior to taking this course.

Students gain logical and practical design criteria for civil site project design, including site grading and earthwork, hydrologic analysis, hydraulic systems, and storm water management.

SCIE - Science

SCIE 1010 - Physical Science

5.0 - 3.0 - 6.0

Prerequisite: (2) College-level reading, writing, and math proficiency; and MATH 0931 or MATH 0960 — must be completed prior to taking this course.

Corequisite: (1) SCIE 1010L — must be taken at the same time as this course.

This course is a survey in physical science with emphasis on scientific processes. It emphasizes the chemical and physical principles needed to better understand the world. The course may also include topics from astronomy, geology, and meteorology. Students registering for this course must also register for SCIE 1010L, which is the laboratory component of the course.

SCIE 1010L - Physical Science Lab

0.0 - 0.0 - 0.0

Prerequisite: (2) MATH 0931 or MATH 0960; and college-level reading, writing, and math proficiency — must be completed prior to taking this course.

Corequisite: (1) SCIE 1010 — must be taken at the same time as this course.

This is the lab component for SCIE 1010. The lab activities are designed to emphasize the chemical and physical principles needed to better understand the world. The course may also include topics from astronomy, geology, and meteorology. Students registering for this course must also register for SCIE 1010, which is the lecture component of the course.

SCIE 1030 - Energy Systems and Sustainability - Conservation and Design

4.5 - 0.0 - 4.5

Prerequisite: (1) College-level reading, writing, and math proficiency — must be completed prior to taking this course.

Recommended: High school math (basic algebra skills) and high school science — recommended prior to taking this course, but not required.

This course is an introduction to energy systems. It presents the current energy sources and uses (primarily from fossil fuels) as well as alternative energy systems, their uses, and potential. The course focuses on ways to address the energy needs of society and the problems that may be encountered over the next 15 years in providing for these energy needs. Course material includes projects and group learning activities.

SCIE 1300 - Astronomy

4.5 - 0.0 - 4.5

Prerequisite: (2) College-level reading, writing, and math proficiency; and MATH 0931 or MATH 0960 — must be completed prior to taking this course.

This course is an introductory course in astronomy that covers the tools of astronomy, the night sky, the solar system, stars and star systems, galaxies, and cosmology. This is a lecture-only course. The lab course that complements this course is SCIE 1310.

SCIE 1310 - Astronomy Laboratory

0.0 - 4.5 - 1.5

Prerequisite: (2) College-level reading, writing, and math proficiency; and MATH 0931 or MATH 0960 — must be completed prior to taking this course.

Pre/Co Requisite: (1) SCIE 1300 — must be taken either prior to or at the same time as this course.

This lab course parallels the astronomy lecture course SCIE 1300. Focusing on inquiry, students study astronomical topics and learn to ask scientific research questions using online data from NASA and other sources. Topics include the celestial motions, the sun, classifying galaxies, moon orbits, stellar spectra, and extrasolar planets. Students participate in virtual science conferences; review research, and complete astronomical observations through field exercises.

SCIE 1400 - Introduction to Meteorology

5.0 - 3.0 - 6.0

Prerequisite: (2) College-level reading, writing and math; and MATH 0931 or MATH 0960 — must be completed prior to taking this course.

Corequisite: (1) SCIE 1400L — must be taken at the same time as this course.

This course introduces and explores the dynamic nature of weather phenomena that impact our daily activities, travel, and industry. It covers atmospheric structure, clouds, precipitation, fronts, wind, storms, climate, and pollution. Topics include current issues ranging from aviation accidents and global warming to alternate energy sources. Students registering for this course must also register for SCIE 1400L, which is the laboratory component of the course.

SCIE 1400L - Introduction to Meteorology Lab

0.0 - 0.0 - 0.0

Prerequisite: (2) MATH 0931 or MATH 0960; and college-level reading, writing, and math proficiency — must be completed prior to taking this course.

Corequisite: (1) SCIE 1400 — must be taken at the same time as this course.

This is the lab component for SCIE 1400. Laboratory activities focus on atmospheric structure, clouds, precipitation, fronts, wind, storms, climate, and pollution. Students registering for this course must also register for SCIE 1400, which is the lecture component of the course.

SCIE 1500 - Early Undergraduate Research

1.0 - 3.0 - 2.0

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This student research course is for motivated, creative, and inquisitive science students. It introduces students to the process of science. The objective of the course is for students to develop their own research question and then begin the process of answering that question by doing a critical review of the scientific literature, designing and carrying out scientific experiments, analyzing the collected data, and then communicating the results. This course can be taken by students in any of the science disciplines.

SCIE 1900 - Special Topics in Science**Variable**

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This course permits instruction in special content areas not included in other science courses, depending on interest and relevancy to curriculum.

SLIS - Sign Language Studies**SLIS 1010 - American Sign Language I** **6.0 - 0.0 - 6.0**

Prerequisite: (1) Assessment testing; or ENGL 0960 and RDLS 0100; or college-level reading assessment test score — must be completed prior to taking this course.

This course acquaints students with American Sign Language, develops visual acuity, and builds comfort with the use of body and facial expressions to convey information. It uses a practical approach to teaching vocabulary, grammar, and the cultural aspects through real-life conversational experiences. Students further acclimate to the new modality of this language via classroom experiences conducted without voice. The course introduces additional information about interacting with the deaf community via outside community events, additional readings, and lab activities.

SLIS 1020 - American Sign Language II **6.0 - 0.0 - 6.0**

Prerequisite: (1) SLIS 1010 or departmental approval — must be completed prior to taking this course.

This course emphasizes expansion and refinement of the fundamental comprehension and production skills. It addresses additional functional grammatical structures and targeted lexical items and stresses spontaneous, interactive use of American Sign Language through discussion of deaf-related events and activities. Students continue the study of information related to everyday life experiences of deaf Americans and deaf people elsewhere in the world. The course fosters receptive skills through interactive ASL lessons.

SLIS 1030 - American Sign Language III**6.0 - 0.0 - 6.0**

Prerequisite: (1) SLIS 1020 or department approval — must be completed prior to taking this course.

This course provides additional opportunities to expand students' ability to produce and comprehend advanced sign language as used in everyday conversational settings. Students develop competency in ASL vocabulary and cultural features of the language. They use advanced conversational skills and learn to identify grammatical non-manual signals and markers.

SLIS 1040 - American Sign Language IV**6.0 - 0.0 - 6.0**

Prerequisite: (1) SLIS 1030 — must be completed prior to taking this course.

This course provides additional opportunities to expand students' ability to produce and comprehend advanced sign language as used in everyday conversational settings. Students develop

competency in ASL vocabulary and cultural features of the language. The course bases activities on the cultural values of the deaf community.

SLIS 2201 - History, Psychology and Sociology of Deafness
4.5 - 0.0 - 4.5

This is an introductory course which surveys historical, psychological, and sociological aspects of deafness. This course introduces students to aspects of deaf culture and the deaf community. It also examines current issues and trends and future directions in the education of children who are deaf or hard of hearing. Basic concepts, theories, research, and philosophical debates are explored through assigned readings, independent work, and classroom activities.

SOCI - Sociology**SOCI 1010 - Introduction to Sociology**  **4.5 - 0.0 - 4.5**

Recommended: Reading assessment and college-level reading skills — recommended prior to taking this course, but not required.

This course is an introduction to the scientific study of society and human social behavior. It focuses on the concepts of research methods and findings, sociological theories, society, institutions, groups, social structure, culture, interaction, socialization, social problems, inequality, and change.

SOCI 1050 - Sociology of Healthcare **4.5 - 0.0 - 4.5**

Recommended: Reading assessment and college-level reading skills — recommended prior to taking this course, but not required.

This course is a systematic attempt to relate sociological concepts to the fields of physical and mental health and illness. It provides an overview of socio-cultural aspects of health and includes community and healthcare, medical education, and the hospital as social institutions.

SOCI 1100 - Native American Studies **4.5 - 0.0 - 4.5**

This course introduces the oral traditions, rituals, life-ways, and world views that comprise the diverse cultural traditions of Native American peoples and includes both historical and contemporary experiences.

SOCI 1250 - Introduction to Anthropology **4.5 - 0.0 - 4.5**

This course provides an introduction to the study and methods of anthropology and the methodologies used to study human societies and cultures. It covers ancient to present societies. Reading assessment and college-level reading skills are recommended for success in this course.

SOCI 2050 - Current Social Problems **4.5 - 0.0 - 4.5**

This course provides an introductory consideration of several major current social issues. It is designed to improve students' ability to understand and systematically investigate concerns vital

to everyday life. Issues treated include poverty, pollution, and population as well as conflict, institutional problems, social change, and alienation. Reading assessment and college-level reading skills are recommended for success in this course.

SOCI 2060 - Multicultural Issues ✓

4.5 - 0.0 - 4.5

Recommended: SOCI 1010 or SOCI 2050 — recommended prior to taking this course, but not required.

This course focuses on the scientific sociological study of diversity in the United States and other societies. It emphasizes value systems, power relationships, forms of societal organization, and cultural contributions of selected racial, ethnic, or culturally marginalized populations. In addition, the course explores such emerging minorities as those based on ability, gender, sexual orientation, appearance, and age. It pays special attention to sociological theories of subordinate and dominant group relations.

SOCI 2110 - Introduction to Gerontology ✓

4.5 - 0.0 - 4.5

Recommended: Reading assessment and college-level reading skills — recommended prior to taking this course, but not required.

This course provides an introduction to the social aspects of aging. It places special significance on issues such as family relationships, socialization to retirement and old age, perceptions and stereotypes of the aged, bereavement and loss, and other physical and psychological consequences of this stage of development.

SOCI 2150 - Survey of Human Sexuality ✓

4.5 - 0.0 - 4.5

Prerequisite: (1) PSYC 1010 or SOCI 1010 — must be completed prior to taking this course.

This course is a survey of the topic of human sexuality. It presents materials concerning the biological, psychological, and socio-cultural facets of sexual behavior. (Cross-listed as PSYC 2150)

SOCI 2160 - Marital and Family Relationships ✓

4.5 - 0.0 - 4.5

Recommended: Reading assessment and college-level reading skills — recommended prior to taking this course, but not required.

This course develops an understanding of the social role of relationships and families. Topics include courtship and preparation for marriage, conflict situations and adjustments between spouses, parent-child relationships, social change and acceptance of alternatives to traditional heterosexual marriages, the family within the community, and consequences of disintegration of the family unit. (Formerly Marriage and the Family)

SOCI 2310 - Criminology ✓

4.5 - 0.0 - 4.5

Prerequisite: (1) SOCI 1010 — must be completed prior to taking this course.

This course examines crime and criminology from a broad sociological perspective. Topics include definitions of crime, the various causes of criminal behavior, theoretical perspectives for studying socially deviant behavior, and systems of criminal justice.

SOCI 2311 - Juvenile Justice ✓

4.5 - 0.0 - 4.5

Prerequisite: (1) SOCI 1010 — must be completed prior to taking this course.

This course examines juvenile delinquency from a sociological and practical perspective. Topics include definitions of juvenile delinquency; theoretical explanations; the various causes of juvenile delinquency; and methods of prevention, treatment, and control.

SOCI 2450 - Social Psychology ✓

4.5 - 0.0 - 4.5

Prerequisite: (1) PSYC 1010 or SOCI 1010 — must be completed prior to taking this course.

This is an introductory course in social psychology that demonstrates the interaction of social groups and individual behavior. (Cross-listed as PSYC 2450)

SOCI 2550 - Popular Readings in Social Science ✓

4.5 - 0.0 - 4.5

Recommended: Reading assessment and college-level reading skills — recommended prior to taking this course, but not required.

This course explores the psychological and sociological authenticity of selected popular psychology, social issues, and self-help books. It emphasizes theoretical foundation, sociological conditions and variables, and therapeutic or pseudo-therapeutic advantages and disadvantages of each book. (Cross-listed as PSYC 2550)

SOCI 2650 - Research Methods ✓

4.5 - 0.0 - 4.5

This is an introductory course in research methods and design. The course is comprehensive, and, as such, students examine the entire research process including, formulating research questions; sampling; measurement (surveys, scaling, qualitative, and quantitative); research design (experimental and quasi-experimental); data analysis; and research writing. It also addresses the major theoretical and philosophical underpinnings of research, including the idea of validity in research, reliability of measures, and ethics. The course materials and text use an informal, conversational style to engage both the beginning and the more experienced students of research methods in several areas of study (e.g., psychology, business, nursing, social work, political science, and education). (Cross-listed as PSYC 2650)

SOCI 2900 - Special Topics in Sociology Variable

This course permits instruction in special content areas that are not included in other Sociology courses.

SOWK - Social Work

SOWK 1010 - Introduction to Social Work

4.5 - 0.0 - 4.5

This course is for students who want to explore a possible major in social work and/or to learn more about social work and its functions in society. Students examine historical and current issues and problems in social welfare, social services, and the social work profession. The course focuses on the values, beliefs, and goals of social work in the United States.

SOWK 1500 - Social Work and Civic Engagement

4.5 - 0.0 - 4.5

This course is designed to acquaint students with the social work profession, professional roles and functions, and social services delivery systems. Students have an opportunity to observe and participate in social services activities within Nebraska and Iowa communities incorporated with didactic experiences. Students have an opportunity to explore their vocational aptitude for social work practice via interactive encounters with clients and helping professionals.

SOWK 2120 - Race, Class, and Gender

4.5 - 0.0 - 4.5

This course examines the effects of race, class, and gender on social policy and social injustice. The focus is on institutional manifestations of racism, classism, and sexism, and how these are interconnected and are mutually reinforcing. The consequences of institutionalized oppressions are examined at the individual, group, family, and societal levels.

SPAN - Spanish

SPAN 1050 - Spanish for Business I

4.5 - 0.0 - 4.5

Recommended: SPAN 1110 or equivalent for those with no prior Spanish experience — recommended prior to taking this course, but not required.

Those in business are finding the need to interact more and more with Spanish-speaking customers. To better serve these customers, it is important to have a grasp of Spanish language and culture. This course provides the necessary skills to communicate in Spanish at a beginning level. NOTE: It is strongly recommended that students who have no prior experience in Spanish take SPAN 1110 or place out of SPAN 1110 using the Spanish placement test prior to enrolling in SPAN 1050.

SPAN 1051 - Spanish for Business II

4.5 - 0.0 - 4.5

Prerequisite: (1) SPAN 1050 — must be completed prior to taking this course.

Students continue to develop skills in order to communicate at a more advanced level of Spanish in business settings.

SPAN 1060 - Spanish for Healthcare I

4.5 - 0.0 - 4.5

Recommended: SPAN 1110 or equivalent for those with no prior Spanish experience — recommended prior to taking this course, but not required.

Those in the medical profession are finding that they need to help and serve more Spanish-speaking clients than they have in the past. To serve these clients better it is important that these medical professionals have a grasp of the Spanish language and culture. The course provides the necessary skills to communicate in Spanish at a beginning level. NOTE: It is strongly recommended that students who have no prior experience in Spanish take SPAN 1110 or place out of SPAN 1110 using the Spanish placement test prior to enrolling in SPAN 1060.

SPAN 1061 - Spanish for Healthcare II

4.5 - 0.0 - 4.5

Prerequisite: (1) SPAN 1060 — must be completed prior to taking this course.

Students continue to focus on the skills begun in Spanish 1060 such that they can communicate with Spanish clients at a more advanced level.

SPAN 1110 - Elementary Spanish I

7.5 - 0.0 - 7.5

This is the first of two introductory courses where students begin to learn the fundamentals of Spanish. It stresses comprehension, pronunciation, speaking, listening, reading, writing, and vocabulary. The course includes nouns, adjectives, and present tense as well as a study of Spanish-speaking cultures.

SPAN 1120 - Elementary Spanish II

7.5 - 0.0 - 7.5

Prerequisite: (1) SPAN 1110 — must be completed prior to taking this course.

Students continue to focus on the skills begun in SPAN 1110. The course covers past tenses and subjunctive mood as well as Spanish-speaking cultures.

SPAN 1410 - Spanish for High Beginners I

7.5 - 0.0 - 7.5

Prerequisite: (1) Strong oral skills in Spanish; instructor referral or approval; the Spanish language placement examination; or previous beginning-level coursework in Spanish — must be completed prior to taking this course.

This is the first of two courses for students considered to be high beginners in Spanish - people with previous beginning-level coursework in Spanish, heritage speakers, people who understand 50 percent or more of Spanish conversation, and/or people who have strong oral skills in Spanish. The course is for students who are too advanced for SPAN 1110 but who are also not quite prepared for SPAN 1120. It emphasizes grammar, vocabulary acquisition, speaking, listening, and culture. Students focus on development of reading and writing skills. The course includes nouns, pronouns, and adjectives, as well as present, progressive, preterit, and imperfect indicative tenses. This course is offered as an online independent study.

SPAN 1411 - Spanish for High Beginners II**7.5 - 0.0 - 7.5**

Prerequisite: (1) SPAN 1410 — must be completed prior to taking this course.

Recommended: SPAN 1110 and SPAN 1120 — recommended prior to taking this course, but not required.

This is the second of two courses for students considered to be high beginners in Spanish. The course is designed for students who are too advanced for SPAN 1120, but who are also not quite prepared for SPAN 2110. It emphasizes grammar, vocabulary acquisition, speaking, listening, and culture. Students focus on development of reading and writing skills. The course includes nouns, pronouns, adjectives, subjunctive mood tenses, commands, perfect indicative and subjunctive mood tenses, and conditional and future tenses. This course is offered as an online independent study.

SPAN 1810 - Spanish Study Abroad**Variable**

Prerequisite: (1) SPAN 1110; SPAN 1120; or an equivalent course subject to instructor approval — must be completed prior to taking this course.

This course begins on campus and includes travel to a Spanish-speaking country later in the quarter. Students research the Spanish-speaking country to be visited and present information gathered to peers. The class then visits the cities and monuments of the country. Students use the Spanish acquired in the classroom to communicate in everyday situations in hotels, restaurants, cafes, and on tours, and they are able to try a new type of cuisine and lifestyle. Immersion in the culture enables students to experience diverse cultural practices, culinary habits, music styles, and dance forms.

SPAN 1900 - Special Topics in Spanish I**Variable**

This course permits instruction in special content areas not included in other Spanish courses. Topics include Spanish for social service personnel and courses examining specific cultures.

SPAN 2050 - Intermediate Spanish for Business I**4.5 - 0.0 - 4.5**

Prerequisite: (1) SPAN 1051 — must be completed prior to taking this course.

This course reinforces the skills learned in SPAN 1050 and 1051. It is taught primarily in Spanish and prioritizes oral communication.

SPAN 2051 - Intermediate Spanish for Business II**4.5 - 0.0 - 4.5**

Prerequisite: (1) SPAN 2050 — must be completed prior to taking this course.

This course reinforces the skills learned in SPAN 2050. It is taught primarily in Spanish and prioritizes oral communication.

SPAN 2060 - Intermediate Spanish for Healthcare I**4.5 - 0.0 - 4.5**

Prerequisite: (1) SPAN 1061 — must be completed prior to taking this course.

This course is a continuation of the skills learned in SPAN 1060 and SPAN 1061. This course is taught primarily in Spanish and is focused on oral communication.

SPAN 2061 - Intermediate Spanish for Healthcare II**4.5 - 0.0 - 4.5**

Prerequisite: (1) SPAN 2060 — must be completed prior to taking this course.

This course reinforces and expands the skills learned in Intermediate Spanish for Medical Personnel I. It is taught primarily in Spanish and prioritizes oral communication. (Formerly Intermediate Spanish for Medical Personnel II)

SPAN 2110 - Intermediate Spanish I**4.5 - 0.0 - 4.5**

Prerequisite: (1) SPAN 1120, SPAN 1061, or SPAN 1051 — must be completed prior to taking this course.

This course builds on previously attained grammar and stresses vocabulary building. It presents the perfect, past subjunctive, future, and conditional tenses as well as commands. It is taught primarily in Spanish.

SPAN 2120 - Intermediate Spanish II**4.5 - 0.0 - 4.5**

Prerequisite: (1) SPAN 2110 or equivalent — must be completed prior to taking this course.

This course continues the grammar review of Intermediate Spanish I and introduces literary readings. Classes are conducted in Spanish.

SPAN 2210 - Conversation Skills I**4.5 - 0.0 - 4.5**

Prerequisite: (1) SPAN 2120 — must be completed prior to taking this course.

To truly understand Spanish, one must be comfortable speaking it. This course develops the skills needed to hold a beginning conversation in Spanish. Readings and video presentations on Spanish-speaking culture and civilization are used as topics for class conversations. The class is conducted entirely in Spanish and emphasizes conversation, reading, writing, and comprehension.

SPAN 2220 - Conversation Skills II**4.5 - 0.0 - 4.5**

Prerequisite: (1) SPAN 2210 — must be completed prior to taking this course.

This course develops the skills needed to hold an intermediate conversation in Spanish. It uses readings and video presentations on Spanish-speaking culture and civilization for class conversations. It is conducted entirely in Spanish and emphasizes conversation, reading, writing, and comprehension at a high intermediate level.

SPAN 2480 - Cinematica**4.5 - 0.0 - 4.5**

Prerequisite: (1) SPAN 2120 or instructor approval — must be completed prior to taking this course.

Students view, discuss, and analyze Spanish and Latin American films, gaining insight into Hispanic culture. Classes conducted in Spanish.

SPAN 2490 - Introduction to Latin American Literature

4.5 - 0.0 - 4.5

Prerequisite: (1) SPAN 2120 — must be completed prior to taking this course.

This course is a general survey of Spanish-American literature. It covers various genres from pre-Columbian literature through present day. Through close critical readings of literary texts, students attempt to discern the relationship of each writer to the particular cultural, political, and historical context and study the means by which the author attempts to articulate the Spanish-American experience and identity through writing.

SPAN 2900 - Special Topics in Spanish II

Variable

Prerequisite: (2) SPAN 2120 and ability to converse in basic Spanish — must be completed prior to taking this course.

This course permits instruction in special content areas not included in other Spanish courses. Topics include advanced grammar study, intensive conversation and pronunciation, and period literature. It is taught entirely in Spanish.

SPAN 2981 - Spanish for Business Internship

Variable

Prerequisite: (1) SPAN 2051 — must be completed prior to taking this course.

This internship provides students with the opportunity to work in a business setting where Spanish is used. It prepares business students to use Spanish in the workplace and/or to expose students to a bilingual/international business setting. To develop an internship to meet their academic and career goals, students must meet with their faculty advisor. Based on state guidelines, students must complete 40 hours of work for each credit hour.

SPAN 2982 - Spanish for Healthcare Internship

Variable

Prerequisite: (1) SPAN 2061 — must be completed prior to taking this course.

The internship provides the opportunity to work in a medical setting that offers Spanish interpretation experience. To meet academic and career objectives, students must meet with program faculty prior to enrollment. Based on state guidelines, students must complete 40 hours of work for each credit hour. (Formerly Spanish for Medical Personnel Internship)

SPCH - Speech

SPCH 1110 - Public Speaking

4.5 - 0.0 - 4.5

Recommended: ENGL 1010 — recommended prior to taking this course, but not required.

This course provides both theoretical basis and practical instruction for speaking effectively in public. Topics include topic selection, audience analysis, speech preparation and organization, support of speeches with credible research,

strategic and creative language use, effective listening and delivery skills, and common types of public speeches. Placement at the English 1010 level is strongly recommended for student success in this course.

SPCH 1120 - Argumentation and Debate

4.5 - 0.0 - 4.5

Prerequisite: (1) ENGL 1020, SPCH 1110, PHIL 1100, or instructor approval — must be completed prior to taking this course.

Students experience a practical approach to the rudiments of argumentation and debate. This course tests the students' ability to critically research, listen, speak, think, and argue in intelligent, logical discourse. Students are able to understand and apply the art of debate by the end of the course.

SPCH 1220 - Communication in Small Groups

4.5 - 0.0 - 4.5

This course provides students with theories of small group communication and small group decision making, and it provides a non-threatening arena for the practice of these processes within the small group. Students who work, or expect to work, in small groups or teams in the workplace benefit from this course.

SPCH 1300 - Interpersonal Communication

4.5 - 0.0 - 4.5

This course introduces theories of communication between two people in a variety of contexts and situations. Students learn how to analyze and understand the communication in interactions and relationships and develop a vocabulary with which to discuss and critique the communication within those relationships. This knowledge is used to improve students' day-to-day communication skills.

SPCH 2900 - Special Topics in Communication

Variable

Prerequisite: (1) SPCH 1110 — must be completed prior to taking this course.

This course permits instruction in special content areas not included in other speech courses. Topics include advanced public speaking preparation and presentation, rhetorical criticism, and media analysis.

THEA - Theatre

THEA 1000 - Introduction to Theatre

4.5 - 0.0 - 4.5

Students survey the various facets of art and craft of theatre, with emphasis on the relationship between theatre and culture as well as theatre's contributions to literature, film, and television. All elements and professions of theatre are explored: the dramatist, the producer, the director, the actor, the production designers, the stage manager, the tech director and crew, and the role of the audience. An overview of theatre history and theatrical genres is included.

THEA 1110 - Theatre Technology I**3.0 - 3.0 - 4.0**

Beginning and experienced students learn the basic arts and crafts of technical theatre in a professional theatre environment. The course includes overviews of the procedure and safety issues and practices set construction, lighting, and costume. It is a prerequisite for admission to the certified Theatre Technology Apprentice program offered through the Omaha Community Playhouse.

THEA 1120 - Theatre Technology II**2.5 - 4.5 - 4.0**

Prerequisite: (1) THEA 1110 — must be completed prior to taking this course.

Students continue work begun in THEA 1110 with focus on real work situations and experiences. Topics include overview and practice in properties, scenic painting, and sound design and support. Students also begin work in their chosen areas of emphasis. These areas include sound, lights, construction, scenic painting, costume, props, stage management, box office, and house management.

THEA 1130 - Theatre Technology III**2.5 - 4.5 - 4.0**

Prerequisite: (1) THEA 1120 — must be completed prior to taking this course.

Students continue the work begun in THEA 1110 and 1120 with focus on real work situations and experiences, continuing their rotation within their selected artistic areas of emphasis. These areas include sound, lights, construction, scenic painting, costume, props, stage management, box office, and house management. Students begin the process of career development through the creation of professional materials, such as resumes and portfolios.

THEA 2010 - Script Analysis**4.5 - 0.0 - 4.5**

Students learn to do close readings of dramatic texts to explore themes and technical challenges. The course emphasizes analysis from technical, performance, and directorial points of view and the importance of unity in the technical elements of a production.

THEA 2020 - Fundamentals of Acting I**4.5 - 0.0 - 4.5**

This is a basic acting course for students with limited acting experience who have an interest in studying the demands and the discipline of acting, especially in live theatre. Exercises in relaxation, movement, voice, concentration, trust, partner/group interaction, improvisation, imagination, and memorization prepare students for basic character and scene work.

THEA 2021 - Fundamentals of Acting II**4.5 - 0.0 - 4.5**

Prerequisite: (1) THEA 2020 — must be completed prior to taking this course.

This course is a continuation of THEA 2020 with further practice in characterization and scene work. Students develop two

scenes and two monologues, with a focus on character development and the acting process.

THEA 2030 - Playwriting I**4.5 - 0.0 - 4.5**

This course is an introduction to the craft of the playwright. Students study the fundamentals of dialogue, character development, and scene structure through writing exercises, workshops, and discussion.

THEA 2031 - Playwriting II**4.5 - 0.0 - 4.5**

Prerequisite: (1) THEA 2030 or instructor approval — must be completed prior to taking this course.

This course is a further exploration of the craft of playwriting, focusing on non-traditional dramatic structure. Through independent study and in-class writing, students develop an appreciation for a variety of theatre styles, while stimulating their own creative output.

THEA 2040 - Movement for the Actor**4.5 - 0.0 - 4.5**

This course includes the study and practice of physical techniques and approaches used to develop physical self-awareness, freedom of expression, flexibility and endurance, awareness of space and time, centers, and energy for characterization and performance.

THEA 2050 - Voice for the Actor**4.5 - 0.0 - 4.5**

Students study and practice vocal techniques to develop physical alignment and release, breathing and resonance, articulation and range, imagery, and text for performance.

THEA 2150 - Stage Rigging**2.0 - 7.5 - 4.5**

Prerequisite: (1) THEA 1110 or instructor approval — must be completed prior to taking this course.

The course builds on concepts and skills introduced in Theatre Technology I with specific emphasis on stage rigging. It covers rigging topics, including repair and maintenance, motorized rigging, trussing, and special applications, in the lecture portion and reinforces them during labs under non-production conditions. Students apply fundamental skills in the installation of flying scenery as well as use of stage rigging equipment under show conditions.

THEA 2160 - Principles of Stage Lighting**2.0 - 7.5 - 4.5**

Prerequisite: (1) THEA 1110 or instructor approval — must be completed prior to taking this course.

This course builds on concepts and skills introduced in THEA 1110 with specific emphasis on stage lighting. It covers lighting topics, including wiring and repair of electrical cables, basic color theory, and refraction principles, in the lecture portion and reinforces them during labs under non-production conditions. Students apply fundamental skills in light console operation and temporary installations of lighting systems under show conditions.

THEA 2170 - Stage Management**4.5 - 0.0 - 4.5**

This course is an introduction to the creative and administrative work of stage management, including responsibilities and methods in rehearsal and productions, union considerations, and communication skills for collaboration.

THEA 2200 - Arts Administration**4.5 - 0.0 - 4.5**

This course is an overview of issues relevant to the operation of arts organizations, including publicity, promotion, box office and admission, facilities management, programming, and planning.

THEA 2900 - Special Topics in Theatre**Variable**

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This course permits instruction in special content areas not included in other theatre courses.

THEA 2920 - Theatre Practicum**Variable**

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

Students earn credit for practical theatre production experience in topics such as design, construction, performance, and promotion.

THEA 2981 - Cooperative Study I**0.0 - 16.0 - 4.0**

This course is the first in a series of apprenticeship courses in theatre technology. As part of the apprenticeship, individuals rotate through self-selected shop rotations throughout the year working alongside of Journeymen-Sponsors, and Master Craftsmen who are professional craftspeople in light and sound (in the electrics department), props, box office and stage management, and scenic painting. Secondly, students work on actual productions to experience working under show conditions backstage.

THEA 2982 - Cooperative Study II**0.0 - 16.0 - 4.0**

This course is the second in a series of apprenticeship courses in theatre technology. As part of the apprenticeship, individuals rotate through self-selected shop rotations throughout the year working alongside of Journeymen-Sponsors and Master Craftsmen who are professional craftspeople in the theatre industry. The rotations may include work in the following craft areas: scene shop, costuming, light and sound (in the electrics department), props, box office and stage management, and scenic painting. Secondly, students work on actual productions to experience working under show conditions backstage.

THEA 2983 - Cooperative Study III**0.0 - 16.0 - 4.0**

This course is the third in a series of apprenticeship courses in theatre technology. As part of the apprenticeship, individuals rotate through self-selected shop rotations throughout the year working alongside of Journeymen-Sponsors and Master

Craftsmen who are professional craftspeople in the theatre industry. The rotations may include work in the following craft areas: scene shop, costuming, light and sound (in the electrics department), props, box office and stage management, and scenic painting. Secondly, students work on actual productions to experience working under show conditions backstage.

THEA 2984 - Cooperative Study IV**0.0 - 16.0 - 4.0**

This course is the beginning of a second-year apprenticeship, where students arrange to work in a specific area in a specific craft with a specific Journeyman Sponsor over the course of the academic year. During the course of the year, students produce a capstone portfolio and develop a significant capstone project in cooperation with professional staff that demonstrates the apprentice has accumulated the skills of the trade to such a degree that they may find entry-level employment in the trade. Capstone experiences may include general technician, costuming, box office and stage management, props, scenic painting, and electrics (either lighting/sound or both). Second-year apprentices are expected to work behind the scenes on shows as well as in shops to prepare shows for the stage.

THEA 2985 - Cooperative Study V**0.0 - 16.0 - 4.0**

This course is the middle course of a second-year apprenticeship, where students arrange to work in a specific area in a specific craft with a specific Journeyman Sponsor over the course of the academic year. During the course of the year, students produce a capstone portfolio and develop a significant capstone project in cooperation with professional staff that demonstrates the apprentice has accumulated the skills of the trade to such a degree that they may find entry-level employment in the trade. Capstone experiences may include general technician, costuming, box office and stage management, props, scenic painting, and electrics (either lighting/sound or both). Second-year apprentices are expected to work behind the scenes on shows as well as in shops to prepare shows for the stage.

THEA 2986 - Cooperative Study VI**0.0 - 16.0 - 4.0**

This course is the final course of a second-year apprenticeship, where students arrange to work in a specific area in a specific craft with a specific Journeyman Sponsor over the course of the academic year. During the course of the year, students produce a capstone portfolio and develop a significant capstone project in cooperation with professional staff that demonstrates the apprentice has accumulated the skills of the trade to such a degree that they may find entry-level employment in the trade. Capstone experiences may include general technician, costuming, box office and stage management, props, scenic painting, and electrics (either lighting/sound or both). Second-year apprentices are expected to work behind the scenes on shows as well as in shops to prepare shows for the stage. Students who successfully complete the apprenticeship course sequences receive an apprentice certificate.

UTIL - Utility Line Technician

UTIL 1010 - Pole Climbing ☺

4.0 - 1.5 - 4.5

Corequisite: (1) UTIL 1030 or instructor approval — must be taken at the same time as this course.

This course instructs students in proper and safe skills to climb wooden structures and the proper operation of utility equipment.

UTIL 1020 - Electricity I ☺

5.0 - 1.5 - 5.5

Students learn about electricity theory, Ohm's Law, series circuits, parallel circuits, and series/parallel circuits, including direct current and alternating current. This course also covers inductance, capacitance, and single-phase transformers. Math skills used in completing circuit computations are also taught.

UTIL 1030 - Ropes, Rigging, and Safety ☺

4.0 - 1.5 - 4.5

Corequisite: (1) UTIL 1010 or instructor approval — must be taken at the same time as this course.

This course acquaints students with tools, equipment, basic rope knots, and splices, as well as the proper operation of utility equipment.

UTIL 1110 - Line Construction I ☺

5.0 - 1.5 - 5.5

Pre/Co Requisite: (1) UTIL 1030 — must be taken either prior to or at the same time as this course.

This course acquaints students with the use of hand tools, hand signals, basic wiring techniques, pole setting, framing, and the use of digger-derrick equipment. Students also learn to identify electrical apparatus.

UTIL 1240 - Underground Distribution Systems I ☺

5.0 - 1.5 - 5.5

Corequisite: (1) UTIL 1110 or instructor approval — must be taken at the same time as this course.

Students are introduced to URD systems, underground cables, and apparatus. Students learn various termination techniques and construct a model URD system in the lab.

UTIL 2020 - Transformer Theory ☺

5.0 - 1.5 - 5.5

Prerequisite: (1) UTIL 1020 — must be completed prior to taking this course.

This course includes principles of electromagnetic induction, use and application of transformers, banking of transformers, calculating transformer loads, maintenance, testing, and proper connection of transformers.

UTIL 2030 - Secondary Electrical Systems ☺

4.0 - 1.5 - 4.5

Prerequisite: (2) UTIL 1020 and UTIL 1110 — must be completed prior to taking this course.

This course covers the application of transformer banks, metering systems, and watt-hour meters. It studies the specifications and relationship to delivery systems for supplying various voltages.

UTIL 2110 - Line Construction II ☺

5.0 - 1.5 - 5.5

Prerequisite: (1) UTIL 1110 — must be completed prior to taking this course.

This course includes stringing and sagging wire, dead ends, anchoring, guying, clipping in, and splicing of overhead conductors. Students become certified in Red Cross-standard first aid and cardiopulmonary resuscitation (CPR).

UTIL 2210 - Overhead Distribution Systems I ☺

5.0 - 1.5 - 5.5

Prerequisite: (2) UTIL 1010 and UTIL 1110 — must be completed prior to taking this course.

This course includes the design and construction of overhead distribution systems involving staking and layout of lines using the National Electrical Code, National Safety Code, and construction specifications.

UTIL 2220 - Overhead Distribution Systems II ☺

5.0 - 1.5 - 5.5

Prerequisite: (1) UTIL 2210 — must be completed prior to taking this course.

This is an on-site field participation in the construction of overhead distribution systems using techniques previously studied.

UTIL 2230 - Distribution Systems Maintenance

4.0 - 1.5 - 4.5

Prerequisite: (7) UTIL 1110; UTIL 1240; UTIL 2020; UTIL 2030; UTIL 2110; UTIL 2210; and UTIL 2220 — must be completed prior to taking this course.

This course focuses on utilizing proper tools and equipment and techniques for maintenance of overhead distribution systems using designated specifications to gain practical field experiences.

UTIL 2240 - Underground Distribution Systems II ☺

4.0 - 1.5 - 4.5

Prerequisite: (1) UTIL 1240 — must be completed prior to taking this course.

This course emphasizes construction, maintenance, and troubleshooting of underground distribution systems, including trenching and termination and primary and secondary cables.

UTIL 2981 - Internship

0.0 - 40.0 - 8.0

Prerequisite: (1) Completion of Utility Line Technician program coursework — must be completed prior to taking this course.

This is a supervised work experience for 10 weeks and is normally a Summer quarter activity following the completion of the UTIL coursework. Students submit regular reports while employed at an electrical utility or industrial plant. Students must have a Class A, O restriction CDL and be certified in first aid/CPR to participate in an internship. Based on state guidelines, students must complete 40 hours of work for each credit hour.

VACA - Video/Audio Communication Arts

VACA 1020 - Audio I

3.5 - 3.0 - 4.5

This course is an introduction to the theory and application of the sound production process with emphasis on learning and practicing sound acquisition and recording techniques. Microphone acquisition, basic audio editing, and track mixing and sound for video and/or music are the basis for assignments.

VACA 1110 - Introduction to Scriptwriting

4.5 - 0.0 - 4.5

Prerequisite: (1) ENGL 1010 — must be completed prior to taking this course.

This course introduces scriptwriting for video production, television, and motion picture film. Using the two-column and screenplay formats, students complete lab exercises and assignments about the structure of concept, treatment, and finished script. It reviews broadcast or corporate examples. Students can use the scripts for projects in Moving Image Lab, Video II, and Video III.

VACA 1130 - Video I - Studio

3.5 - 3.0 - 4.5

This course is an introduction to the video medium. Students learn and practice the basics of operating a video camera, recording quality images and sound, and editing tape. Both studio and location assignments provide practical learning opportunities.

VACA 2020 - Audio II

3.5 - 3.0 - 4.5

Prerequisite: (1) VACA 1020 — must be completed prior to taking this course.

This course is a continuation of Audio I. Additional microphone and recording techniques are learned and practiced. Computer desktop editing and track mixing, recording, and editing are introduced and emphasized. Sound for video as well as digital media and the Internet are the basis for assignments.

VACA 2030 - Audio III

3.5 - 3.0 - 4.5

Prerequisite: (1) VACA 2020 — must be completed prior to taking this course.

This course includes advanced recording theory and application for use in the professional sound recording environment. It covers sound processing and mastering in depth.

VACA 2050 - Pro-Tools

3.5 - 3.0 - 4.5

Prerequisite: (1) VACA 2020 — must be completed prior to taking this course.

This course concentrates on the industry-standard Pro-Tools Digital Audio Workstation software and hardware. Students learn how to use advanced Pro-Tools techniques and concepts in the professional recording and editing environments.

VACA 2060 - Audio Mixing and Summing

3.5 - 3.0 - 4.5

Prerequisite: (3) VACA 1020; VACA 2020; and VACA 2050 — must be completed prior to taking this course.

This course is an advanced study of procedures to achieve controlled mixes in the digital and analog mixing environments. It focuses on aspects of digital and analog summing, headroom, gain stages, subgroups, side-chain processing, hardware inserts, delay compensation, clocking, maintaining digital resolution, digital synchronization, A/D D/A conversion, sample rate conversion, dithering, serial order of processing, mid/side processing, and more. Students complete such assignments as signal flow drawings, equipment research, and a final project focusing on subgroup mixing techniques.

VACA 2070 - Modern Recording Techniques

3.5 - 3.0 - 4.5

Prerequisite: (3) VACA 1020; VACA 2020; and VACA 2050 — must be completed prior to taking this course.

This course is an in-depth study of recording capture methods. It focuses on the various techniques used to record different instruments, use of specific microphones, mono and stereo microphone techniques, gain staging, preproduction preparation, and more. A final, individual recording capture project corroborates the student's understanding.

VACA 2120 - Screenwriting Principles

4.5 - 0.0 - 4.5

Prerequisite: (1) VACA 1110 — must be completed prior to taking this course.

This course is an overview of writing screenplays for motion picture film. It covers storytelling using the standard three-act screenplay structure and relates fundamental principles, including script format, structure, plot points, and character development, to sample scripts, films, and exercises.

VACA 2130 - Video II - Field

3.5 - 3.0 - 4.5

Prerequisite: (1) PHOT 1500 — must be completed prior to taking this course.

Camera operation, sound recording, and editing assignments provide an intermediate skill level of learning and practice. It introduces and applies lighting for the studio and on location.

VACA 2131 - Video III - Project Development

3.5 - 3.0 - 4.5

Prerequisite: (1) VACA 2130 — must be completed prior to taking this course.

This course serves as a practicum for individual student productions. Students are responsible for the conception, production, direction, and post-production of a storytelling media program. Students achieve competence in planning and executing a script to a final product. The course reviews key production elements and critiques at each stage of the production.

VACA 2220 - Digital Media Editing**3.5 - 3.0 - 4.5**

Prerequisite: (1) PHOT 1500 — must be completed prior to taking this course.

This course serves as a practicum for digital production or post-production. Students are responsible for the conception, production, direction, and post-production of a media program directed toward digital delivery. The course reviews key production elements and critiques at each stage of the production.

VACA 2230 - Video Post-Production**3.5 - 3.0 - 4.5**

Prerequisite: (1) VACA 1130 — must be completed prior to taking this course.

This course is an introduction to digital applications, such as compositing and media compression for computer and Internet delivery. Students achieve basic competence in appropriate software applications as used in industry.

VACA 2240 - Cinematography**3.5 - 3.0 - 4.5**

Prerequisite: (1) PHOT 1500 — must be completed prior to taking this course.

This class is an exploration into the art of cinematography, including composition, camera movement and lighting as used in cinema production. Students study the art form and actively work with camera and lighting to gain better appreciation for the craft as well as gaining technical skills in cinematography.

VACA 2540 - Video Portfolio Development**1.0 - 6.0 - 3.0**

Prerequisite: (1) VACA 2131 or instructor approval — must be completed prior to taking this course.

Students put the commercial application of the video process into finished form. Instructors advise students and critique their work. Students complete comprehensive portfolios of their work as their final products.

VACA 2900 - Special Topics in Video/Audio**Variable**

Prerequisite: (1) Instructor approval — must be completed prior to taking this course.

This course permits instruction in special content areas not included in other courses of the Video/Audio Communication Arts program.

VACA 2940 - MetroVision Practicum**0.0 - 9.0 - 3.0**

Prerequisite: (1) PHOT 1500 — must be completed prior to taking this course.

This practicum is a studio and field production class. It is a hands-on opportunity for students to gain experience on location, in the studio, and with remote video productions. This course stresses the nature of collaborative work and various stages and processes involved with producing existing regularly scheduled productions. It may also include the development of new programming. Students gain advanced production experience

with lighting, shooting, editing, directing, and producing MetroVision programming, which airs on a local cable television channel.

VACA 2981 - Internship**Variable**

Through internships, students gain experience working in a professional video workplace performing a variety of functions, including set preparation, video production and post-production, and audio production and post-production. Based on state guidelines, students must complete 40 hours of work for each credit hour.

WELD - Welding**WELD 900 - Introduction to Welding****WELD 0900 - Introduction to Welding****2.0 - 3.0 - 3.0**

This course introduces the basic principles and techniques for safe set-up, shut-down, and operation of a number of welding and welding-related processes, including oxy-acetylene, shielded metal arc (stick), gas metal arc (MIG), and gas tungsten arc welding (TIG).

WELD 1000 - Print Reading for Welders**3.0 - 0.0 - 3.0**

This course is a good first welding course. Students learn the elements of print reading with special emphasis on interpreting welding symbols. The course covers basic welding information, such as process fundamentals and selection considerations, weld types, joint design, and welding terminology. Students successfully completing this course are well-prepared for success in the program.

WELD 1100 - Industrial Cutting Processes**2.0 - 3.0 - 3.0**

Students gain a working knowledge of oxy-fuel cutting (manual and machine), plasma cutting (manual and machine), and air carbon arc and plasma gouging.

WELD 1150 - Welded Sculpture I**2.0 - 3.0 - 3.0**

Students learn the fundamental skills required to create sculptures in steel and copper using oxy-acetylene welding and cutting processes and related metal-working equipment. Students apply the basic elements and principles of design and practice achieving unity and harmony to a greater degree as they work on succeeding pieces.

WELD 1160 - Welded Sculpture II**2.0 - 3.0 - 3.0**

Prerequisite: (1) WELD 1150 — must be completed prior to taking this course.

Students learn the fundamental skills required to create sculptures in steel and copper using gas metal arc welding, plasma cutting processes, and other welding-related metal-working equipment. Students combine these skills with those

learned in Welded Sculpture I, applying the basic elements and principles of design and practice achieving unity and harmony to a greater degree as they work on succeeding pieces.

WELD 1200 - Gas Metal Arc Welding (MIG) - Steel I
2.0 - 3.0 - 3.0

Prerequisite: (1) WELD 1100 — must be completed prior to taking this course.

This course uses the theory and techniques in basic gas metal arc welding to produce sound fillet welds and sound groove welds in both the flat and vertical positions. Students weld using short-circuit and spray modes of metal transfer.

WELD 1261 - Combination Welding - Automotive
2.0 - 3.0 - 3.0

This course acquaints students with the various welding and cutting techniques applicable to the automotive field.

WELD 1262 - Quick Start
2.0 - 3.0 - 3.0

This course gives students a quick start into a welding career by preparing them to pass the type of welding test given by many employers. Students learn the fundamentals of oxy-acetylene cutting, gas metal arc welding, and air carbon arc cutting. It also explores print reading for welders.

WELD 1300 - Oxy-Acetylene Welding
2.0 - 3.0 - 3.0

This course covers the basic skills and use of equipment necessary to be knowledgeable in this discipline. Students learn to weld various joint types in all positions with steel and braze filler materials. This is an excellent preparatory class for TIG welding classes.

WELD 1400 - Gas Tungsten Arc Welding (TIG) - Steel I
2.0 - 3.0 - 3.0

Recommended: WELD 1300 — recommended prior to taking this course, but not required.

This course emphasizes the theory and techniques used in basic gas tungsten arc welding of steel fillet and groove welds in the flat and vertical positions. It covers the equipment and its proper adjustment and also includes the many types of tungsten electrodes and the use of different gases.

WELD 1410 - Gas Tungsten Arc Welding (TIG) - Stainless I
2.0 - 3.0 - 3.0

Prerequisite: (1) WELD 1400 with a grade of C or better — must be completed prior to taking this course.

Recommended: WELD 1300 — recommended prior to taking this course, but not required.

This course emphasizes the theory and techniques used in basic gas tungsten arc welding of stainless steel in the flat and vertical positions. It covers the equipment and its proper adjustment and also includes the many types of tungsten electrodes and the use of different gases.

WELD 1420 - Gas Tungsten Arc Welding (TIG) - Aluminum I
2.0 - 3.0 - 3.0

Prerequisite: (1) WELD 1410 — must be completed prior to taking this course.

Recommended: WELD 1300 — recommended prior to taking this course, but not required.

This course emphasizes the theory and techniques used in basic gas tungsten arc welding of aluminum in the flat and vertical positions. It covers the equipment and its proper adjustment and also includes the many types of tungsten electrodes and the use of different gases.

WELD 1500 - Shielded Metal Arc Welding (Stick) - Flat
2.0 - 3.0 - 3.0

Prerequisite: (1) WELD 1100 — must be completed prior to taking this course.

This course covers fundamental understanding and skills in the safe use of arc welding equipment. Typical operations include striking the arc, making fillet welds in the flat position, and making groove welds in the flat position. It uses a variety of methods to examine the weldments such as visual inspection, fillet weld break tests, and root/face bend test specimens.

WELD 1510 - Shielded Metal Arc Welding (Stick) - Vertical
2.0 - 3.0 - 3.0

Prerequisite: (1) WELD 1500 with a grade of C or better — must be completed prior to taking this course.

Vertical position weldments are basic to welding technology. This course studies and uses various techniques in the vertical position, including the use of E6010 and E7018 electrodes.

WELD 1700 - Introductory Fabrication
2.0 - 3.0 - 3.0

Prerequisite: (7) DRAF 1100, WELD 1000, WELD 1100, WELD 2200; and WELD 1200, WELD 1400, and WELD 1500 with grades of C or better — must be completed prior to taking this course.

This is a basic course in the fabrication of projects. It explores the use of layout tools and project drawings or sketches and emphasizes actual vs. estimated time and cost considerations.

WELD 2200 - Gas Metal Arc Welding (MIG) - Steel II
2.0 - 3.0 - 3.0

Prerequisite: (1) WELD 1200 with a grade of C or better — must be completed prior to taking this course.

This course is a continuation of GMAW - Steel I, including fillet and groove welds in the horizontal and overhead positions and the study of pulsed-spray transfer.

WELD 2220 - Gas Metal Arc Welding (MIG) - Stainless
2.0 - 3.0 - 3.0

Prerequisite: (1) WELD 2200 — must be completed prior to taking this course.

This course is an advanced course covering gas metal arc welding of stainless steel in all positions using short-circuit and pulsed-spray modes of metal transfer.

WELD 2230 - Gas Metal Arc Welding (MIG) - Aluminum
2.0 - 3.0 - 3.0

Prerequisite: (1) WELD 2200 — must be completed prior to taking this course.

This is an advanced course covering gas metal arc welding of aluminum in all positions using short-circuit, spray, and pulsed-spray modes of metal transfer.

WELD 2240 - Flux-Cored Arc Welding I
2.0 - 3.0 - 3.0

Prerequisite: (1) WELD 2200 — must be completed prior to taking this course.

This course covers gas-shielded and self-shielded flux-cored arc welding in the flat and vertical positions using semiautomatic equipment.

WELD 2241 - Flux-Cored Arc Welding II
2.0 - 3.0 - 3.0

Prerequisite: (1) WELD 2240 — must be completed prior to taking this course.

This course covers gas-shielded and self-shielded flux-cored arc welding in the horizontal and overhead positions using semiautomatic equipment.

WELD 2242 - Submerged Arc and Metal-Cored Welding
2.0 - 3.0 - 3.0

Prerequisite: (1) WELD 2200 — must be completed prior to taking this course.

This course covers automatic submerged arc welding in the flat position, manual submerged arc welding in the horizontal position, and metal-cored welding of flat and horizontal fillet and groove welds using semiautomatic equipment.

WELD 2400 - Gas Tungsten Arc Welding (TIG) - Steel II
2.0 - 3.0 - 3.0

Prerequisite: (1) WELD 1400 with a grade of C or better — must be completed prior to taking this course.

This course is a continuation of Gas Tungsten Arc Welding - Steel I, covering welding in the horizontal and overhead positions. It includes the study of pulse-arc welding.

WELD 2410 - Gas Tungsten Arc Welding (TIG) - Stainless II
2.0 - 3.0 - 3.0

Prerequisite: (1) WELD 1410 — must be completed prior to taking this course.

This course is a continuation of Gas Tungsten Arc Welding - Stainless I. It covers welding in the horizontal and overhead positions and includes the study of pulse-arc welding.

WELD 2420 - Gas Tungsten Arc Welding (TIG) - Aluminum II
2.0 - 3.0 - 3.0

Prerequisite: (1) WELD 1420 — must be completed prior to taking this course.

This course is a continuation of Gas Tungsten Arc Welding - Aluminum I. It covers welding in the horizontal and overhead positions, and it includes the study of pulse-arc welding.

WELD 2500 - Shielded Metal Arc Welding (Stick) - Horizontal
2.0 - 3.0 - 3.0

Prerequisite: (1) WELD 1500 with a grade of C or better — must be completed prior to taking this course.

The ability to weld in the horizontal position is important in both plate and pipe welding. Students learn the proper techniques for welding fillet and groove welds using E6010 and E7018 electrodes.

WELD 2510 - SMAW (Stick) - Overhead
2.0 - 3.0 - 3.0

Prerequisite: (1) WELD 1510 — must be completed prior to taking this course.

Overhead weldments are basic to welding technology. This course studies and applies various techniques in the vertical position including the use of E6010 and E7018 electrodes.

WELD 2520 - Shielded Metal Arc Welding (Stick) - Pipe I
2.0 - 3.0 - 3.0

Prerequisite: (2) WELD 1100 and WELD 2510 — must be completed prior to taking this course.

This course features basic pipe welding including techniques involving pipe-to-plate, single, and multiple pass fillet welds in the horizontal, vertical, and overhead positions using E6010 and E7018 electrodes.

WELD 2530 - Shielded Metal Arc Welding (Stick) - Pipe II
2.0 - 3.0 - 3.0

Prerequisite: (1) WELD 2520 — must be completed prior to taking this course.

This course stresses advanced pipe welding techniques for welding open root, pipe-to-pipe connections. Students weld in the horizontal (2G), multi-position vertical uphill progression (5G), and multi-position 45-degree incline (6G) positions using E6010 and E7018 electrodes. Students test each pipe position using visual inspection and root-face bend test specimens.

WELD 2540 - Shielded Metal Arc Welding (Stick) - Pipe III
2.0 - 3.0 - 3.0

Prerequisite: (3) WELD 1100; WELD 2400; and WELD 2520 — must be completed prior to taking this course.

This course includes GTAW (TIG) open root and SMAW (Stick) E7018 Fill/Cap pipe-to-pipe welding in 2G, 5G, and 6G positions.

WELD 2600 - Gas Shielded Arc Welding - Pipe
2.0 - 3.0 - 3.0

Prerequisite: (3) WELD 1100; WELD 2241; and WELD 2400 — must be completed prior to taking this course.

This course includes root, fill, and cover passes on pipe in all positions with gas metal arc welding. It also includes gas tungsten arc welding root passes with flux-core arc welding of the fill and cover passes.

WELD 2710 - Industrial Fabrication Project
2.0 - 3.0 - 3.0

Prerequisite: (3) WELD 1700; WELD 2400; and WELD 2510 — must be completed prior to taking this course.

This course consists of constructing projects where students apply techniques and principles acquired in previous courses. Students document their fabrication by use of weld prints, parts lists, and time-cost estimates.

WELD 2810 - Welder Pre-Qualification
2.0 - 3.0 - 3.0

Prerequisite: (1) Special course requirements; contact a full-time instructor — must be completed prior to taking this course.

Students wanting to be certified welders must pass a welder performance qualification test. This course is preparation for such a test. Students identify the appropriate code and welding procedure, become familiar with the requirements of the test, prepare the test coupons, and work on skill-building in preparation for the test. Testing is not done as part of this course.

WELD 2820 - Welder Qualification (Certification)
1.0 - 0.0 - 1.0

Prerequisite: (1) Special course requirements; contact a full-time instructor — must be completed prior to taking this course.

Student welders wishing to be certified welders take the welder performance qualification test.

WELD 900 - Introduction to Welding

WORK - Workplace Skills

WORK 0200 - Career and Learning Strategies
Variable

This course helps students acquire skills related to career awareness and choice, learning and study skills, basic skills enhancement, and other strategies. After successful completion of this course, students better understand the process of achieving their educational goals.

WORK 0900 - Introduction to Microcomputer Technology
4.5 - 0.0 - 4.5

This course introduces students to essential technology skills by providing a beginning overview of basic microcomputer components and functions; computer-based technologies such as Internet, email, and College resources; file management; and word processing basics. NOTE: This course replaces WORK 1310, 1320, 1330, 1340, and 1350.

WORK 1011 - Orientation for International Students
1.0 - 0.0 - 1.0

This course provides an introduction to the facilities and services at MCC and guidelines for living and studying in the United States and Omaha, Nebraska. Students learn practical information about education, employment, immigration regulations, insurance, social security, and transportation to enhance their participation in community activities and services in the Omaha area.

WORK 1230 - Career Planning
2.0 - 0.0 - 2.0

This course assists students in making career choices. Topics include career pathways, values, clarification of interests, skills assessment, and using career and College resources.

WORK 1250 - Learning Anxiety
Variable

This course helps students address issues such as test and math anxiety. Topics focus on mastering learning strategies that help them overcome this anxiety.

WORK 1400 - Employability Skills
4.5 - 0.0 - 4.5

Students enhance their interpersonal skills, improve their ability to work in teams, learn to communicate effectively, think creatively and use problem-solving techniques. Students are also introduced to career exploration activities.

WORK 1401 - Employability Skills for Process, Power, and Energy-Related Fields
4.5 - 0.0 - 4.5

This course introduces students to energy-related industries, employers, and the unique employability skills required to succeed. Students have the opportunity to enhance their interpersonal, teamwork, and communication skills; to problem solve and think creatively; and to employ effective time management life skills as required for success in the field.

WORK 1402 - Employability Skills Fundamentals
1.0 - 0.0 - 1.0

Students enhance their interpersonal skills, increase their ability to work in teams and communicate effectively, think creatively, and use problem-solving techniques.

WORK 1410 - Secrets to Business Success 
3.0 - 0.0 - 3.0

This course provides an in-depth look at the soft skills and self-management skills needed to provide effective customer service and support in all workplace environments.

WORK 1420 - Interpersonal Communication Skills for the Workplace
3.5 - 0.0 - 3.5

This course introduces students to the basic concepts of interpersonal communication and enhances their ability to use effective interpersonal communication skills. Students discuss, analyze, and demonstrate effective verbal and nonverbal communication in interactions and demonstrate skills of active listening and use of appropriate communication in a variety of business settings.

WORK 2900 - Special Topics in Workplace Skills
Variable

Prerequisite: (1) Assessment testing or instructor approval — must be completed prior to taking this course.

This course permits instruction in various skill areas related to workplace effectiveness strategies not included in other workplace skills courses.

WORK 2981 - Internship
Variable

Prerequisite: (2) WORK 1400 and WORK 1410 — must be completed prior to taking this course.

Students apply the principles and procedures learned in employability, including use of proper work behavior and work attitude, basic skills, and human relations skills. The work setting is a public office or a department of a business or nonprofit organization. Students record the tasks performed in their portfolios, which work supervisors and faculty sponsors review periodically to assure development and reinforcement of appropriate competencies

FACULTY

Applied Technology Area

Deb Eppenbaugh, *Executive Director of Applied Technology, Campus Student Services*, B.S. University of Nebraska-Lincoln; M.S. University of Nebraska-Lincoln

Gregory Babst, *Utility Line Instructor*, A.A.S., Northeast Community College

Joseph Baker, *Auto Collision Technology Instructor*, A.A.S., Metropolitan Community College; ASE Master Collision Instructor; I-CAR PDP instructor; PPG automotive refinishing MVP; Chief Frame Alignment certification in laser measuring

Tim Bowling, *Utility Line Technician and Electrical Instructor*, A.A.S., Metropolitan Community College; journey person

Donald Gilliland, *Diesel Technology Instructor*, B.S., University of Nebraska-Lincoln

Kevin Ingalls, *Diesel Technology Instructor*, A.A.S. Southeast Community College; ASE Master Medium/Heavy Truck Technician

Kim Martin, *Truck Driving Instructor*, A.A.S., Iowa Western Community College

Patrick McKibbin, *Auto Collision Technology Instructor*; ASE Master Collision Instructor; I-CAR PDP instructor; trained in Axalta Refinish, Sherwin Williams Auto Refinish, and Chief Measuring Systems; and GM Training

Rich Newcomer, *Utility Line Technician Instructor*, A.A.S., Metropolitan Community College; B.A., Bellevue University; journey person

Darryl Partner, *Truck Driving Instructor*, U.S. Navy retired

Business and Human Services Area

Daryl Hansen, *Dean of Business and Human Services*, B.A., Parsons College; M.A., University of Nebraska-Lincoln; M.S.W., University of Nebraska at Omaha

Victoria Badura, *Accounting and Business Management Instructor*, B.S., M.A.c.c., University of Nebraska at Omaha; Ph.D. Capella University; C.P.A.

Larry Buland, *Business, Finance, and Real Estate Instructor*, B.S., University of Nebraska at Omaha; M.B.A., University of Nebraska at Omaha

Richard Carter, *Economics and Business Instructor*, B.A., Texas A&M University; M.A., University of Oklahoma

Cynthia J. Cusick, *Human Services Instructor*, B.S., Midland University at Fremont, NE; M.S.W., University of Nebraska at Omaha; certified master social worker; licensed mental health professional; licensed independent mental health practitioner

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Robert Gronstal, *Accounting Instructor*, B.S., Creighton University; M.B.A., University of Nebraska at Omaha; C.P.A. certificate, state of Nebraska

Carley Hunzeker, *Accounting Instructor*, B.S., University of Nebraska at Omaha; C.P.A. certificate and license, state of Nebraska

Richard Jaeckel, *Accounting and Management Instructor*, B.A., M.A., University of Northern Iowa

William Jefferson, *Accounting Instructor*, B.A., Ohio University; M.B.A., Wharton Division University of Pennsylvania

Rita Kleeman, *Accounting Instructor*, B.A., Briar Cliff University; C.P.A. license, state of Nebraska

Lori Lothringer, *Management and Accounting Instructor*, B.S.B.A., University of Nebraska at Omaha; M.B.A., University of Missouri-Kansas City; M.S., College of Financial Planning; Ph.D., Iowa State University; accredited financial counselor

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Dawn Naumann, *Human Services and Psychology Instructor*, B.S., University of Nebraska at Omaha; M.S., University of Nebraska at Kearney; certified social worker

Heather Nelson, *Entrepreneurship Instructor*, B.A., University of Nebraska-Lincoln; Executive M.B.A., University of Nebraska at Omaha; M.S., Peru State College

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Michael Rush, *Human Services and Chemical Dependency Counseling Instructor*, B.S., M.S., Kearney State College; licensed mental health practitioner

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Construction Education Area

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Culinary Arts and Horticulture Studies Area

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English, English as a Second Language, and Reading Area

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Information Technology and E-Learning Area

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EDUCATIONAL TERMS

Academic year – Comprised of four quarters at MCC, the academic year runs from Fall quarter through Summer quarter.

Career certificate – A career certificate is awarded for successful completion of a structured sequence of courses that is at least 24.0 and a maximum of 36.0 credit hours in length. (formerly known as specialist diploma)

Census date – Date used by colleges to determine enrollment figures and to determine students' eligibility for financial aid disbursements.

Certificate of achievement – A certificate of achievement is awarded for successful completion of a program of study that is at least 48.0 credit hours in length.

Corequisite – An academic course required to be taken in conjunction with another course. In some cases, previous completion of the required course is acceptable.

Course description – This is a statement found in the College catalog that identifies the content of a specific course.

Course number – The number following a course subject identifies a specific course, such as BSAD 1000 (Introduction to Business).

Course objective – Each course offered has defined objectives that program faculty have agreed make up the essentials of the course. These objectives are part of the syllabus distributed at the beginning of each class. Individual instructors determine how to best assess the extent to which students have mastered these objectives: tests, homework assignments, presentations, research projects, etc.

Course section – A combination of two characters (can be numerals or letters) that immediately follows a course subject and number. The course section uniquely identifies the location and the time of the course.

Course subject – This four-letter code identifies the area of study, such as business management (BSAD).

Credit hour – This is a unit used in giving credit for a course and usually determines the number of hours per week the student is in class.

Degree – The associate degree is offered to a student who successfully completes a two-year program of study. MCC offers associate in arts, associate in science, and associate in applied science degrees.

Diploma – This document indicates successful completion of one of the College's programs of study.

Elective – An elective class permits students to select a course of their choice to apply toward program requirements.

Full-time student – Students enrolled in 12.0 or more credit hours are considered to be full-time students.

Grade point average – This is the cumulative, numerical average of the grades a student has received. The range may be from a low of 0.0 to a high of 4.0.

Hybrid course – This is a coordinated approach to learning, using both online technology and classroom interaction with faculty and peers.

Internship – This is work related to students' programs of study for which they receive college credit. The internship is generally taken near the end of a program of study.

Major – A major indicates a specific group of classes needed to complete a certificate or degree program. It is also referred to as the program of study.

Non-standard courses – These courses may run for less than the full quarter, more than the full quarter, and/or may have non-standard begin and end dates not within the designated academic quarter dates.

Option – A degree or certificate option is an area of interest within a program of study. A degree or certificate is awarded for the program, not the option. For students completing multiple options within a program, only one major degree is awarded.

Part-time student – Students enrolled in fewer than 12.0 credit hours are considered to be part-time students.

Prerequisite – Requirements to enter selected courses have been established; students must complete these requirements before enrolling in the course.

Program of study – A program of study indicates a specific group of classes needed to complete a certificate or degree program. It is also referred to as the major.

Quarter – This is one of four periods of instruction offered at MCC: Fall (FA), Winter (WI), Spring (SP), and Summer (SS). Academic quarters are 11 weeks in length (except for the Summer quarter with one 10-week and two five-week sessions). Students must register and pay for each quarter they attend. Quarters are often referenced in relation to the academic year in which they occur, such as 15/WI for Winter classes in the 2015 academic year.

Specialist diploma – A specialist diploma was awarded for successful completion of a structured sequence of courses that is at least 24.0 and a maximum of 36.0 credit hours in length. In fall 2013, specialist diplomas were renamed career certificates.

Standard courses – Full-quarter classes that begin and end within the designated academic quarter dates (see begin and end dates in the academic calendar).

Syllabus – A document presented to students at the start of the quarter that outlines content, policies, and activities in a class. MCC syllabi follow a standard template that includes the course description, course objectives, assessment policies, the instructor's expectations of students, learning and technology support, and a schedule of assignments.

Synonym – A unique six-digit number assigned to every course section at MCC.

Transcript – An official record of the grades earned at an institution.

Transfer – The conveyance of a student's credits from one institution to another.

COLLEGE POLICIES AND PROCEDURES

Animals on Campus

Animals are not allowed on campus with the exception of service animals for people with disabilities. At no time should animals be left in vehicles. Questions should be directed to a disability support counselor or center executive director.

The ADA and Nebraska law [Section 20-127] allows service animals accompanying people with disabilities to be on MCC's campuses. A service animal must be permitted to accompany a person with a disability everywhere on campus except in situations where safety may be compromised. If there are any questions as to whether an animal qualifies as a service animal, a determination will be made by Disability Support Services counselors. Therapy animals do not assist an individual with a disability in the activities of daily living; therefore, they are not protected by laws for service animals.

Annual Notice to Students

Annually, MCC informs students of the Family Educational Rights and Privacy Act (FERPA) of 1974, as amended. This Act, with which the institution complies fully, was designed to protect the privacy of education records, to establish the right of students to inspect and review their education records, and to provide guidelines for the correction of inaccurate or misleading data through informal and formal hearings. Students also have the right to file complaints with the Family Educational Rights and Privacy Act office concerning alleged failures by the institution in complying with the provisions of the Act.

Children on Campus

Out of respect for all students and concern for safety and liability issues, children not registered in MCC classes are not permitted to attend class with their parent or guardian or to be left unattended at any College location. MCC police will attempt to locate a parent or guardian of an unattended child. Legal authorities may be called to deal with the situation if the attempt to locate the parent or guardian is unsuccessful. Students who disregard this policy may face disciplinary action.

Drug-Free Schools and Communities Act Notice

MCC's standards of conduct prohibit the unlawful possession, use, or distribution of illicit drugs and/or alcohol by students and employees on College property or as part of any of the College's activities. Illicit drug use means the use of illegal drugs and the abuse of alcohol and other drugs, including anabolic steroids. State and federal laws and any applicable city ordinances pertaining to the possession and use of illicit drugs and alcoholic beverages shall be observed by all College students and employees. A student's violation of the standards stated in this paragraph shall result in disciplinary sanctions. Provisions of this act require the annual distribution to students of a notice of the

standards of conduct. A copy is available online at mccneb.edu/getattachment/Prospective-Students/Resources/Police/Drug-Free-Schools-Brochure-2016.pdf.aspx.

Family Educational Rights and Privacy Act (FERPA)

Access to student information

Students' rights concerning access to educational records are outlined in the Family Educational Rights and Privacy Act, as amended. These rights include:

- providing students with the opportunity to inspect their educational records (Call the Records office at 531-622-2353 for an appointment);
- providing students with the opportunity to challenge through a hearing the content of their educational records if it is believed that they contain information that is inaccurate or misleading (Call the Records office at 531-622-2353 for an appointment); and
- limiting disclosure of information from students' records to those who have students' written consent or to officials specifically permitted within the law, such as College officials and - under certain conditions - local, state, and federal officials.

Students who wish to grant parental, spouse, or third-party access to their educational records may do so by submitting an Authorization to Release Student Information form to the Records office.

Metropolitan Community College will not disclose any personally identifiable information about students (except directory information listed below, at the discretion of the College) without the written consent of the student. Each student, however, has the right to restrict the release of this information by submitting an opt out of directory information form or sending in a written request to the Records office. MCC's directory information may include, at the discretion of the College:

- student's name
- MCC email address
- credit hour status (full- or part-time for the term)
- start and end dates of attendance (start date of first quarter of when classes were taken and end date of the last quarter when classes were completed only)
- degrees, honors, and awards received
- major field of study
- photographs, audios, and videos of students participating in official school activities and events*

*In consideration of acceptance of enrollment, students authorize Metropolitan Community College to use their image, likeness, name and comments in, but not limited to, photographs, videos and audio recordings created or used for the purposes of publicity/marketing and advertising for the College.

Students have the right to restrict access to their directory information by completing a Request to Opt Out of Directory

Information form. By completing this form, students are requesting that directory information not be released to non-College personnel. As a result of the decision to request confidential status, students should know:

- all address changes must be made in person with a form of ID;
- no information can be given to friends or relatives trying to locate a student through MCC;
- information as to student status is suppressed, so loan companies, prospective employers, family members, etc., are informed that MCC has no record of the student's attendance; and
- the graduation program or any other official publication does not contain the student's name.

Students who object to the disclosure of any of the above information and would like it withheld from disclosure may notify the Records office in writing at

Metropolitan Community College
Attn: Records Office
P.O. Box 3777
Omaha, NE 68103-0777

Nondiscrimination and Equal Opportunity

Metropolitan Community College does not discriminate on the basis of race, color, national origin, religion, sex, marital status, age, disability or sexual orientation in admission or access to its programs and activities or in its treatment or hiring of employees. The College complies with Title VI of the Civil Rights Act of 1964, the Civil Rights Act of 1990, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, Title II of the Americans with Disabilities Act of 1990, as amended, the Age Discrimination Act of 1975, related Executive Orders 11246 and 11375 and all civil rights laws of the State of Nebraska and the City of Omaha.

Contacts: Concerning Title VI (race), Title IX (gender equity), Section 504 (disability) and Americans with Disabilities Act/Program and Services Accessibility, and Age, contact

Vice President for Student Affairs: 531-622-2681, aarich@mccneb.edu or Dean of Student Advocacy and Accountability: 531-622-2202, jangholdt@mccneb.edu (students); Associate Vice President of Human Resources: 531-622-2236, mmoeglin@mccneb.edu (employees); Director of Facilities: 531-622-2529, bsedlacek@mccneb.edu (accessibility); or the United States Department of Education Assistant Secretary for Civil Rights – Office for Civil Rights (OCR): 1-800-421-3481, ocr@ed.gov.

Concerning hiring and employment-related complaints of discrimination or harassment based on race, color, national origin, religion, sex, marital status, age, disability, sexual orientation, retaliation or for affirmative action and diversity issues, contact Associate Vice President for Equity and Diversity: 531-622-2649, cgooch@mccneb.edu

The address for all of the above individuals is as follows:
Metropolitan Community College
30th and Fort Streets

P.O. Box 3777
Omaha, NE 68103-0777

Processes for Addressing Concerns of Students, Employees, and Members of the Public; Legal Compliance Officer; College Ombudsperson

College students, employees, and members of the public who wish to report suspected wrongdoing, share a concern, lodge a complaint or seek guidance in navigating College policies and procedures may refer to Board of Governors Policy 10801 and College Procedures Memorandum X-14.

To report suspected criminal wrongdoing contact the MCC Police Department at 531-622-2222, or contact any other law enforcement agency with jurisdiction.

To report suspected non-criminal wrongdoing – such as suspected mismanagement of public funds or actions creating a substantial and significant danger to the health or safety of any individual or the security of public property – contact the College Legal Compliance Officer, James R. Thibodeau, Associate Vice President for Compliance and General Counsel, at 531-622-2428.

For assistance handling unresolved concerns (such as academic grades, student aid, discipline, and so forth), redress of grievances, and assistance with navigating College policies and procedures, contact the College Ombudsperson at 531-622-8030, or email concerns to ombudsperson@mccneb.edu.

Individuals making reports may remain anonymous to the extent possible, and will not be subject to retaliation or reprisal. Employees and students and who knowingly make false or bad faith reports may be subject to disciplinary action.

Solicitation and Distribution of Literature

The College forbids the solicitation of students, employees, visitors, and guests on College property for the sale of goods and services, religious or charitable purposes, or any other activity not officially sanctioned by the College without the prior consent of the president or designee.

The College reserves the right to limit the time, place, and manner of solicitation on College property for any purpose and by any individual or group to reasonable times, places, and methods that do not interfere with the educational or student activities of the College; the safe and unobstructed movement of students, employees, visitors, and guests of the College; the safety of all individuals on College property; and promotion of the cleanliness and preservation of College grounds and facilities.

The College prohibits the placement of any kind of flier or other kind of paper, sticker, pamphlet, or other solicitous information, whether for-profit or not, on any vehicles or anywhere else on College property at any time. College organizations wishing to post announcements on approved College bulletin boards must seek prior permission of the director of student services, executive director, or their designees

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Records/Transcripts 531-622-2353

Single Parent Homemaker Services 531-622-2319

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