Accountant
A.A.S. Degree • 71 Credits

Degree Description

*** PENDING MnSCU APPROVAL ***

The A.A.S. Degree in Accounting is designed to prepare learners to examine, analyze and interpret accounting data for the purpose of giving advice and preparing financial statements. Responsibilities may include recording receipts, recording disbursements, closing year end records, compiling financial statements, preparing internal management, and/or state and federal reports. Accountants perform these duties both manually and with computer assistance.

Admission Dates: Fall and Spring Semester

Offered on the Faribault and North Mankato Campuses
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Accounting department. See the Accounting department page for more details.

Required Technical Courses (16 Courses)
Complete all of the following courses:

- ACCT1800 Business Law (3 Credits)
- ACCT1810 Financial Accounting (4 Credits)
- ACCT1811 Managerial Accounting (4 Credits)
- ACCT1814 Payroll Accounting (3 Credits)
- ACCT1834 Computerized Accounting I (3 Credits)
- ACCT1835 Computerized Accounting II (3 Credits)
- ACCT1870 Professional Accounting Careers (1 Credit)
- ACCT2821 Intermediate Accounting I (3 Credits)
- ACCT2822 Intermediate Accounting II (3 Credits)
- ACCT2847 Fraud, Auditing and Internal Controls (4 Credits)
- ACCT2861 Cost Accounting I (4 Credits)
- ACCT2862 Cost Accounting II (3 Credits)
- ACCT2863 Fund/NonProfit Accounting (3 Credits)
- ACCT2864 Income Tax I (4 Credits)
- ACCT2865 Income Tax II (3 Credits)
- ACCT2900 Accounting Review (3 Credits)

Elective Credits (3 Credits)
Choose 3 credits from ACCT, MKT, COMP, OTEC or ECON (ECON 110 and 120 will not count toward this requirement).

- ECON110 Principles of Macroeconomics (3 Credits)
- ECON120 Principles of Microeconomics (3 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.

Required Liberal Arts and Sciences (5 Courses)
To complete the Accountant AAS Degree, students must complete 17 MNTC credits from 3 of the 10 MNTC Goal areas.

The following courses are required:

- ENGL100 Composition (4 Credits)
- COMM140 Interpersonal Communication (3 Credits)

- COMM110 Public Speaking (3 Credits)
  Or
- COMM120 Small Group Communication (3 Credits)

- ECON110 Principles of Macroeconomics (3 Credits)
  Or
ECON120 Principles of Microeconomics (3 Credits)

MATH115 Concepts in Math (4 Credits)
Or
MATH120 College Algebra (4 Credits)
Or
MATH154 Elementary Statistics (4 Credits)
Accounting Technician
A.A.S. Degree • 67 Credits

Degree Description

*** PENDING MnSCU APPROVAL ***

The A.A.S. degree in Accounting Technician is designed to prepare students for a crossfunctional position that emphasizes working in an advanced electronic office environment. Typical responsibilities would be installation and operation of accounting software packages, computerized processing of federal and state reporting forms, information processing, graphical presentation of reports, and database management.

Admission Dates: Fall and Spring Semester

Offered on the Faribault and North Mankato Campuses
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Accounting department. See the Accounting department page for more details

Required Technical Courses (14 Courses)
Complete all of the following courses:

- ACCT1800 Business Law (3 Credits)
- ACCT1810 Managerial Accounting (4 Credits)
- ACCT1814 Payroll Accounting (3 Credits)
- ACCT1834 Computerized Accounting I (3 Credits)
- ACCT1835 Computerized Accounting II (3 Credits)
- ACCT1870 Professional Accounting Careers (1 Credit)
- ACCT2821 Intermediate Accounting I (3 Credits)
- ACCT2847 Fraud, Auditing and Internal Controls (4 Credits)
- ACCT2861 Cost Accounting I (4 Credits)
- ACCT2863 Income Tax I (4 Credits)
- COMP1200 PC Hardware and Software Essentials (4 Credits)
- COMP1360 Introduction to Data Communications and Networking (4 Credits)
- COMP1140 Web for Business (3 Credits)

Technical Electives (3 Credits)
Choose a minimum of 3 from either ACCT, COMP, MKT, OTEC or ECON.

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.

Required Liberal Arts and Sciences (5 Courses)
To complete the Accounting Technician AAS Degree, students must complete 17 MNTC credits from 3 of the 10 MNTC Goal areas.

The following courses are required:

- ENGL100 Composition (4 Credits)
- COMM140 Interpersonal Communication (3 Credits)
- ECON110 Principles of Macroeconomics (3 Credits)
  Or
- ECON120 Principles of Microeconomics (3 Credits)
- MATH115 Concepts in Math (4 Credits)
  Or
MATH120 College Algebra (4 Credits)
Or
MATH154 Elementary Statistics (4 Credits)

COMM110 Public Speaking (3 Credits)
Or
COMM120 Small Group Communication (3 Credits)
Accounting Assistant
Diploma • 34 Credits

Required Technical Courses (8 Courses)
Complete the following courses:

- **ACCT1800** Business Law (3 Credits)
- **ACCT1810** Financial Accounting (4 Credits)
- **ACCT1811** Managerial Accounting (4 Credits)
- **ACCT1814** Payroll Accounting (3 Credits)
- **ACCT1834** Computerized Accounting I (3 Credits)
- **ACCT1835** Computerized Accounting II (3 Credits)
- **ACCT1870** Professional Accounting Careers (1 Credit)
- **ACCT2847** Fraud, Auditing and Internal Controls (4 Credits)

Required Liberal Arts and Sciences (1 Course)
Complete the following course:

- **ENGL100** Composition (4 Credits)

Elective Credits (5 Credits)
Choose 5 credits from any of the following Technical and/or Liberal Arts and Sciences courses:

- **ACCT2827** Principles of Finance (3 Credits)
- **ACCT2850** Accounting Internship (1 - 8 Credits)
- **ACCT2863** Fund/NonProfit Accounting (3 Credits)
- **ACCT2864** Income Tax I (4 Credits)
- **COMM110** Public Speaking (3 Credits)
  Or
- **COMM120** Small Group Communication (3 Credits)

Degree Description
An accounting assistant performs any combination of routine calculating, posting, and verifying duties to obtain primary financial data for use in maintaining accounting records. In addition, the accounting assistant prepares daily bank deposits, writes checks, and maintains a cash disbursement system. All Accounting Assistant diploma courses can be applied toward an A.A.S. degree in Accounting.

Admission Dates: Fall and Spring Semester

Offered on the Faribault and North Mankato Campuses
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Accounting department. See the Accounting department page for more details.

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Accounting Technician
Diploma • 48 Credits

Required Technical Courses (12 Courses)
Complete all of the following courses:
- ACCT1800 Business Law (3 Credits)
- ACCT1810 Financial Accounting (4 Credits)
- ACCT1811 Managerial Accounting (4 Credits)
- ACCT1814 Payroll Accounting (3 Credits)
- ACCT1834 Computerized Accounting I (3 Credits)
- ACCT1835 Computerized Accounting II (3 Credits)
- ACCT1870 Professional Accounting Careers (1 Credit)
- ACCT2821 Intermediate Accounting I (3 Credits)
- ACCT2827 Principles of Finance (3 Credits)
- ACCT2834 Fraud, Auditing and Internal Controls (4 Credits)
- ACCT2861 Cost Accounting I (4 Credits)
- ACCT2863 Fund/NonProfit Accounting (3 Credits)
- ACCT2864 Income Tax I (4 Credits)

Required Liberal Arts and Sciences (1 Course)
Complete the following course:
- ENGL100 Composition (4 Credits)

Offered on the Faribault and North Mankato Campuses
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Accounting department. See the Accounting department page for more details.

Elective Credits (5 Credits)
Choose 5 credits from the following Technical and/or Liberal Arts and Sciences courses:
- ACCT2827 Principles of Finance (3 Credits)
- ACCT2834 Fraud, Auditing and Internal Controls (4 Credits)
- COMM110 Public Speaking (3 Credits)
- COMM120 Small Group Communication (3 Credits)

Degree Description
The Accounting Technician monitors and controls various types of electronic data processing equipment used to process accounting data. Applications would include automated general ledger and other sub-systems, spreadsheet applications, database management, and the use of graphics. All Accounting Technician diploma courses can be applied toward an Accountant A.A.S degree.

Admission Dates: Fall and Spring Semester

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Payroll Clerk
Certificate • 23 Credits

Degree Description
A payroll clerk fills the need for timely and accurate payroll cost information. This certificate is a series of courses that provide entry-level skills in payroll accounting. This includes the recording function all the way through to the disbursement of the checks. With constant changes in the legal environment and technological advances, this occupation is critical. All Payroll Clerk certificate courses can be applied toward an A.A.S. degree in Accounting, Accounting Assistant Diploma and Accounting Technician Diploma.

Admission Dates: Fall and Spring Semester

Offered on the Faribault and North Mankato Campuses
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Accounting department. See the Accounting department page for more details.

Required Technical Courses (5 Courses)
Complete all of the following courses:
ACCT1810 Financial Accounting (4 Credits)
ACCT1814 Payroll Accounting (3 Credits)
ACCT1834 Computerized Accounting I (3 Credits)
ACCT1835 Computerized Accounting II (3 Credits)
ACCT1870 Professional Accounting Careers (1 Credit)

Elective Credits (9 Credits)
Choose 9 credits from any of the following Technical and/or Liberal Arts and Sciences courses:
ACCT1811 Managerial Accounting (4 Credits)
ACCT2847 Fraud, Auditing and Internal Controls (4 Credits)
MKT 1930 Human Resource Management (3 Credits)
COMM140 Interpersonal Communication (3 Credits)
COMM110 Public Speaking (3 Credits)
Or
COMM120 Small Group Communication (3 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Agricultural Education Technology Partnership
A.S. Degree • 60 Credits

Degree Description

The need for agricultural educators has created a unique partnership between South Central College and the University of Minnesota. The key is that this is not a regular transfer program. The 2 + 2 Partnership program allows learners to complete their first two years at SCC and apply every course toward a 4-year Ag Education degree from the University of Minnesota. All of the SCC credits in this program will be applied to a Bachelor of Science degree in Agricultural, Food and Environmental Education at the University of Minnesota, with a specialization in Agricultural Science and Technology Education. Learners' advisors will work with them to make sure that all your courses meet degree requirements. Please note that courses are subject to change. Some courses are delivered through interactive television (ITV) and online distance technologies. By working with the University of Minnesota to develop this partnership program, South Central College has given individuals a great start toward a life impacting career in Agricultural Education

Admission Dates: Fall and Spring Semester

Offered on the North Mankato Campus

The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Agribusiness department. See the Agribusiness department page for more details

Required Technical Courses (7 Courses)
Complete all of the following courses:

- **AGBS1100** Agricultural Selling Skills (3 Credits)
- **ANSC1100** Livestock Production Principles (3 Credits)
- **ANSC2100** Principles of Animal Nutrition (3 Credits)
- **MEAG1610** Ag Equipment Maintenance (3 Credits)
- **PLSC1100** Soils I (3 Credits)
- **PLSC1300** Agronomy I (2 Credits)
- **PLSC1400** Agronomy II (3 Credits)

Required Liberal Arts and Sciences

Completing the Minnesota Transfer Curriculum (MnTC) requirements alone satisfies the lower division general education requirement at all Minnesota two and four-year colleges and universities.

To complete the Minnesota Transfer Curriculum, students must:
A) Complete all 10 goals B) Complete at least 40 college-level credits from courses listed within the 10 goal areas of the MnTC. C) Earn a cumulative GPA of 2.0 or higher in all MnTC courses.

Other Recommended Courses

The following courses are offered through the University of Minnesota Twin Cities through distance education. These courses are not specifically required to complete your degree at South Central College

- **AFEE1001** Introduction to Agricultural Education and Extension (1 Credit)
- **AFEE1002** Principles of Career Planning for Ag Professionals (1 Credit)
- **AFEE2096** Professional Practicum in Ag Education: Early Experience (1 Credit)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Agribusiness Office Specialist/Manager
A.A.S. Degree • 72 Credits

Degree Description
The Agribusiness Office Specialist/Manager program prepares learners with the understanding, knowledge and skills to manage or staff a modern farm or agribusiness firm office. The program provides specific office skills necessary to function in an agribusiness office setting, as well as the agricultural background to work with producers and customers.

Degree Student Learning Outcomes
1. Demonstrate effective participation on an agribusiness team
2. Demonstrate verbal and written business communications
3. Demonstrate input technology
4. Demonstrate promotion and selling of agricultural services and products
5. Utilize information organization and retrieval systems
6. Develop and maintain records required for successful employment
7. Apply knowledge of computer applications/operating system software.

Admission Dates: Fall and Spring Semester

Offered on the North Mankato Campus
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Agribusiness department. See the Agribusiness department page for more details

Required Technical Courses (15 Courses)
Complete the following courses:

- **AGBS1100** Agricultural Selling Skills (3 Credits)
- **AGBS2150** Agribusiness Financial Management (4 Credits)
- **AGEC1100** Agricultural Economics (3 Credits)
- **AGRI1800** Employer/Employee Issues (2 Credits)
- **AGRI2700** Agricultural Technology Seminar (2 Credits)
- **AGRI2780** Agribusiness Internship (1 - 9 Credits)
- **ANSC1100** Livestock Production Principles (3 Credits)
- **ANSC1100** Livestock Production Principles (3 Credits)
- **OTEC1815** Keyboarding for Speed and Accuracy (2 Credits)
- **OTEC1820** Business English (3 Credits)
- **OTEC1822** Microsoft Excel (4 Credits)
- **OTEC1840** Business Presentations (3 Credits)
- **OTEC1860** Microsoft Word (4 Credits)
- **OTEC2814** Office Procedures (4 Credits)
- **OTEC2870** Information Resource Management (3 Credits)
- **SGAG1000** Ag Orientation (1 Credit)

Technical Electives (10 Credits)
Choose 10 credits from the following courses:

- **AGBS2990** International Field Study (3 Credits)
- **AGEC2400** Marketing Principles (3 Credits)
- **AGEC2450** Commodity Marketing Strategies (2 Credits)
- **AGEC2500** Agricultural Transfer and Law (2 Credits)
- **ANSC2100** Principles of Animal Nutrition (3 Credits)
- **OTEC2815** Employment Portfolio (3 Credits)
- **OTEC2820** Business Communications (3 Credits)
- **OTEC2830** Microsoft Publisher (3 Credits)
- **PLSC1100** Soils I (3 Credits)
- **PLSC1205** Precision Agriculture (3 Credits)
- **PLSC1300** Agronomy I (2 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.

Required Liberal Arts and Sciences (3 Courses)
To complete an AAS Degree, students must complete 15 MnTC credits from 3 of the 10 MnTC Goal Areas.

The following courses are required:

- **ENGL100** Composition (4 Credits)
- **COMM140** Interpersonal Communication (3 Credits)

Elective Liberal Arts and Sciences
Select 5 additional MnTC credits in goals 1-10. Courses must be selected in consultation with advisor/faculty. Recommended courses are: COMM 110, BIOL 101, PSYC 100, PHIL 100.
ECON110 Principles of Macroeconomics (3 Credits)
Or
ECON120 Principles of Microeconomics (3 Credits)
Agribusiness Production
A.A.S. Degree • 72 Credits

Degree Description
Emphasis Areas available include: Agronomy, Animal Science, Diversified

Program emphasis areas provide learners with an opportunity for study in the areas of plant and animal production. The crop production areas consist of selection, planning, management, harvesting, and marketing. Areas of soil science are also studied focusing on fertility, conservation, and tillage. The animal production study consists of areas in breeding, feeding, care, management, and marketing. In addition, courses in farm machinery, buildings and structures, farm management, farm accounting, farm business analysis, and farm business reorganization provide a broad-based program of study. Learners will be required to keep a complete farm record for analysis and interpretation. An on-the-farm internship will be required. The A.A.S. Degree includes 15 credits of Liberal Arts and Sciences and the Diploma includes up to 6 credits of Liberal Arts and Sciences respectively.

Degree/Diploma Student Learning Outcomes
1. Prepare and assess a livestock management plan
2. Develop and assess a soil and crop management plan
3. Perform farm business operations
4. Utilize a comprehensive farm business plan
5. Demonstrate approved management practices used to select, cultivate and harvest agricultural crops
6. Demonstrate effective participation in an agribusiness team

Admission Dates: Fall and Spring Semester

Offered on the North Mankato Campus
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Agribusiness department. See the Agribusiness department page for more details.

Required Technical Courses (11 Courses)
You must complete all of the following classes:

- **AGEC1100** Agricultural Economics (3 Credits)
- **AGEC1200** Principles of Farm Records (3 Credits)
- **AGEC2400** Marketing Principles (3 Credits)
- **AGEC2250** Farm Business Planning & Analysis (4 Credits)
- **AGEC2500** Agricultural Transfer and Law (2 Credits)
- **AGRI2700** Agricultural Technology Seminar (2 Credits)
- **ANSC1100** Livestock Production Principles (3 Credits)
- **MEAG1500** Facility Maintenance (3 Credits)
- **PLSC1100** Soils I (3 Credits)
- **PLSC1300** Agronomy I (2 Credits)
- **SGAG1000** Ag Orientation (1 Credit)

Agribusiness Emphasis Areas (17 Credits)
Select at least 17 credits from one of the following Agribusiness emphasis areas.

Animal Science Emphasis: ANSC1105,1200,1205,1305
ANSC2100, SWPR1050,1200,1300,1500,2000, PLSC1105, AGRI1800, AGEC2450,2600

Internship (11 Credits)
Complete 11 credits

- **AGRI2780** Agribusiness Internship (1 - 9 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.

Liberal Arts and Sciences
To complete an AAS Degree, students must complete 15 MNTC credits from 3 of the 10 MNTC Goal Areas.
Agronomy Emphasis: PLSC1105, 1200, 1205, 1400, 2100, 2700, MEAG1610, AGRI1800, AGEC2450, 2600

Diversified Emphasis: Select 14 credits from any of these departments: AGEC, AGBS, AGRI, ANSC, MEAG, PLSC or SWPR.
Agribusiness Service and Management
A.A.S. Degree • 72 Credits

Degree Description

Emphasis Areas available include: Agronomy, Animal Science, Diversified

Program emphasis areas are designed to prepare learners to sell and deliver services as employees of agribusiness firms in the crop and livestock related industries. Duties include performance of retail and office procedural tasks, preparation and implementation of marketing programs, sales and sales management, preparation of financial and business reports, delivery of products and services, and managing selected aspects of these businesses. The program includes technical agriculture courses in the areas of plant, soil, and animal science as well as agricultural industry equipment operation and maintenance. The courses in business include the subject areas of accounting, business procedures, interpersonal communication, financial/business management, marketing, selling, and computer operations. An 11 credit supervised occupational internship in an agribusiness firm is required. The A.A.S. Degree includes 15 credits of Liberal Arts and Sciences and the Diploma includes up to 6 credits of Liberal Arts and Sciences respectively.

Degree/Diploma Student Learning Outcomes

1. Demonstrate effective participation on an agribusiness team
2. Maintain and safely operate industry equipment
3. Demonstrate financial management skills
4. Demonstration promotion and selling of agricultural services and products
5. Develop and maintain records required for successful employment

Admission Dates: Fall and Spring Semester

Offered on the North Mankato Campus

The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Agribusiness department. See the Agribusiness department page for more details.

Required Technical Courses (9 Courses)
You must complete all of the following classes:

- AGBS1100 Agricultural Selling Skills (3 Credits)
- AGBS2150 Agribusiness Financial Management (4 Credits)
- AGEC1100 Agricultural Economics (3 Credits)
- AGEC2400 Marketing Principles (3 Credits)
- AGRI2700 Agricultural Technology Seminar (2 Credits)
- ANSC1100 Livestock Production Principles (3 Credits)
- PLSC1100 Soils I (3 Credits)
- PLSC1300 Agronomy I (2 Credits)
- SGAG1000 Ag Orientation (1 Credit)

Internship (11 Credits)
Complete 11 credits

- AGRI2780 Agribusiness Internship (1 - 9 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.

Agribusiness Emphasis Areas (22 Credits)
Select at least 22 credits from one of the following Agribusiness emphasis areas.

Animal Science Emphasis: ANSC1105,1200,1205,1305
ANSC2100, SWPR1050,1200,1300,1500,2000, PLSC1105,
AGRI1800, AGEC2450,2600

Liberal Arts and Sciences
To complete an AAS Degree, students must complete 15 MNTC credits from 3 of the 10 MNTC Goal Areas.
Agronomy Emphasis: PLSC1105,1200,1205,1400,2100,2700, MEAG1500,1700, AGBS2105, AGEC2600

Diversified Emphasis: Select 19 credits from any of these departments: AGEC, AGBS, AGRI, ANSC, MEAG, PLSC or SWPR.
Degree Description

This degree provides an opportunity for study in the area of agricultural power and mechanization. The major areas of study include gasoline and diesel engine component repair including the support lubrication, cooling, air intake, exhaust, and basic fuel systems. Other areas of emphasis are power trains (clutches and transmissions), DC electrical systems and monitors, hydraulics, and diesel fuel systems (nozzles and injection pumps). In addition, safety, air conditioning and outdoor power products complete the technical course offerings. The curriculum will provide both basic and advanced technical instruction. This degree includes a Liberal Arts & Sciences component of 15 credits.

Degree Student Learning Outcomes

1. Perform assembly, repair, operation, and adjustment of machinery and power units
2. Conduct trouble shooting of agricultural power units and machinery
3. Diagnose and repair tractor systems and equipment
4. Perform parts department operations
5. Perform metal welding and fabrication
6. Perform work using appropriate safety practices

Admission Dates: Fall and Spring Semester

Offered on the North Mankato Campus
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Agribusiness department. See the Agribusiness department page for more details.

Required Technical Courses (18 Courses)

Complete the following courses:

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<td>Equipment Assembly, Operation, Adjustment and Reconditioning I</td>
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<td>AGME1813</td>
<td>Equipment Assembly, Operation, Adjustment and Reconditioning II</td>
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<td>AGME1821</td>
<td>Precision Measuring Tools</td>
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<td>Engine Support Systems and Lab</td>
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<td>AGME1831</td>
<td>Tractor Power Trains</td>
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<td>AGME1861</td>
<td>Tractor Electrical Systems</td>
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<td>Parts Department Operation</td>
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<td>Ag Welding</td>
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<td>Hydraulic Assist/Hydrostatic Transmissions</td>
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<td>Introduction to Diesel</td>
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<td>Diesel Injection (Pumps)</td>
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<td>Advanced Agricultural Electrical/Electronics</td>
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<td>AGME2892</td>
<td>Hydraulic Theory and Diagnosis</td>
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Internship (11 Credits)

Complete 11 credits:

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</table>

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Technical Electives (5 Credits)
Select 5 credits from the following courses in consultation with advisor/faculty.

AGBS2015  Commercial Driver's License (1 Credit)
AGBS2995  Individualized Study/Special Problems (1 - 6 Credits)
AGME2882  Ag Tech Seminar (1 Credit)
AGME2945  Tractor/Equipment Repair I (3 Credits)
AGME2946  Tractor/Equipment Repair II (4 Credits)
AGME2947  Tractor/Equipment Diagnosis and Repair (4 Credits)
PLSC1205  Precision Agriculture (3 Credits)

Liberal Arts and Sciences
To complete an AAS Degree, students must complete 15 MNTC credits from 3 of the 10 MNTC Goal Areas. Select credits in consultation with advisor/faculty.
Agribusiness Service Technician, Diversified
A.A.S. Degree • 72 Credits

Degree Description
This degree provides an opportunity for study in the area of agricultural power and mechanization. The major areas of study include gasoline and diesel engine component repair including the support lubrication, cooling, air intake, exhaust and basic fuel systems. Other areas of emphasis are power trains (clutches and transmissions), DC electrical systems and monitors, hydraulics, and diesel fuel systems (nozzles and injection pumps). In addition, safety, air conditioning and outdoor power products complete the technical course offerings. The curriculum will provide both basic and advanced technical instruction. This degree includes a Liberal Arts & Sciences component of 15 credits.

Degree Student Learning Outcomes
1. Perform assembly, repair, operation, and adjustment of machinery and power units
2. Conduct trouble shooting of agricultural power units and machinery
3. Diagnose and repair tractor systems and equipment
4. Perform parts department operations
5. Perform metal welding and fabrication
6. Perform work using appropriate safety practices

Admission Dates: Fall and Spring Semester

Offered on the North Mankato Campus
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Agribusiness department. See the Agribusiness department page for more details.

Required Technical Courses (8 Courses)
Complete the following courses:

- **AGME1812** Equipment Assembly, Operation, Adjustment and Reconditioning I (2 Credits)
- **AGME1822** Gas/Diesel Engine Repair I (3 Credits)
- **AGME1823** Engine Support Systems and Lab (3 Credits)
- **AGME1831** Tractor Power Trains (3 Credits)
- **AGME1861** Tractor Electrical Systems (3 Credits)
- **AGME2841** Air Conditioning (1 Credit)
- **AGME2852** Introduction to Diesel (1 Credit)
- **AGME2892** Hydraulic Theory and Diagnosis (4 Credits)

Internship (11 Credits)
Complete 11 credits:

- **AGME2940** Agribusiness Service Technician Internship (11 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.

Technical Electives (26 Credits)
Select 26 credits from the following courses in consultation with advisor/faculty.

- **AGBS2015** Commercial Driver's License (1 Credit)
- **AGBS2995** Individualized Study/Special Problems (1 - 6 Credits)
- **AGME1801** Outdoor Power Equipment (3 Credits)
- **AGME1813** Equipment Assembly, Operation, Adjustment and Reconditioning II (2 Credits)
- **AGME1821** Precision Measuring Tools (1 Credit)
- **AGME1881** Parts Department Operation (1 Credit)
- **AGME1891** Hydraulic Theory (1 Credit)
- **AGME1923** Gas/Diesel Engine Repair II (4 Credits)
- **AGME1930** Ag Welding (2 Credits)

Liberal Arts & Sciences
To complete an AAS Degree, students must complete 15 MNTC credits from 3 of the 10 MNTC Goal Areas in consultation with advisor/faculty.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>AGME2832</td>
<td>Hydraulic Assist/Hydrostatic Transmissions</td>
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<tr>
<td>AGME2853</td>
<td>Diesel Injection (Pumps)</td>
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<tr>
<td>AGME2863</td>
<td>Advanced Agricultural Electrical/Electronics</td>
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<tr>
<td>AGME2945</td>
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<td>AGME2946</td>
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<tr>
<td>AGME2947</td>
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<td>PLSC1205</td>
<td>Precision Agriculture</td>
<td>3</td>
</tr>
<tr>
<td>SGAG1000</td>
<td>Ag Orientation</td>
<td>1</td>
</tr>
</tbody>
</table>
Agribusiness Production
Diploma • 72 Credits

Degree Description

Emphasis Areas available include: Agronomy, Animal Science, Diversified

Program emphasis areas provide learners with an opportunity for study in the areas of plant and animal production. The crop production areas consist of selection, planning, management, harvesting, and marketing. Areas of soil science are also studied focusing on fertility, conservation, and tillage. The animal production study consists of areas in breeding, feeding, care, management, and marketing. In addition, courses in farm machinery, buildings and structures, farm management, farm accounting, farm business analysis, and farm business reorganization provide a broad-based program of study. Learners will be required to keep a complete farm record for analysis and interpretation. An on-the-farm internship will be required. The A.A.S. Degree includes 15 credits of Liberal Arts and Sciences and the Diploma includes up to 6 credits of Liberal Arts and Sciences respectively.

Degree/Diploma Student Learning Outcomes

1. Prepare and assess a livestock management plan
2. Develop and assess a soil and crop management plan
3. Perform farm business operations
4. Utilize a comprehensive farm business plan
5. Demonstrate approved management practices used to select, cultivate and harvest agricultural crops
6. Demonstrate effective participation in an agribusiness team

Admission Dates: Fall and Spring Semester

Offered on the North Mankato Campus
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Agribusiness department. See the Agribusiness department page for more details.

Required Technical Courses (14 Courses)
You must complete all of the following classes:

- AGEC1100 Agricultural Economics (3 Credits)
- AGEC1200 Principles of Farm Records (3 Credits)
- AGEC2400 Marketing Principles (3 Credits)
- AGEC2250 Farm Business Planning & Analysis (4 Credits)
- AGEC2500 Agricultural Transfer and Law (2 Credits)
- AGEC2450 Commodity Marketing Strategies (2 Credits)
- MEAG1500 Facility Maintenance (3 Credits)
- MEAG2200 Planning Farmstead Environments (3 Credits)
- PLSC1100 Soils I (3 Credits)
- PLSC1300 Agronomy I (2 Credits)
- SGAG1000 Ag Orientation (1 Credit)

Agribusiness Emphasis Areas (19 Credits)
Select at least 19 credits from one of the following Agribusiness emphasis areas.

Internship (11 Credits)
Complete 11 credits

AGRI2780 Agribusiness Internship (1 - 9 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Animal Science Emphasis: ANSC1105,1200,1205,1305
ANSC2100, SWPR1050,1200,1300,1500,2000, PLSC1105,
AGEC2600

Agronomy Emphasis: PLSC1105,1200,1205,1400,2100,2700,
MEAG1610, AGEC2600, AGBS2015

Diversified Emphasis: Select 19 credits from any of these
departments: AGEC, AGBS, AGRI, ANSC, MEAG, PLSC or
SWPR.

Additional Required Liberal Arts and Sciences (1 Course)
Choose 1 course from MnTC Goal Areas 2 through 10.
Degree Description

Emphasis Areas available include: Agronomy, Animal Science, Diversified

Program emphasis areas are designed to prepare learners to sell and deliver services as employees of agribusiness firms in the crop and livestock related industries. Duties include performance of retail and office procedural tasks, preparation and implementation of marketing programs, sales and sales management, preparation of financial and business reports, delivery of products and services, and managing selected aspects of these businesses. The program includes technical agriculture courses in the areas of plant, soil, and animal science as well as agricultural industry equipment operation and maintenance. The courses in business include the subject areas of accounting, business procedures, interpersonal communication, financial/business management, marketing, selling, and computer operations. An 11 credit supervised occupational internship in an agribusiness firm is required. The A.A.S. Degree includes 15 credits of Liberal Arts and Sciences and the Diploma includes up to 6 credits of Liberal Arts and Sciences respectively.

Degree/Diploma Student Learning Outcomes

1. Demonstrate effective participation on an agribusiness team
2. Maintain and safely operate industry equipment
3. Demonstrate financial management skills
4. Demonstration promotion and selling of agricultural services and products
5. Develop and maintain records required for successful employment

Admission Dates: Fall and Spring Semester

Offered on the North Mankato Campus

The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Agribusiness department. See the Agribusiness department page for more details

Required Technical Courses (15 Courses)

You must complete all of the following classes:

- **AGBS1100** Agricultural Selling Skills (3 Credits)
- **AGBS2015** Commercial Driver's License (1 Credit)
- **AGBS2150** Agribusiness Financial Management (4 Credits)
- **AGEC1100** Agricultural Economics (3 Credits)
- **AGEC2400** Marketing Principles (3 Credits)
- **AGEC2450** Commodity Marketing Strategies (2 Credits)
- **AGEC2500** Agricultural Transfer and Law (2 Credits)
- **AGRI1800** Employer/Employee Issues (2 Credits)
- **AGRI2700** Agricultural Technology Seminar (2 Credits)
- **ANSC1100** Livestock Production Principles (3 Credits)
- **PLSC1100** Soils I (3 Credits)
- **PLSC1300** Agronomy I (2 Credits)
- **SGAG1000** Ag Orientation (1 Credit)
- **MEAG1500** Facility Maintenance (3 Credits)
- **MEAG1700** Agricultural Industry Machinery Maintenance (3 Credits)

Internship (11 Credits)

Complete 11 credits

- **AGRI2780** Agribusiness Internship (1 - 9 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.

Agribusiness Emphasis Areas (18 Credits)

Required Liberal Arts and Sciences (1 Course)
Select at least 18 credits from one of the following Agribusiness emphasis areas.

**Animal Science Emphasis:** ANSC1105, 1200, 1205, 1305, ANSC2100, SWPR1050, 1200, 1300, 1500, 2000, PLSC1105, AGE2600

**Agronomy Emphasis:** PLSC1105, 1200, 1205, 1400, 2100, 2700, AGE2600, AGBS2990, 2995

**Diversified Emphasis:** Select 18 credits from any of these departments: AGEC, AGBS, AGRI, ANSC, MEAG, PLSC or SWPR.

**Additional Required Liberal Arts and Sciences (1 Course)**
Choose 1 course from MnTC Goal Areas 2 through 10.
Agribusiness Service Technician
Diploma • 72 Credits

Degree Description
The diploma is designed to prepare learners for entry level career opportunities in the diesel, farm equipment, and industrial mechanics fields. Learners will diagnose and repair engines, fuel systems, power trains, electrical systems, hydraulics, air conditioning, and related machinery. With additional training and experience many technicians become shop foreman, service managers or open their own business.

Diploma Student Learning Outcomes
1. Perform assembly, repair, operation, and adjustment of machinery and power units
2. Conduct trouble shooting of agricultural power units and machinery
3. Diagnose and repair tractor systems and equipment
4. Perform parts department operations
5. Perform metal welding and fabrication
6. Perform work using appropriate safety practices

Admission Dates: Fall and Spring Semester

Offered on the North Mankato Campus
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Agribusiness department. See the Agribusiness department page for more details.

Required Technical Courses (23 Courses)
Complete the following courses:
- **AGME1801** Outdoor Power Equipment (3 Credits)
- **AGME1812** Equipment Assembly, Operation, Adjustment and Reconditioning I (2 Credits)
- **AGME1813** Equipment Assembly, Operation, Adjustment and Reconditioning II (2 Credits)
- **AGME1821** Precision Measuring Tools (1 Credit)
- **AGME1822** Gas/Diesel Engine Repair I (3 Credits)
- **AGME1823** Engine Support Systems and Lab (3 Credits)
- **AGME1831** Tractor Power Trains (3 Credits)
- **AGME1861** Tractor Electrical Systems (3 Credits)
- **AGME1881** Parts Department Operation (1 Credit)
- **AGME1891** Hydraulic Theory (1 Credit)
- **AGME1923** Gas/Diesel Engine Repair II (4 Credits)
- **AGME1930** Ag Welding (2 Credits)
- **AGME2832** Hydraulic Assist/Hydrostatic Transmissions (2 Credits)
- **AGME2841** Air Conditioning (1 Credit)
- **AGME2852** Introduction to Diesel (1 Credit)
- **AGME2853** Diesel Injection (Pumps) (3 Credits)
- **AGME2869** Advanced Agricultural Electrical/Electronics (2 Credits)
- **AGME2882** Ag Tech Seminar (1 Credit)
- **AGME2992** Hydraulic Theory and Diagnosis (4 Credits)
- **AGME2945** Tractor/Equipment Repair I (3 Credits)
- **AGME2946** Tractor/Equipment Repair II (4 Credits)

Internship (11 Credits)
Complete 11 credits:
- **AGME2940** Agribusiness Service Technician Internship (11 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
**AGME2947** Tractor/Equipment Diagnosis and Repair (4 Credits)

**SGAG1000** Ag Orientation (1 Credit)

**Elective Credits (1 Credit)**
Complete 1 credit from courses offered in the following departments in consultation with faculty: AGBS, AGEC, AGRI, ANSC, MEAG, PLSC, SGAG, SWPR, OTEC, HLTH

**Liberal Arts and Sciences (6 Credits)**
Students must select 6 MNTC credits from 2 of the 10 MnTC goal areas in consultation with advisor/faculty.
Agribusiness Service Technician, Diversified
Diploma • 72 Credits

Degree Description
The diploma is designed to prepare learners for career opportunities in the diesel, farm equipment, and industrial mechanics fields. Learners will diagnose and repair engines (diesel and gasoline), fuel systems, power trains, electrical systems, hydraulics, air conditioning, and related machinery. An 11 credit internship experience in a dealership or related firm is required.

Diploma Student Learning Outcomes
1. Perform assembly, repair, operation, and adjustment of machinery and power units
2. Conduct trouble shooting of agricultural power units and machinery
3. Diagnose and repair tractor systems and equipment
4. Perform parts department operations
5. Perform metal welding and fabrication
6. Perform work using appropriate safety practices

Admission Dates: Fall and Spring Semester

Offered on the North Mankato Campus
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Agribusiness department. See the Agribusiness department page for more details

Required Technical Courses (9 Courses)
Complete the following courses:
AGME1812 Equipment Assembly, Operation, Adjustment and Reconditioning I (2 Credits)
AGME1822 Gas/Diesel Engine Repair I (3 Credits)
AGME1823 Engine Support Systems and Lab (3 Credits)
AGME1831 Tractor Power Trains (3 Credits)
AGME1861 Tractor Electrical Systems (3 Credits)
AGME2841 Air Conditioning (1 Credit)
AGME2852 Introduction to Diesel (1 Credit)
AGME2892 Hydraulic Theory and Diagnosis (4 Credits)
SGAG1000 Ag Orientation (1 Credit)

Internship (11 Credits)
Complete 11 credits:
AGME2940 Agribusiness Service Technician Internship (11 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.

Technical Electives (34 Credits)
Complete 34 credits from the following courses:
AGBS2015 Commercial Driver's License (1 Credit)
AGBS2995 Individualized Study/Special Problems (1 - 6 Credits)
AGME1801 Outdoor Power Equipment (3 Credits)
AGME1813 Equipment Assembly, Operation, Adjustment and Reconditioning II (2 Credits)
AGME1821 Precision Measuring Tools (1 Credit)
AGME1881 Parts Department Operation (1 Credit)
AGME1891 Hydraulic Theory (1 Credit)
AGME1923 Gas/Diesel Engine Repair II (4 Credits)
AGME1930 Ag Welding (2 Credits)
AGME2832 Hydraulic Assist/Hydrostatic Transmissions (2 Credits)
AGME2853 Diesel Injection (Pumps) (3 Credits)

Liberal Arts and Sciences
Students must select 6 MNTC credits from 2 of the 10 MnTC goal areas in consultation with advisor/faculty.
AGME2863 Advanced Agricultural Electrical/Electronics (2 Credits)
AGME2882 Ag Tech Seminar (1 Credit)
AGME2945 Tractor/Equipment Repair I (3 Credits)
AGME2946 Tractor/Equipment Repair II (4 Credits)
AGME2947 Tractor/Equipment Diagnosis and Repair (4 Credits)
AGRI1800 Employer/Employee Issues (2 Credits)
PLSC1205 Precision Agriculture (3 Credits)
Agribusiness Technician
Diploma • 37 Credits

Degree Description
The diploma is designed to prepare a learner for entry level career opportunities in the diesel, farm equipment, and industrial mechanics fields. Learners will diagnose and repair engines, fuel systems, power trains, electrical systems, hydraulics, air conditioning, and related machinery. With additional training and experience many technicians become shop foreman, service managers or open their own business. This diploma is designed for the learner who has prior training in the field or credit for life experience. A pretest or prior course work is required for admittance to this program.

Admission Dates: Fall and Spring Semester

Offered on the North Mankato Campus
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Agribusiness department. See the Agribusiness department page for more details

Required Technical Courses (12 Courses)
Complete the following courses:
AGME2832 Hydraulic Assist/Hydrostatic Transmissions (2 Credits)
AGME2841 Air Conditioning (1 Credit)
AGME2852 Introduction to Diesel (1 Credit)
AGME2853 Diesel Injection (Pumps) (3 Credits)
AGME2863 Advanced Agricultural Electrical/Electronics (2 Credits)
AGME2882 Ag Tech Seminar (1 Credit)
AGME2892 Hydraulic Theory and Diagnosis (4 Credits)
AGME2945 Tractor/Equipment Repair I (3 Credits)
AGME2946 Tractor/Equipment Repair II (4 Credits)
AGME2947 Tractor/Equipment Diagnosis and Repair (4 Credits)
AGME2940 Agribusiness Service Technician Internship (11 Credits)

OTEC1001 Computer Software for College (2 Credits)
Or
OTEC1790 Keyboarding for College (2 Credits)

Elective Credit (1 Credit)
Select one credit from courses in the following subjects:
AGBS, AGEC, AGRI, ANSC, MEAG, PLSC, SGAG, SWPR, OTEC or HLTH. Courses must be selected in consultation with advisor/faculty.

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Agribusiness Technician's Aide
Diploma • 35 Credits

Required Technical Courses (16 Courses)
Complete the following courses:

- AGME1801 Outdoor Power Equipment (3 Credits)
- AGME1812 Equipment Assembly, Operation, Adjustment and Reconditioning I (2 Credits)
- AGME1813 Equipment Assembly, Operation, Adjustment and Reconditioning II (2 Credits)
- AGME1821 Precision Measuring Tools (1 Credit)
- AGME1822 Gas/Diesel Engine Repair I (3 Credits)
- AGME1823 Engine Support Systems and Lab (3 Credits)
- AGME1831 Tractor Power Trains (3 Credits)
- AGME1861 Tractor Electrical Systems (3 Credits)
- AGME1881 Parts Department Operation (1 Credit)
- AGME1891 Hydraulic Theory (1 Credit)
- AGME1923 Gas/Diesel Engine Repair II (4 Credits)
- AGME1930 Ag Welding (2 Credits)
- AGME2940 Agribusiness Service Technician Internship (11 Credits)
- AGRI1800 Employer/Employee Issues (2 Credits)
- HLTH1952 First Aid (1 Credit)
- SGAG1000 Ag Orientation (1 Credit)

Degree Description
The diploma is designed to prepare learners for career opportunities in the diesel, farm equipment and industrial mechanics field. Students will prepare for entry level employment in a variety of settings doing lube services, detailing, and light mechanical repairs. With additional course work and experience technician aides will become service technicians.

Admission Dates: Fall and Spring Semester

Offered on the North Mankato Campus
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Agribusiness department. See the Agribusiness department page for more details.

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Ag Chemical Applicator Technician
Certificate • 30 Credits

Degree Description
The Ag Chemical Applicator Technician Program will provide hands-on training in all areas of agriculture, including crops, soil, fertilizers, equipment operation and maintenance and agribusiness sales and management. Participants will gain proficiency with ultra-modern, high-tech chemical application equipment. Extensive use will be made of community-based resources to help provide private employment experience for students.

Certificate Core Competencies
1. Demonstrate effective participation on an agribusiness team
2. Perform maintenance and operate agribusiness industry equipment
3. Perform agribusiness industry computer functions
4. Promote and sell agricultural services and products
5. Develop and maintain agribusiness records systems
6. Demonstrate application of agricultural inputs

Admission Dates: Fall and Spring Semester

Offered on the North Mankato Campus
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Agribusiness department. See the Agribusiness department page for more details

Required Technical Courses (12 Courses)
Complete the following courses:
AGBS1100 Agricultural Selling Skills (3 Credits)
AGBS2015 Commercial Driver's License (1 Credit)
AGRI1800 Employer/Employee Issues (2 Credits)
AGRI2700 Agricultural Technology Seminar (2 Credits)
AGRI2780 Agribusiness Internship (1 - 9 Credits)
MEAG1700 Agricultural Industry Machinery Maintenance (3 Credits)
PLSC1100 Soils I (3 Credits)
PLSC1200 Soils II (3 Credits)
PLSC1205 Precision Agriculture (3 Credits)
PLSC1300 Agronomy I (2 Credits)
PLSC1400 Agronomy II (3 Credits)
SGAG1000 Ag Orientation (1 Credit)

Elective Courses (Suggested)
These courses are not required but are suggested as courses which may be beneficial to you in this career field. You will graduate from this program even if you do not complete these courses.
AGBS2990 International Field Study (3 Credits)
AGBS2995 Individualized Study/Special Problems (1 - 6 Credits)
AGEC1100 Agricultural Economics (3 Credits)
PLSC1105 Forages and Pasture Management (2 Credits)
PLSC2100 Agronomy Lab (2 Credits)
PLSC2700 Advanced Agronomy (2 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Architectural Drafting and Design
A.A.S. Degree • 60 Credits

Degree Description
This program prepares students for application of basic technical skills in support of Architects engaged in designing/developing commercial buildings.

A laptop is required for this program. Please consult faculty before purchase.

Due to the highly responsible nature of the work performed, no grade lower than C in any required course with a BDET prefix will be counted towards graduation.

Admission Dates: Fall and Spring Semester

Offered on the North Mankato Campus

The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Architectural Drafting and Design department. See the Architectural Drafting and Design department page for more details.

Required Technical Courses (16 Courses)

NOTE: Due to the highly responsible nature of the work performed, no grade lower than a C in any required course with a BDET prefix will be counted towards graduation.

You must complete all of the following classes:

- **BDET1100** Introduction to Building Design and Energy Technology (1 Credit)
- **BDET1110** Studio I (4 Credits)
- **BDET1120** Estimating Concepts (2 Credits)
- **BDET1130** Materials and Methods (3 Credits)
- **BDET1150** AutoCAD (2 Credits)
- **BDET1210** Studio II (4 Credits)
- **BDET1220** Building Analyst (3 Credits)
- **BDET1240** Construction Documents (2 Credits)
- **BDET1250** Revit (2 Credits)
- **BDET1260** Special Topics in Environmental Design (1 Credit)
- **BDET2110** Studio III (4 Credits)
- **BDET2120** Statics and Strength of Materials (3 Credits)
- **BDET2130** MEP Systems (Mechanical, Electrical and Plumbing) (3 Credits)
- **BDET2140** Building Codes (2 Credits)
- **BDET2210** Studio IV (6 Credits)
- **BDET1320** Internship (3 Credits)

Required Liberal Arts & Sciences (3 Courses)

To complete an AAS degree, students must complete 15 MnTC credits from 3 of the 10 MnTC goal areas. The following courses are required:

- **ENGL100** Composition (4 Credits)
- **MATH120** College Algebra (4 Credits)
- **MATH125** Trigonometry (3 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.

Liberal Arts and Sciences - Electives (4 Credits)

Select an additional 4 credits from MnTC goals 2,3,5,6,7,8,9 or 10.
Architectural Drafting and Design
Diploma • 32 Credits

Degree Description
This program prepares students for application of basic technical skills in support of Architects engaged in designing/developing commercial buildings.

A laptop is required for this program. Please consult faculty before purchase.

Due to the highly responsible nature of the work performed, no grade lower than C in any required course with a BDET prefix will be counted towards graduation.

Offered on the North Mankato Campus
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the department. See the department page for more details.

Required Technical Courses (10 Courses)

NOTE: Due to the highly responsible nature of the work performed, no grade lower than a C in any required course with a BDET prefix will be counted towards graduation.

You must complete all of the following classes:

- **BDET1100** Introduction to Building Design and Energy Technology (1 Credit)
- **BDET1110** Studio I (4 Credits)
- **BDET1120** Estimating Concepts (2 Credits)
- **BDET1130** Materials and Methods (3 Credits)
- **BDET1150** AutoCAD (2 Credits)
- **BDET1210** Studio II (4 Credits)
- **BDET1220** Building Analyst (3 Credits)
- **BDET1240** Construction Documents (2 Credits)
- **BDET1250** Revit (2 Credits)
- **BDET1260** Special Topics in Environmental Design (1 Credit)

Required Liberal Arts and Sciences (8 Credits)
Please complete both of the following courses:

- **ENGL100** Composition (4 Credits)
- **MATH120** College Algebra (4 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Associate in Arts
A.A. Degree • 60 Credits

Degree Description

The Associate in Arts (AA) degree is awarded for successful completion of a 60 semester credit program in Liberal Arts & Sciences and is intended primarily for students who plan to transfer to another college or university to complete a bachelor’s degree. Although no specific major is listed in conjunction with this degree, students may choose to concentrate in a particular field of study in preparation for a planned major or professional emphasis at a four-year college or university. An AA degree must include the entire 40-credit Minnesota Transfer Curriculum (MNTC) specified below, which, pursuant to Minnesota statute, must transfer to any institution in the Minnesota State Colleges and Universities System or to the University of Minnesota. Students are strongly encouraged to develop an educational plan with their academic advisor and the Transfer Specialist to assure that AA degree and pre-major requirements are fulfilled.

To view the Associate in Arts website, please browse to:

http://www.southcentral.edu/liberal-arts-and-sciences/liberal-arts-a-sciences-program-description.html

General Requirements

MINNESOTA TRANSFER CURRICULUM

Completing the Minnesota Transfer Curriculum (MnTC) requirement alone satisfies the lower division general education requirement at all Minnesota two and four-year public colleges and universities.

To complete the Minnesota Transfer Curriculum students must:

1. Complete all ten goals.
2. Complete at least 40 college-level credits from courses listed within the ten goal areas MnTC.
3. Earn a cumulative GPA of 2.0 or higher and a 67% completion rate in coursework completed at South Central College.

ASSOCIATE OF ARTS DEGREE / GRADUATION REQUIREMENTS:

Complete a total of 60 semester credits numbered 100 and above (college level) as described below:

1. Complete the Minnesota Transfer Curriculum (MnTC)
2. Complete the FYE 100 First Year Experience course (1 credit) within the first three semesters (Fall, Spring, Summer) of attendance at South Central College. This course is required for all A.A. students unless the student has:
   • Completed 24 college level credits at another institution or in another SCC program before transferring to the AA program
   • Taken a First Year Experience course at another accredited college
3. Complete the Capstone course after the completion of at least 40 credits (1 credit)
4. Complete electives to meet 60 semester credits (Up to 16 credits can be from technical/career courses)
5. Complete at least one (1) credit in a health and wellness course
6. Earn a cumulative GPA of 2.0 and a 67% completion rate
7. Earn a GPA of 2.0 or higher in MnTC coursework.

NOTE: Credits from repeated courses count only once

Admission Dates: Fall, Spring, and Summer Semester

Offered on the Faribault and North Mankato Campuses

The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Associate in Arts department. See the Associate in Arts department page for more details
Goal Area 1 - Oral and Written Communication
The following courses apply to MNTC Goal 1. To complete the goal, students must complete ENGL 100 and one COMM course from COMM 100, 110, 120 or 140.

PART A
ENGL100 Composition (4 Credits)

PART B
COMM100 Introduction to Human Communication (3 Credits)
Or
COMM110 Public Speaking (3 Credits)
Or
COMM120 Small Group Communication (3 Credits)
Or
COMM140 Interpersonal Communication (3 Credits)

Goal Area 2 - Critical Thinking
The following courses apply to MNTC Goal 2. Complete all 9 other MNTC goal areas OR select one course.
HUM 100 Critical Thinking (3 Credits)
PHIL100 Ethics in Society (3 Credits)
PHIL130 Logic (4 Credits)
CAP 250 Associate of Arts Capstone Class (1 Credit)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.

Goal Area 3 - Natural Sciences
The following courses apply to MNTC Goal 3. To complete the goal, students must select at least two courses from two different disciplines.

BIOL100 Introduction to Biology (4 Credits)
BIOL101 Introduction to Ecology (4 Credits)
BIOL106 Introduction to Cell Biology (3 Credits)
BIOL110 Biology of Disease (3 Credits)
BIOL115 General Biology I (4 Credits)
BIOL116 General Biology II (4 Credits)
BIOL152 Tropical Rain Forest Ecology (4 Credits)
BIOL162 Human Biology (4 Credits)
BIOL220 Human Anatomy (4 Credits)
BIOL225 Anatomy and Physiology I (4 Credits)
BIOL230 Human Physiology (4 Credits)
BIOL235 Anatomy and Physiology II (4 Credits)
BIOL240 Pathophysiology (3 Credits)
BIOL270 Microbiology (4 Credits)
CHEM101 The Chemistry of Everything (3 Credits)
CHEM108 Introduction to Chemistry (4 Credits)
CHEM120 Principles of Chemistry I (5 Credits)
CHEM121 Principles of Chemistry II (5 Credits)
CHEM220 Organic Chemistry I (5 Credits)
GEOG101 Introduction to Physical Geography (3 Credits)
GEOG104 Introduction to Weather and Climate (3 Credits)
PHYS101 Introductory Physics (3 Credits)
PHYS211 Principles in Physics I (4 Credits)
PHYS212 Principles in Physics II (4 Credits)
PHYS221 General Physics I (4 Credits)
PHYS222 General Physics II (4 Credits)

Goal Area 4 - Mathematical/Logical Reasoning
The following courses apply to MNTC Goal 4. To complete the goal, students must complete one course.

MATH115 Concepts in Math (4 Credits)
MATH120 College Algebra (4 Credits)
MATH125 Trigonometry (3 Credits)
MATH130 Pre-Calculus (4 Credits)
MATH131 Calculus I (4 Credits)
MATH132 Calculus II (4 Credits)
MATH154 Elementary Statistics (4 Credits)
MATH231 Ordinary Differential Equations (4 Credits)
MATH233 Multivariable Calculus (4 Credits)
MATH240 Elementary Linear Algebra (4 Credits)
PHIL130 Logic (4 Credits)

Goal Area 5 - History and Social Sciences
The following courses apply to MNTC Goal 5. To complete the goal, students must select at least two courses from two different disciplines.

ANTH100 Introduction to Anthropology (4 Credits)
ANTH121 Cultural Anthropology (4 Credits)
ECON110 Principles of Macroeconomics (3 Credits)
ECON120 Principles of Microeconomics (3 Credits)
ECON130 Economics of Public Issues (3 Credits)
ETHN101 American Racial Minorities (3 Credits)
ETHN110 The Immigrant Experience (3 Credits)
GEOG100 Elements of Geography (3 Credits)
GEOG103 Introduction to Cultural Geography (3 Credits)
GEOG200 Special Topics in Geography: (3 Credits)
HIST120 U.S. History I (4 Credits)
HIST121 U. S. History II (4 Credits)
HIST160 World History I (4 Credits)

Goal Area 6 - Humanities and Fine Arts
The following courses apply to MNTC Goal 6. To complete the goal, students must select at least two courses from two different disciplines.

ART 100 Art Appreciation (3 Credits)
ART 110 Art Structure (3 Credits)
ART 120 Metal Art (3 Credits)
ART 125 Sculpture (3 Credits)
ART 130 Painting (3 Credits)
ART 135 Introduction to Watercolor (3 Credits)
ART 140 Digital Photography (3 Credits)
ART 150 Drawing I (3 Credits)
ART 155 Visual Narrative (3 Credits)
ART 165 Public Art (3 Credits)
ART 170 Digital Video Production (3 Credits)
ART 180 Digital Photography 2 (3 Credits)
ART 201 Art History I (3 Credits)
### Goal Area 7 - Human Diversity

The following courses apply to MNTC Goal 7. To complete the goal, students must complete one course.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>AIS 112</td>
<td>Native American Perspectives</td>
<td>4</td>
</tr>
<tr>
<td>ANTH 121</td>
<td>Cultural Anthropology</td>
<td>4</td>
</tr>
<tr>
<td>ART 155</td>
<td>Visual Narrative</td>
<td>3</td>
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<tr>
<td>COMM 130</td>
<td>Intercultural Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 120</td>
<td>Perspectives in Literature, Film, and American Diversity</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 208</td>
<td>African American Literature</td>
<td>4</td>
</tr>
<tr>
<td>ETHN 110</td>
<td>The Immigrant Experience</td>
<td>3</td>
</tr>
<tr>
<td>HIST 120</td>
<td>U.S. History I</td>
<td>4</td>
</tr>
<tr>
<td>HIST 121</td>
<td>U.S. History II</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 110</td>
<td>Lifespan Psychology</td>
<td>3</td>
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<tr>
<td>PSYC 230</td>
<td>Abnormal Psychology</td>
<td>4</td>
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<tr>
<td>PSYC 240</td>
<td>Child and Adolescent Psychology</td>
<td>4</td>
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<tr>
<td>PSYC 250</td>
<td>Industrial Organizational Psychology</td>
<td>4</td>
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<tr>
<td>SOC 110</td>
<td>Social Problems</td>
<td>3</td>
</tr>
<tr>
<td>SOC 201</td>
<td>Marriage and Family</td>
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### Goal Area 8 - Global Perspective

The following courses apply to MNTC Goal 8. To complete the goal, students must complete one course.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>ANTH 100</td>
<td>Introduction to Anthropology</td>
<td>4</td>
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<tr>
<td>ART 201</td>
<td>Art History I</td>
<td>3</td>
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<tr>
<td>ART 202</td>
<td>Art History II</td>
<td>3</td>
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<tr>
<td>ASL 101</td>
<td>American Sign Language 1</td>
<td>3</td>
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<tr>
<td>COMM 130</td>
<td>Intercultural Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 100</td>
<td>Perspectives in Literature, Film, and Global Cultures</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 100</td>
<td>Elements of Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 103</td>
<td>Introduction to Cultural Geography</td>
<td>3</td>
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<tr>
<td>GEOG 105</td>
<td>World Regional Geography</td>
<td>3</td>
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<tr>
<td>HIST 160</td>
<td>World History I</td>
<td>4</td>
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<tr>
<td>HIST 161</td>
<td>World History II: The Rise of the West (4 Credits)</td>
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<tr>
<td>HIST 162</td>
<td>World History III: The Twentieth Century (4 Credits)</td>
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<tr>
<td>HIST 205</td>
<td>Special Topics in History: (1 - 4 Credits)</td>
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<tr>
<td>HUM 122</td>
<td>Introduction to Humanities II</td>
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<tr>
<td>HUM 150</td>
<td>Global Connections Travel Seminar (1 Credit)</td>
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<td>HUM 205</td>
<td>Special Topics in the Humanities: (1 - 4 Credits)</td>
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<td>HUM 250</td>
<td>Global Connections Travel Seminar II (1 - 3 Credits)</td>
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<td>MUSC 100</td>
<td>Music in the Global Culture</td>
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<tr>
<td>MUSC 121</td>
<td>Class Guitar</td>
<td>2</td>
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<tr>
<td>MUSC 131</td>
<td>Music Theory 1</td>
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<td>THTR 100</td>
<td>Introduction to Theater</td>
<td>3</td>
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<tr>
<td>THTR 110</td>
<td>Introduction to Acting I</td>
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<table>
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<th>Course Title</th>
<th>Credits</th>
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<tr>
<td>SOLA 100</td>
<td>Somali Language I</td>
<td>4</td>
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<tr>
<td>SOLA 102</td>
<td>Somali Language II</td>
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<tr>
<td>SPAN 105</td>
<td>Elementary Spanish I</td>
<td>4</td>
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<tr>
<td>SPAN 110</td>
<td>Elementary Spanish II</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 205</td>
<td>Intermediate Spanish</td>
<td>4</td>
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### Goal Area 9 - Ethical and Civic Responsibility

The following courses apply to MNTC Goal 9. To complete the goal, students must complete one course.

<table>
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<tr>
<th>Course Code</th>
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<th>Credits</th>
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<tbody>
<tr>
<td>COMM110</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>ECON110</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON120</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON130</td>
<td>Economics of Public Issues</td>
<td>3</td>
</tr>
<tr>
<td>ENGL115</td>
<td>Global Peace and Social Justice</td>
<td>4</td>
</tr>
<tr>
<td>ETHN101</td>
<td>American Racial Minorities</td>
<td>3</td>
</tr>
<tr>
<td>ETHN110</td>
<td>The Immigrant Experience</td>
<td>3</td>
</tr>
<tr>
<td>MASS110</td>
<td>Introduction to Mass Communication</td>
<td>4</td>
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<tr>
<td>PHIL100</td>
<td>Ethics in Society</td>
<td>3</td>
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<tr>
<td>PHIL140</td>
<td>Science in Society</td>
<td>3</td>
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<tr>
<td>PHIL150</td>
<td>Medical Ethics</td>
<td>3</td>
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<tr>
<td>PHIL210</td>
<td>Environmental Ethics</td>
<td>3</td>
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<tr>
<td>PHIL215</td>
<td>Business Ethics</td>
<td>3</td>
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<tr>
<td>PHIL220</td>
<td>Philosophy and the Just Society</td>
<td>3</td>
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<tr>
<td>POL 110</td>
<td>American Government</td>
<td>3</td>
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<tr>
<td>PSYC140</td>
<td>Psychology of Positive Adjustment</td>
<td>4</td>
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<td>SOC 106</td>
<td>Introduction to Criminal Justice</td>
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<td>SOC 205</td>
<td>Special Topics in Sociology</td>
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<td>SOC 206</td>
<td>Juvenile Delinquency</td>
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<tr>
<td>SOC 251</td>
<td>Criminology and Criminal Behavior</td>
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<tr>
<td>SOC 259</td>
<td>Drugs and Society</td>
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### Goal Area 10 - People and the Environment

The following courses apply to MNTC Goal 10. To complete the goal, students must complete one course.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>AIS 112</td>
<td>Native American Perspectives</td>
<td>4</td>
</tr>
<tr>
<td>BIOL101</td>
<td>Introduction to Ecology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL152</td>
<td>Tropical Rain Forest Ecology</td>
<td>4</td>
</tr>
<tr>
<td>GEOG101</td>
<td>Introduction to Physical Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEOG104</td>
<td>Introduction to Weather and Climate</td>
<td>3</td>
</tr>
<tr>
<td>GEOG105</td>
<td>World Regional Geography</td>
<td>3</td>
</tr>
<tr>
<td>HHP 101</td>
<td>Health and the Environment</td>
<td>3</td>
</tr>
<tr>
<td>PHIL210</td>
<td>Environmental Ethics</td>
<td>3</td>
</tr>
</tbody>
</table>
Auto Body and Collision Technology
A.A.S. Degree • 72 Credits

Degree Description
The A.A.S. Degree in Auto Body and Collision Technology provides students with the opportunity to develop technical skills and to broaden personal horizons through the requirement of 15 Liberal Arts and Sciences credits. Each student is required to have tools relative to the trade area.

Admission Dates: Fall Semester

Offered on the North Mankato Campus
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Auto Body and Collision Technology department. See the Auto Body and Collision Technology department page for more details.

Required Technical Courses (18 Courses)
Select the following courses:

- **ABCT1805** Auto Body Collision Technology Fundamentals (2 Credits)
- **ABCT1801** Auto Body Lab I (4 Credits)
- **ABCT1810** Sheet Metal I (3 Credits)
- **ABCT1820** Priming and Refinish System Preparation (3 Credits)
- **ABCT1860** Auto Body Welding (3 Credits)
- **ABCT1802** Auto Body Lab II (4 Credits)
- **ABCT1850** Trim, Hardware and Glass (3 Credits)
- **ABCT1870** Refinishing (3 Credits)
- **ABCT1880** Sheet Metal II (3 Credits)
- **ABCT2800** Auto Body Appraisal and Shop Management (3 Credits)
- **ABCT2803** Auto Body Lab III (4 Credits)
- **ABCT1840** Auto Collision Mechanical I (3 Credits)
- **ABCT2810** Appearance Matching (3 Credits)
- **ABCT2820** Composites (2 Credits)
- **ABCT2830** Measuring and Pulling Systems (3 Credits)
- **ABCT2850** Structural Repair (3 Credits)
- **ABCT2870** Auto Collision Mechanical II (3 Credits)
- **ABCT2804** Auto Body Lab IV (4 Credits)

Or

- **ABCT2910** Occupational Internship (1 - 9 Credits)

Technical Elective Credits (1 Credit)
Courses must be selected in consultation with advisor/faculty. Choose from the following courses or see advisor/faculty for additional offerings.

- **ABCT2910** Occupational Internship (1 - 9 Credits)
- **ABCT2920** Special Problems (1 - 6 Credits)
- **ABCT2805** Auto Body and Collision Air Conditioning (2 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.

Required Liberal Arts & Sciences
To complete an AAS Degree, students must complete 15 MNTC credits from 3 of the 10 MNTC goal areas. Courses must be selected in consultation with advisor/faculty.
Auto Body and Collision Technology
Diploma • 64 Credits

Degree Description
The Auto Body and Collision Technology diploma is designed to meet the needs of students who wish to concentrate on technical skills and 6 Liberal Arts and Sciences credits. Each student is required to have tools relative to the trade area.

Admission Dates: Fall Semester

Offered on the North Mankato Campus
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Auto Body and Collision Technology department. See the Auto Body and Collision Technology department page for more details.

Required Technical Courses (19 Courses)
Complete all of the following courses:

- **ABCT1805** Auto Body Collision Technology Fundamentals (2 Credits)
- **ABCT1801** Auto Body Lab I (4 Credits)
- **ABCT1810** Sheet Metal I (3 Credits)
- **ABCT1820** Priming and Refinish System Preparation (3 Credits)
- **ABCT1860** Auto Body Welding (3 Credits)
- **ABCT1802** Auto Body Lab II (4 Credits)
- **ABCT1850** Trim, Hardware and Glass (3 Credits)
- **ABCT1870** Refinishing (3 Credits)
- **ABCT1880** Sheet Metal II (3 Credits)
- **ABCT2800** Damage Appraisal and Shop Management (3 Credits)
- **ABCT2803** Auto Body Lab III (4 Credits)
- **ABCT1840** Auto Collision Mechanical I (3 Credits)
- **ABCT2810** Appearance Matching (3 Credits)
- **ABCT2820** Composites (2 Credits)
- **ABCT2830** Measuring and Pulling Systems (3 Credits)
- **ABCT2805** Auto Body and Collision Air Conditioning (2 Credits)
- **ABCT2850** Structural Repair (3 Credits)
- **ABCT2870** Auto Collision Mechanical II (3 Credits)
- **ABCT2900** Auto Body Lab IV (4 Credits)
- Or
- **ABCT2910** Occupational Internship (1 - 9 Credits)

Required Liberal Arts and Sciences (6 Credits)
To complete the diploma, students must complete 6 MNTC credits from 2 of the 10 MNTC goal areas. Courses must be approved by advisor/faculty.

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.

Elective Courses (Suggested)
These courses are not required but are suggested as courses which may be beneficial to you in this career field. You will graduate from this program even if you do not complete these courses.

- **ABCT2900** Auto Body Lab (1 - 4 Credits)
- **ABCT2910** Occupational Internship (1 - 9 Credits)
- **ABCT2920** Special Problems (1 - 6 Credits)
Automotive Service
A.A.S. Degree • 72 Credits

Degree Description
Learners graduating with an A.A.S. degree in Automotive Service receive intense training and experience in the diagnosis, repair and service of contemporary vehicles.

Admission Dates: Fall and Spring Semester

Offered on the North Mankato Campus
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Automotive Service department. See the Automotive Service department page for more details.

Required Technical Courses (24 Courses)
Complete all of the following courses:

- **AST 1112** Introduction to Auto Service (2 Credits)
- **AST 1121** Service Management (1 Credit)
- **AST 1212** Basic Electrical (2 Credits)
- **AST 1222** Advanced Electrical/Electronics (2 Credits)
- **AST 1233** Starting and Charging Systems (3 Credits)
- **AST 1311** Engine Diagnosis (1 Credit)
- **AST 1323** Lower Engine Service (3 Credits)
- **AST 1332** Upper Engine Service (2 Credits)
- **AST 1341** Engine Lab (1 Credit)
- **AST 1412** Clutch & Drive Line (2 Credits)
- **AST 1423** Manual Transmission/Transaxle & 4X4 (3 Credits)
- **AST 1513** Suspension/Steering & Wheel Alignment (3 Credits)
- **AST 1613** Brakes (3 Credits)
- **AST 1622** Advanced Brakes (2 Credits)
- **AST 1712** Basic Tune-up (Non-computer) (2 Credits)
- **AST 2432** Rear Axle/Differential (2 Credits)
- **AST 2442** Automatic Transmission I (2 Credits)
- **AST 2452** Automatic Transmission II (2 Credits)
- **AST 2462** Automatic Transmission III (2 Credits)
- **AST 2723** Fuel Systems I (3 Credits)
- **AST 2733** Introduction to Automotive Computers (3 Credits)
- **AST 2743** Fuel Systems II (3 Credits)
- **AST 2752** Engine Performance & Drivability (2 Credits)
- **AST 2812** Basic Air Conditioning (2 Credits)

Auto Lab (4 Credits)
NOTE: Qualified sophomores may substitute COE for two credits of Auto Lab. Choose all four of the following courses:

- **AST 2911** Auto Lab I (1 Credit)
- **AST 2921** Auto Lab II (1 Credit)
- **AST 2931** Auto Lab III (1 Credit)
- **AST 2941** Auto Lab IV (1 Credit)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.

Elective Technical Courses (2 Credits)
Select at least two credits from the following:

- **AST 2951** Individualized Study (1 - 8 Credits)
- **AST 2961** Cooperative Occupational Experience (1 - 8 Credits)
- **AST 2822** Advanced Heating and Air Conditioning (2 Credits)

Liberal Arts and Sciences
To complete an AAS Degree, students must complete 15 MNTC credits from 3 of the 10 MNTC goal areas.
Automotive Service
Diploma • 64 Credits

Required Technical Courses (28 Courses)
Complete all of the following courses: NOTE: For qualified sophomores, COE may be substituted for up to 2 credits of Auto Lab.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>AST 1112</td>
<td>Introduction to Auto Service</td>
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<td>AST 1121</td>
<td>Service Management</td>
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<tr>
<td>AST 1212</td>
<td>Basic Electrical (2 Credits)</td>
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<tr>
<td>AST 1222</td>
<td>Advanced Electrical/Electronics (2 Credits)</td>
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<tr>
<td>AST 1233</td>
<td>Starting and Charging Systems (3 Credits)</td>
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<tr>
<td>AST 1311</td>
<td>Engine Diagnosis (1 Credit)</td>
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<td>AST 1323</td>
<td>Lower Engine Service (3 Credits)</td>
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<td>AST 1332</td>
<td>Upper Engine Service (2 Credits)</td>
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<td>AST 1341</td>
<td>Engine Lab (1 Credit)</td>
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<td>AST 1412</td>
<td>Clutch &amp; Drive Line (2 Credits)</td>
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<tr>
<td>AST 1423</td>
<td>Manual Transmission/Transaxle &amp; 4X4 (3 Credits)</td>
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<tr>
<td>AST 1513</td>
<td>Suspension/Steering &amp; Wheel Alignment (3 Credits)</td>
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<td>AST 1613</td>
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<tr>
<td>AST 1712</td>
<td>Basic Tune-up (Non-computer) (2 Credits)</td>
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<td>AST 2432</td>
<td>Rear Axle/Differential (2 Credits)</td>
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<td>AST 2442</td>
<td>Automatic Transmission I (2 Credits)</td>
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<td>AST 2452</td>
<td>Automatic Transmission II (2 Credits)</td>
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<tr>
<td>AST 2462</td>
<td>Automatic Transmission III (2 Credits)</td>
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<td>AST 2723</td>
<td>Fuel Systems I (3 Credits)</td>
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<tr>
<td>AST 2733</td>
<td>Introduction to Automotive Computers (3 Credits)</td>
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<td>AST 2743</td>
<td>Fuel Systems II (3 Credits)</td>
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<td>AST 2812</td>
<td>Basic Air Conditioning (2 Credits)</td>
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<tr>
<td>AST 2911</td>
<td>Auto Lab I (1 Credit)</td>
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<tr>
<td>AST 2921</td>
<td>Auto Lab II (1 Credit)</td>
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<td>AST 2931</td>
<td>Auto Lab III (1 Credit)</td>
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<tr>
<td>AST 2941</td>
<td>Auto Lab IV (1 Credit)</td>
<td></td>
</tr>
</tbody>
</table>

Required Liberal Arts and Sciences (6 Credits)
Complete 6 MNTC credits from MNTC goals 1-10.

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.

Technical Electives (1 Credit)
Complete 1 credit from the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AST 1622</td>
<td>Advanced Brakes (2 Credits)</td>
<td></td>
</tr>
<tr>
<td>AST 2822</td>
<td>Advanced Heating and Air Conditioning (2 Credits)</td>
<td></td>
</tr>
</tbody>
</table>
AST 2951 Individualized Study (1 - 8 Credits)
AST 2961 Cooperative Occupational Experience (1 - 8 Credits)
Degree Description

The Biology A.S. degree at South Central College was developed to provide learners with the first two years of a broad based education in Biology and its supporting sciences. It is specifically designed to prepare learners to transfer into the junior year of a Biology major at a four year college. This program articulates with the Biology program at Minnesota State University, Mankato.

Admission Dates: Fall and Spring Semester

Offered on the North Mankato Campuses

The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Biology department. See the Biology department page for more details

Required Courses (5 Courses)

Complete the following courses:

- BIOL115 General Biology I (4 Credits)
- BIOL116 General Biology II (4 Credits)
- BIOL211 Genetics (4 Credits)
- BIOL250 Biology Capstone (2 Credits)
- CHEM120 Principles of Chemistry I (5 Credits)

Biology Electives (11 Credits)

Choose 11 credits from the following courses:

- BIOL220 Human Anatomy (4 Credits)
- BIOL230 Human Physiology (4 Credits)
- BIOL270 Microbiology (4 Credits)
- CHEM220 Organic Chemistry I (5 Credits)
- CHEM221 Organic Chemistry II (5 Credits)

Additional Required Liberal Arts and Sciences (5 Courses)

Choose the following courses:

- PHYS211 Principles in Physics I (4 Credits)
- CHEM121 Principles of Chemistry II (5 Credits)
- ENGL100 Composition (4 Credits)
- COMM110 Public Speaking (3 Credits)

Liberal Arts and Sciences Electives

To complete an AS degree in Biology, students must complete 30 MNTC credits from 6 of the 10 MnTC Goal Areas. Courses should be selected in consultation with advisor/faculty.

Select an additional 14 credits to fulfill three other MNTC goal areas (MNTC Goals 2,4,5,6,7,8,9,10).

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Business Management
A.A.S. Degree • 60 Credits

Degree Description
The Business Management Program is designed to provide learners with a broad background in general business concepts. The program focuses on the skills and knowledge needed in the areas of accounting, marketing and management, computer technology and office administration. The program increases opportunities for learners to be successful in their current job as well as assisting them in their career advancement endeavors. The program also includes a Liberal Arts and Sciences component that helps learners develop a well-rounded view of the world in which they live and work.

Admission Dates: Fall and Spring Semester

Offered on the Faribault and North Mankato Campuses
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Business Management department. See the Business Management department page for more details

Required Technical Courses (14 Courses)
Complete all of the following courses:

- **ACCT1800** Business Law (3 Credits)
- **ACCT1810** Financial Accounting (4 Credits)
- **ACCT1811** Managerial Accounting (4 Credits)
- **ACCT1834** Computerized Accounting I (3 Credits)
- **ACCT2827** Principles of Finance (3 Credits)
- **MGT 2820** Introduction to Management Information Systems (3 Credits)
- **MKT 1800** Introduction to Sales (3 Credits)
- **MKT 1810** Principles of Marketing (3 Credits)
- **MKT 1820** Introduction to Business (3 Credits)
- **MKT 1900** Principles of Management (3 Credits)
- **MKT 1910** Entrepreneurship (3 Credits)
- **MKT 1930** Human Resource Management (3 Credits)
- **OTEC1820** Business English (3 Credits)
- **OTEC2820** Business Communications (3 Credits)

Required Liberal Arts & Sciences (3 Courses)
To complete an AAS Degree, students must complete 16 MNTC credits from 3 of the 10 MNTC Goal areas. Courses must be selected in consultation with advisor/faculty.

Select 3 of the following courses:

- **ENGL100** Composition (4 Credits)
- **COMM110** Public Speaking (3 Credits)
- **ECON110** Principles of Macroeconomics (3 Credits)
  Or
- **ECON120** Principles of Microeconomics (3 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.

Elective Liberal Arts and Science Credits
Select six credits in MNTC Goals 1 - 10 At least one course must be outside of MNTC goals 1 and 5. Select courses in consultation with advisor/faculty.
Required Technical Courses (11 Courses)
Complete the following courses:

- CDEV1210 Child Growth and Development (3 Credits)
- CDEV1220 Health, Safety & Nutrition (3 Credits)
- CDEV1240 Working with Diverse Families and Children (3 Credits)
- CDEV1260 Observation and Assessment 1 (1 Credit)
- CDEV1270 Learning Environment & Curriculum (3 Credits)
- CDEV1310 Infant-Toddler Development and Learning Experiences (3 Credits)
- CDEV2210 Observation and Assessment 2 (2 Credits)
- CDEV2510 Internship 1 (3 Credits)
- CDEV2310 Children with Differing Abilities (3 Credits)
- CDEV2530 Curriculum Planning (3 Credits)
- CDEV2560 Language and Literacy Development (3 Credits)

Required Liberal Arts & Sciences (3 Courses)
To complete the Child Development AS Degree, students must complete 30 MNTC credits from 6 of the 10 MNTC Goal areas. The following courses are required:

- ENGL100 Composition (4 Credits)
- COMM110 Public Speaking (3 Credits)
- MATH120 College Algebra (4 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.

Liberal Arts and Sciences Electives
Select an additional 19 credits to fulfill four other MNTC Goal Areas (MNTC Goals 2,3,5,6,7,8,9,10).
Administration of Child Care Programs
A.A.S. Degree • 60 Credits

Degree Description
A manager of an early childhood or afterschool program has complex responsibilities that require a wide range of knowledge and skills. The Administration of Child Care Programs degree is designed to build students’ knowledge and abilities to adequately and effectively evaluate the qualifications and performance of employees, develop sound personnel practices, oversee the purchase, care and maintenance of equipment, develop and evaluate sound curricula, build and maintain professional relationships with parents, staff and colleagues, and respond sensitively to the diverse needs of children, their parents, and staff. The skills obtained in this degree will prepare students for career opportunities such as a Director, Assistant Director, Site Coordinator, Early Childhood Teacher or Paraprofessional.

Admission Dates: Fall and Spring Semester

Offered on the Faribault and North Mankato Campuses
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Child Development Careers department. See the Child Development Careers department page for more details

Required Technical Courses (18 Courses)
Complete the following courses:

- **CDEV1210** Child Growth and Development (3 Credits)
- **CDEV1220** Health, Safety & Nutrition (3 Credits)
- **CDEV1230** Guiding Children's Behavior (3 Credits)
- **CDEV1240** Working with Diverse Families and Children (3 Credits)
- **CDEV1260** Observation and Assessment 1 (1 Credit)
- **CDEV1270** Learning Environment & Curriculum (3 Credits)
- **CDEV1310** Infant-Toddler Development and Learning Experiences (3 Credits)
- **CDEV1312** Preschool Development and Learning Experiences (3 Credits)
- **CDEV2210** Observation and Assessment 2 (2 Credits)
- **CDEV2310** Children with Differing Abilities (3 Credits)
- **CDEV2510** Internship 1 (3 Credits)
- **CDEV2520** Children with Challenging Behaviors (3 Credits)
- **MKT 1900** Principles of Management (3 Credits)
- **MKT 1930** Human Resource Management (3 Credits)
- **ACCT1814** Payroll Accounting (3 Credits)
- Or **ACCT1810** Financial Accounting (4 Credits)
- **CDEV2940** Managing Multiple Sites (1 Credit)
- **CDEV2990** Practicum Project (1 Credit)
- **HLTH1950** CPR (1 Credit)
- Or **HLTH1952** First Aid (1 Credit)
- Or **HLTH1954** Safety (1 Credit)

Liberal Arts and Sciences - MNTC Goal 1 (1 Course)
Select one ENGL or COMM course from MNTC Goal 1.

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Liberal Arts and Sciences - MNTC Goal 5 (1 Course)
Select one SOC or PSYC course from MNTC Goal 5.

Additional Liberal Arts and Sciences (9-11 Credits)
To complete an AAS Degree, students must complete 15 MNTC credits from 3 of the 10 MNTC goal areas. At least one course must be from outside MNTC Goal Areas 1 and 5.
Child Development
A.A.S. Degree • 60 Credits

Degree Description
Education for early childhood licensure is provided by South Central College according to the Minnesota Department of Human Services requirements. Individuals will be prepared for careers in a variety of early childhood and educational settings. Graduates may pursue positions such as early childhood teachers or assistants, or as paraprofessionals within a school system. Graduates receiving an A.A.S. Degree in Child Development may transfer the degree to Metropolitan State University to pursue a B.A.S. Degree in the Early Childhood Studies, Psychology Department. This articulation agreement may be revised when program changes are made in the B.A.S. Degree in the Early Childhood Studies, Psychology Department at Metropolitan State University.

Admission Dates: Fall and Spring Semester

Offered on the Faribault and North Mankato Campuses
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Child Development Careers department. See the Child Development Careers department page for more details

Required Technical Courses (16 Courses)
Complete the following courses:
- **CDEV1210** Child Growth and Development (3 Credits)
- **CDEV1220** Health, Safety & Nutrition (3 Credits)
- **CDEV1230** Guiding Children's Behavior (3 Credits)
- **CDEV1240** Working with Diverse Families and Children (3 Credits)
- **CDEV1260** Observation and Assessment 1 (1 Credit)
- **CDEV1270** Learning Environment & Curriculum (3 Credits)
- **CDEV1310** Infant-Toddler Development and Learning Experiences (3 Credits)
- **CDEV1312** Preschool Development and Learning Experiences (3 Credits)
- **CDEV2210** Observation and Assessment 2 (2 Credits)
- **CDEV2510** Internship 1 (3 Credits)
- **CDEV2310** Children with Differing Abilities (3 Credits)
- **CDEV2520** Children with Challenging Behaviors (3 Credits)
- **CDEV2530** Curriculum Planning (3 Credits)
- **CDEV2550** Cognitive Development (3 Credits)
- **CDEV2560** Language and Literacy Development (3 Credits)
- **CDEV2590** Social-Emotional Development and Learning (3 Credits)

Or

- **CDEV1340** Planning and Implementing Curriculum (4 Credits)

Liberal Arts and Sciences - Sociology or Psychology (1 Course)
Select at least one course from MNTC Goal Area 5 in PSYC or SOC.

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.

Liberal Arts and Sciences - Communication (1 Course)
Select at least one ENGL or COMM course from MNTC Goal Area 1.

Required Liberal Arts & Sciences (7 - 9 Credits)
To complete an AAS Degree, students must complete 15 MNTC credits from 3 of the 10 MNTC goal areas.
Child Development
Diploma • 33 Credits

Required Technical Courses (10 Courses)
Complete the following courses:
- CDEV1210 Child Growth and Development (3 Credits)
- CDEV1220 Health, Safety & Nutrition (3 Credits)
- CDEV1230 Guiding Children's Behavior (3 Credits)
- CDEV1240 Working with Diverse Families and Children (3 Credits)
- CDEV1260 Observation and Assessment 1 (1 Credit)
- CDEV1270 Learning Environment & Curriculum (3 Credits)
- CDEV1310 Infant-Toddler Development and Learning Experiences (3 Credits)
- CDEV1312 Preschool Development and Learning Experiences (3 Credits)
- CDEV2210 Observation and Assessment 2 (2 Credits)
- CDEV2510 Internship 1 (3 Credits)

Required Liberal Arts & Sciences (6 Credits)
Students must complete 6 MnTC credits from courses in MnTC goal areas 1-10. Courses must be selected consultation with advisor/faculty.

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Administration of Child Care Programs
Certificate • 11 Credits
CERT2511/CERT3511

Degree Description
A manager of an early childhood or afterschool program has complex responsibilities that require a wide range of knowledge and skills. The Administration of Child Care Programs advanced certificate is designed to build students knowledge and abilities to adequately and effectively evaluate the qualifications and performance of employees, develop sound personnel practices, oversee the purchase, care and maintenance of equipment, develop and evaluate sound curricula, build and maintain professional relationships with parents, staff and colleagues, and respond sensitively to the diverse needs of children, their parents, and staff. To be enrolled in the Advanced Certificate students must have 17 credits in Child Development Careers, a related field, or advisor approval.

A National Association for the Education of Young Children (NAEYC) Approved Director’s Credential.

Admission Dates: Fall and Spring Semester

Offered on the Faribault and North Mankato Campuses
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Child Development Careers department. See the Child Development Careers department page for more details.

Required Technical Courses (5 Courses)

- **MKT 1900** Principles of Management (3 Credits)
- **MKT 1930** Human Resource Management (3 Credits)
- **ACCT1814** Payroll Accounting (3 Credits)
- Or
- **ACCT1810** Financial Accounting (4 Credits)
- **CDEV2940** Managing Multiple Sites (1 Credit)
- **CDEV2990** Practicum Project (1 Credit)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Child Development
Certificate • 16 Credits

Degree Description
The Child Development program is designed to establish foundations in early childhood education, improve the quality of early childhood services, and increase professionalism in the field. Students will learn skills, such as: guidance techniques, health and safety, cultural sensitivity, curriculum planning, enhancing literacy, and interpersonal communication.

Admission Dates: Fall and Spring Semester

Offered on the Faribault and North Mankato Campuses
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Child Development Careers department. See the Child Development Careers department page for more details

Required Technical Courses (6 Courses)
Choose the following courses
CDEV1210 Child Growth and Development (3 Credits)
CDEV1220 Health, Safety & Nutrition (3 Credits)
CDEV1230 Guiding Children's Behavior (3 Credits)
CDEV1240 Working with Diverse Families and Children (3 Credits)
CDEV1260 Observation and Assessment 1 (1 Credit)
CDEV1270 Learning Environment & Curriculum (3 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Civil Engineering Technology
A.A.S. Degree • 60 Credits

Degree Description
Learners in the Civil Engineering Technology program will learn surveying techniques along with design and construction practices dealing with sewer, water, streets, roads and land surveying. Learners will be introduced to the newest surveying equipment plus computer programming, computer aided drafting and surveying systems. The ability to work independently and make decisions, along with accuracy and neatness are very important qualities for technicians. Technicians must be able to deal with professional people as well as the general public on a daily basis. The A.A.S. degree provides students with the necessary technical skills plus the Liberal Arts and Sciences base to broaden their horizons and aid them in seeing employment advancement.

Admission Dates: Fall and Spring Semester

Offered on the North Mankato Campus
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Civil Engineering Technology department. See the Civil Engineering Technology department page for more details

Required Technical Courses (13 Courses)
Complete the following courses:
- CTLS1110 Basic AutoCAD (3 Credits)
- CTLS1800 Construction Contract Documents (3 Credits)
- CTLS1805 Civil Cad (3 Credits)
- CTLS1810 Introduction to Surveying (4 Credits)
- CTLS1815 Surveying 2 (4 Credits)
- CTLS1820 Materials Technology (4 Credits)
- CTLS2110 Statics and Strengths of Materials (3 Credits)
- CTLS2825 Civil Design (4 Credits)
- CTLS2830 Construction Estimating and Inspections (4 Credits)
- CTLS2835 Introduction to Land Surveying (3 Credits)
- GIS 2840 Introduction to Geographic Information Systems (4 Credits)
- CTLS2846 Hydrology and Hydraulics (3 Credits)
- CTLS2851 Internship (3 Credits)

Required Math Courses (1 Course)
Select one or two courses to complete the Math requirement:
- MATH120 College Algebra (4 Credits)
- MATH125 Trigonometry (3 Credits)
- MATH130 Pre-Calculus (4 Credits)

Required Liberal Arts & Sciences (1 Course)
To complete an AAS Degree, students must complete 15 MNTC credits from 3 of the 10 MNTC Goal areas.

The following course is required:
- ENGL100 Composition (4 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.

A minimum of 4 - 7 credits from one MnTC Goal Area outside of MnTC Goal Areas 1 and 4. Courses must be chosen in consultation with Advisor/Faculty.
College Readiness

Degree Description

For more information about who needs to take college readiness courses, please view the understanding accuplacer scores page.

Offered on the Faribault and North Mankato Campuses

The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the College Readiness department. See the College Readiness department page for more details.

Reading Courses (2 Courses)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
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<tbody>
<tr>
<td>READ0080</td>
<td>Reading I</td>
<td>4</td>
</tr>
<tr>
<td>READ0085</td>
<td>Reading and Critical Thinking I and II Modular</td>
<td>6 Credits</td>
</tr>
<tr>
<td>READ0090</td>
<td>Reading and Critical Thinking II</td>
<td>4</td>
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Writing Courses (2 Courses)

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<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ENGL0080</td>
<td>English and Writing I</td>
<td>4</td>
</tr>
<tr>
<td>ENGL0085</td>
<td>Writing and English I and II Modular</td>
<td>6 Credits</td>
</tr>
<tr>
<td>ENGL0090</td>
<td>Writing and English II</td>
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</tbody>
</table>

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.

Math Courses (2 Courses)

<table>
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<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MATH0075</td>
<td>Introductory Algebra</td>
<td>4</td>
</tr>
<tr>
<td>MATH0085</td>
<td>Intermediate Algebra</td>
<td>4</td>
</tr>
</tbody>
</table>
Community Health Worker
Certificate • 16 Credits

Degree Description
Here is a list of courses required to earn the Community Health Worker Certificate of Training

Admission Dates: Fall and Spring Semester

Offered on the Faribault and North Mankato Campuses
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Community Health Worker department. See the Community Health Worker department page for more details

Required Technical Courses (9 Courses)
Complete all of the following courses:

**CHW 1000** Role, Advocacy and Outreach (2 Credits)
**CHW 1015** Organization and Resources (1 Credit)
**CHW 1025** Teaching and Capacity Building (2 Credits)
**CHW 1035** Legal and Ethical Responsibilities (1 Credit)
**CHW 1045** Coordination, Documentation and Reporting (1 Credit)
**CHW 1055** Communication Skills and Cultural Competence (2 Credits)
**CHW 1065** Community Health Worker Health Promotion (3 Credits)
**CHW 1075** Internship (2 Credits)
**CHW 1085** The CHW as a Public Health Professional (2 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Community Social Services
A.A.S. Degree • 60 Credits

Degree Description
The A.A.S. degree entitles learners to the Designated Coordinator status in addition to having three years of work experience and applies to supervisory and middle management positions in human services settings licensed by the Consolidated Standards Rule. Learners completing the A.A.S. degree must have certification in CPR and First Aid at the time of graduation. These certifications may be completed through SCC or an employer. The A.A.S. degree offers the graduates the option to continue their education at a four-year institution upon completion.

Admission Dates: Fall and Spring Semester

Offered on the Faribault and North Mankato Campuses
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Community Social Service department. See the Community Social Service department page for more details.

Required Technical Courses (15 Courses)
Complete the following courses:

- CSS 1801 Direct Service Professionalism (3 Credits)
- CSS 1802 Physical Developmental Supports I (3 Credits)
- CSS 1804 Person Centered Planning (3 Credits)
- CSS 1811 Facilitating Positive Behaviors (4 Credits)
- CSS 1812 Introduction to Social Work (3 Credits)
- CSS 1813 Social Welfare Services (3 Credits)
- CSS 1814 Community Social Service Projects (3 Credits)
- CSS 1902 Physical Developmental Supports II (3 Credits)
- CSS 1910 Community Social Service Internship (4 Credits)
- CSS 1911 Community Social Service Internship Seminar (1 Credit)
- CSS 1913 Supportive Interventions (4 Credits)
- HC 1000 Medical Terminology (3 Credits)
- HC 1934 Trained Medication Aide (2 Credits)
- HCTC1886 Nursing Assistant (4 Credits)
- OTEC1001 Computer Software for College (2 Credits)

Other Required Technical Courses
Students are responsible for these two courses outside of the credit totals for the program:

- HLTH1950 CPR (1 Credit)
- HLTH1952 First Aid (1 Credit)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.

Required Liberal Arts and Sciences (1 Course)

To complete an AAS Degree, students must complete 15 credits from 2 of the 10 MnTC goal areas.

The following course is required:

- ENGL100 Composition (4 Credits)
Community Social Service
Diploma • 43 Credits

Required Technical Courses (12 Courses)
Please complete the following courses:
- CSS 1801 Direct Service Professionalism (3 Credits)
- CSS 1802 Physical Developmental Supports I (3 Credits)
- CSS 1804 Person Centered Planning (3 Credits)
- CSS 1811 Facilitating Positive Behaviors (4 Credits)
- CSS 1902 Physical Developmental Supports II (3 Credits)
- CSS 1910 Community Social Service Internship (4 Credits)
- CSS 1911 Community Social Service Internship Seminar (1 Credit)
- CSS 1913 Supportive Interventions (4 Credits)
- HC 1000 Medical Terminology (3 Credits)
- HC 1934 Trained Medication Aide (2 Credits)
- HCTC1886 Nursing Assistant (4 Credits)
- OTEC1001 Computer Software for College (2 Credits)

Other Required Technical Courses
Students are responsible for these courses outside of the credit totals for the program.
- HLTH1950 CPR (1 Credit)
- HLTH1952 First Aid (1 Credit)

Elective Credits (1 Course)
Liberal Arts and Sciences Choose one Liberal Arts and Sciences course from the following list as recommended by advisor.
- BIOL100 Introduction to Biology (4 Credits)
- MATH154 Elementary Statistics (4 Credits)
- ETHN101 American Racial Minorities (3 Credits)
- PSYC110 Lifespan Psychology (3 Credits)
- SOC 101 Introduction to Sociology (4 Credits)
- ASL 101 American Sign Language 1 (3 Credits)
- ECON110 Principles of Macroeconomics (3 Credits)
- ECON120 Principles of Microeconomics (3 Credits)
- PHIL100 Ethics in Society (3 Credits)
- POL 110 American Government (3 Credits)
Community Social Service
Certificate • 17 Credits

Degree Description

Through the certificate program students will acquire the knowledge and skills for performing duties as Direct Service Professionals in residential, vocational, recreation, health and education settings.

Admission Dates: Fall and Spring Semester

Offered on the Faribault and North Mankato Campuses

The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Community Social Service department. See the Community Social Service department page for more details

Required Technical Courses (5 Courses)

Complete the following courses:

- CSS 1801 Direct Service Professionalism (3 Credits)
- CSS 1802 Physical Developmental Supports I (3 Credits)
- CSS 1804 Person Centered Planning (3 Credits)
- CSS 1811 Facilitating Positive Behaviors (4 Credits)
- HCTC1886 Nursing Assistant (4 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Information Systems
A.A.S. Degree • 60 Credits

Degree Description
This program is designed to prepare the learner for a career as a computer programmer, programmer/analyst, database programmer, database administrator, technical writer, technical support specialist, help desk specialist, web designer, web developer, webmaster, software or software tester. The learner will receive a solid background in the basic concepts of computer programming, web page development, web server application development, management and maintenance of web servers, and electronic commerce concepts. The learner will be exposed to major programming languages, systems analysis and software design, computer operating systems, and Internet services.

Hands-on training is provided on three platforms: IBM Mainframe, IBM Midrange, and PC clients and servers.

Students successfully completing this degree have the opportunity to apply the degree toward a Bachelor of Applied Science (BAS) in Computer and Information Technology at Minnesota State University, Mankato.

Degree Student Learning Outcomes
1. Design and code software applications using a variety of programming languages
2. Utilize and maintain relational databases
3. Use web application development tools
4. Apply current web server technologies

Admission Dates: Fall and Spring Semester

Offered on the North Mankato Campus
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Computer Careers department. See the Computer Careers department page for more details

Required Technical Courses (6 Courses)
Complete all of the following courses:
COMP1120 Foundations of Computing (4 Credits)
COMP1125 Spreadsheet/Database Integration (4 Credits)
COMP1130 Programming Fundamentals (4 Credits)
COMP1140 Web for Business (3 Credits)
COMP1200 PC Hardware and Software Essentials (4 Credits)
COMP1360 Introduction to Data Communications and Networking (4 Credits)

Select One Track (5 Courses)
Enterprise Computing Track
COMP2200 IBM i (iSeries) Operating System (4 Credits)
COMP2205 RPG IV (iSeries) (4 Credits)
COMP2220 SQL/DB2 (4 Credits)
COMP2300 Java (4 Credits)
COMP2145 Web Programming (4 Credits)
Or another course of similar level

Comp2445 A.S. in Business

Select One Track (5 Courses)
Web Programming Track
COMP2145 Web Programming (4 Credits)
COMP2150 Web Services (4 Credits)
COMP2300 Java (4 Credits)
COMP2310 Visual Basic.Net (4 Credits)
GCC 1120 Graphic Software 1 (4 Credits)

Required Capstone (2 Credits)
Complete 2 credits:
COMP2496 Capstone - Software Development (1 - 4 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
COMP2150 Web Services (4 Credits)  
Or  
COMP2460 Linux (4 Credits)  
Or  
COMP2500 Emerging Technologies (4 Credits)

**Required Liberal Arts & Sciences (3 Courses)**  
To complete an AAS Degree, students must complete 15 MNTC credits from 3 of the 10 MNTC Goal areas. Select the following required courses:

ENGL100 Composition (4 Credits)  
Or  
ENGL240 Technical Communication (4 Credits)  
COMM110 Public Speaking (3 Credits)  
Or  
COMM120 Small Group Communication (3 Credits)  
Or  
COMM140 Interpersonal Communication (3 Credits)  
MATH115 Concepts in Math (4 Credits)  
Or  
MATH120 College Algebra (4 Credits)

**Elective Liberal Arts & Sciences**  
Choose an additional 4 credits from MNTC Goal Areas 2, 3, 5, 6, 7, 8, 9 or 10.
Networking Services
A.A.S. Degree • 60 Credits

Degree Description

This program prepares the learner with the core skills necessary for a technical support position with a focus on networking services. Training is emphasized in the areas of installing, maintaining, and troubleshooting personal computers, computer networks, and peripheral devices utilizing current industry hardware and software products. Learners also receive an orientation on IBM mid-range and mainframe computer systems that are frequently integrated into corporate networks. Hands-on labs are included in the curriculum to give learners exposure to current and upcoming technology.

Degree Student Learning Outcomes

1. Design and administer computer networks.
2. Maintain and repair personal computer systems.
4. Support current computer operating systems.

Admission Dates: Fall and Spring Semester

Offered on the North Mankato Campus

The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Computer Careers department. See the Computer Careers department page for more details.

Required Technical Courses (6 Courses)
Complete the following courses:

- COMP1120 Foundations of Computing (4 Credits)
- COMP1125 Spreadsheet/Database Integration (4 Credits)
- COMP1130 Programming Fundamentals (4 Credits)
- COMP1140 Web for Business (3 Credits)
- COMP1200 PC Hardware and Software Essentials (4 Credits)
- COMP1360 Introduction to Data Communications and Networking (4 Credits)

Select One Track (5 Courses)

Networking Track Select the four required and one elective course.

- COMP2460 Linux (4 Credits)
- COMP2462 Microsoft Network Administration (4 Credits)
- COMP2466 Advanced Networking (4 Credits)
- COMP2475 Information Warfare (4 Credits)
- COMP2456 Cloud Technologies and Services (4 Credits)
- COMP2452 Information Storage and Management (4 Credits)
- COMP2453 Virtualization Technologies (4 Credits)
- COMP2500 Emerging Technologies (4 Credits)
- COMP2145 Web Programming (4 Credits)
- COMP2150 Web Services (4 Credits)
- COMP2300 Java (4 Credits)
- COMP2310 Visual Basic.Net (4 Credits)

Select One Track (5 Courses)

Cloud Computing Track Select the three required and two elective courses.

- COMP2456 Cloud Technologies and Services (4 Credits)
- COMP2452 Information Storage and Management (4 Credits)
- COMP2453 Virtualization Technologies (4 Credits)
- COMP2460 Linux (4 Credits)
- COMP2462 Microsoft Network Administration (4 Credits)

Required Capstone (2 Credits)

Complete 2 credits:

- COMP2498 Capstone - Networking Services (1 - 4 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
COMP2466 Advanced Networking (4 Credits)
COMP2475 Information Warfare (4 Credits)
COMP2500 Emerging Technologies (4 Credits)
COMP2145 Web Programming (4 Credits)
COMP2150 Web Services (4 Credits)
COMP2300 Java (4 Credits)
COMP2310 Visual Basic.Net (4 Credits)

**Required Liberal Arts & Sciences (3 Courses)**
To complete an AAS Degree, students must complete 15 MNTC credits from 3 of the 10 MNTC goal areas. Select the following courses:

ENGL100 Composition (4 Credits)
Or
ENGL240 Technical Communication (4 Credits)

COMM110 Public Speaking (3 Credits)
Or
COMM120 Small Group Communication (3 Credits)
Or
COMM140 Interpersonal Communication (3 Credits)

MATH115 Concepts in Math (4 Credits)
Or
MATH120 College Algebra (4 Credits)

**Elective Liberal Arts & Sciences**
Choose an additional 4 credits from MNTC Goal Areas 2,3,5,6,7,8,9 or 10
Information Systems
Diploma • 64 Credits

Degree Description
This program prepares the learner with the core skills necessary for a technical support position with a focus on networking services. Training is emphasized in the areas of installing, maintaining, and troubleshooting personal computers, computer networks, and peripheral devices utilizing current industry hardware and software products. Learners also receive an orientation on IBM mid-range and mainframe computer systems that are frequently integrated into corporate networks. Hands-on labs are included in the curriculum to give learners exposure to current and upcoming technology.

Diploma Student Learning Outcomes
1. Design and code software applications using a variety of programming languages.
2. Utilize and maintain relational databases.
3. Use web application development tools.
4. Apply current web server technologies.

Admission Dates: Fall and Spring Semester

Offered on the North Mankato Campus
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Computer Careers department. See the Computer Careers department page for more details.

Required Technical Courses (6 Courses)
Complete all of the following courses:
- COMP1120 Foundations of Computing (4 Credits)
- COMP1125 Spreadsheet/Database Integration (4 Credits)
- COMP1130 Programming Fundamentals (4 Credits)
- COMP1140 Web for Business (3 Credits)
- COMP1200 PC Hardware and Software Essentials (4 Credits)
- COMP1360 Introduction to Data Communications and Networking (4 Credits)

Technical Electives (20 Credits)
Choose 20 credits from the following courses:
- WEB DEV
  - COMP2145 Web Programming (4 Credits)
  - COMP2150 Web Services (4 Credits)
- PC SOFTWARE DEV
  - COMP2130 Advanced Spreadsheets/Database & Programming (4 Credits)
  - COMP2300 Java (4 Credits)
  - COMP2310 Visual Basic.Net (4 Credits)
- ENTERPRISE DEV
  - COMP2200 IBM i5 (iSeries) Operating System (4 Credits)
  - COMP2205 RPG IV (iSeries) (4 Credits)
  - COMP2210 COBOL (4 Credits)

Technical Electives (9 Credits)
Choose 9 credits from the following:
- COMP2460 Linux (4 Credits)
- COMP2462 Microsoft Network Administration (4 Credits)
- COMP2464 Application of Wireless & Mobile Networks (4 Credits)
- COMP2466 Advanced Networking (4 Credits)
- COMP2475 Information Warfare (4 Credits)
- COMP2498 Capstone - Networking Services (1 - 4 Credits)

Required Capstone (4 Credits)
Complete 4 credits:
- COMP2496 Capstone - Software Development (1 - 4 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Required Liberal Arts and Sciences (2 Courses)
Select the following courses:

- **ENGL100** Composition (4 Credits)
- **COMM110** Public Speaking (3 Credits)
Networking Services
Diploma • 64 Credits

Degree Description

This program prepares the learner with the core skills necessary for a technical support position with a focus on networking services. Training is emphasized in the areas of installing, maintaining, and troubleshooting personal computers, computer networks, and peripheral devices utilizing current industry hardware and software products. Learners also receive an orientation on IBM mid-range and mainframe computer systems that are frequently integrated into corporate networks. Hands-on labs are included in the curriculum to give learners exposure to current and upcoming technology.

Diploma Student Learning Outcomes

1. Design and administer computer networks.
2. Maintain and repair personal computer systems.
4. Support current computer operating systems.

Admission Dates: Fall and Spring Semester

Offered on the North Mankato Campus

The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Computer Careers department. See the Computer Careers department page for more details.

Required Technical Courses (11 Courses)

Complete the following courses:

- COMP1120 Foundations of Computing (4 Credits)
- COMP1125 Spreadsheet/Database Integration (4 Credits)
- COMP1130 Programming Fundamentals (4 Credits)
- COMP1140 Web for Business (3 Credits)
- COMP1200 PC Hardware and Software Essentials (4 Credits)
- COMP1360 Introduction to Data Communications and Networking (4 Credits)
- COMP2460 Linux (4 Credits)
- COMP2462 Microsoft Network Administration (4 Credits)
- COMP2464 Application of Wireless & Mobile Networks (4 Credits)
- COMP2466 Advanced Networking (4 Credits)
- COMP2475 Information Warfare (4 Credits)

Technical Electives (9 Credits)

You must complete 9 credits from the following courses:

- COMP2130 Advanced Spreadsheets/Database & Programming (4 Credits)
- COMP2145 Web Programming (4 Credits)
- COMP2150 Web Services (4 Credits)
- COMP2200 IBM i5 (iSeries) Operating System (4 Credits)
- COMP2205 RPG IV (iSeries) (4 Credits)
- COMP2210 COBOL (4 Credits)
- COMP2300 Java (4 Credits)
- COMP2310 Visual Basic.Net (4 Credits)
- COMP2496 Capstone - Software Development (1 - 4 Credits)

Required Capstone (4 Credits)

Complete 4 credits:

- COMP2498 Capstone - Networking Services (1 - 4 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.

Required Liberal Arts & Sciences (2 Courses)

Complete the following courses:

- ENGL100 Composition (4 Credits)
- COMM110 Public Speaking (3 Credits)
Cloud Computing and Virtualization
Certificate • 20 Credits

Degree Description

*** PENDING MnSCU APPROVAL ***

This certificate provides a complete introduction to Cloud Computing, virtualization, legacy hardware and software considerations and approaches to transitioning information technology from legacy systems to a shared managed service model. Through practical, hands-on activities, learners will explore the technical infrastructure and administrative requirements of server-based computing utilizing both open source and proprietary virtualization software. Prior to entry into this program, it is strongly recommend that learners should complete the Computer Assistant Certificate of have advanced computer literacy and/or IT related industry experience.

Admission Dates: Spring Semester

Offered on the North Mankato Campus
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Computer Careers department. See the Computer Careers department page for more details

Required Technical Courses (3 Courses)
Complete the following courses:

- COMP2456 Cloud Technologies and Services (4 Credits)
- COMP2452 Information Storage and Management (4 Credits)
- COMP2453 Virtualization Technologies (4 Credits)

Technical Electives (8 Credits)
Select two of the following courses:

- COMP2460 Linux (4 Credits)
- COMP2462 Microsoft Network Administration (4 Credits)
- COMP2466 Advanced Networking (4 Credits)
- COMP2475 Information Warfare (4 Credits)
- COMP2500 Emerging Technologies (4 Credits)
- COMP2145 Web Programming (4 Credits)
- COMP2150 Web Services (4 Credits)
- COMP2300 Java (4 Credits)
- COMP2310 Visual Basic.Net (4 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Computer Assistant
Certificate • 23 Credits

Degree Description

This program prepares the learner with the core skills necessary for a technical support position with a focus on personal computer operations. Training is emphasized in the areas of installing, maintaining, and troubleshooting personal computers and peripheral devices utilizing current industry hardware and software products. Learners also receive an orientation on IBM midrange and mainframe computer systems that are frequently integrated into corporate networks. Hands-on labs are included in the curriculum to give students exposure to current and upcoming technology.

Students successfully completing this certificate will have satisfied the requirements of the first year of the Networking Services AAS degree.

Admission Dates: Fall and Spring Semester

Offered on the North Mankato Campus
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Computer Careers department. See the Computer Careers department page for more details.

Required Technical Courses (6 Courses)
Complete all of the following courses:

- COMP1120 Foundations of Computing (4 Credits)
- COMP1125 Spreadsheet/Database Integration (4 Credits)
- COMP1130 Programming Fundamentals (4 Credits)
- COMP1140 Web for Business (3 Credits)
- COMP1200 PC Hardware and Software Essentials (4 Credits)
- COMP1360 Introduction to Data Communications and Networking (4 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Enterprise Computing
Certificate • 20 Credits

Degree Description

*** PENDING MnSCU APPROVAL ***

This certificate provides learners with an additional skill-set to support IBM's Power Systems Platform and the IBMi Operating System. Successful graduates will gain experience with RPG, DB2/SQL, and IBMi. This will help a learner bridge the gap between current computer systems and legacy systems still used as part of several enterprise computing systems. Prior to entry into the program, it is strongly recommended that learners complete the Computer Assistant certificate or have advanced programming skills and/or IT related inducstry experience.

Admission Dates: Spring Semester

Offered on the North Mankato Campus
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Computer Careers department. See the Computer Careers department page for more details

Required Technical Courses (4 Courses)
Complete the following courses:
- COMP2200 IBM i5 (iSeries) Operating System (4 Credits)
- COMP2205 RPG IV (iSeries) (4 Credits)
- COMP2220 SQL/DB2 (4 Credits)
- COMP2300 Java (4 Credits)

Technical Electives (4 Credits)
Select one of the following courses:
- COMP2145 Web Programming (4 Credits)
- COMP2150 Web Services (4 Credits)
- COMP2460 Linux (4 Credits)
- COMP2500 Emerging Technologies (4 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Network Administration
Certificate • 20 Credits

**Required Technical Courses (4 Courses)**
Complete the following courses:
- COMP2460 Linux (4 Credits)
- COMP2462 Microsoft Network Administration (4 Credits)
- COMP2466 Advanced Networking (4 Credits)
- COMP2475 Information Warfare (4 Credits)

**Technical Electives (4 Credits)**
Select one of the following courses:
- COMP2456 Cloud Technologies and Services (4 Credits)
- COMP2452 Information Storage and Management (4 Credits)
- COMP2453 Virtualization Technologies (4 Credits)
- COMP2500 Emerging Technologies (4 Credits)
- COMP2145 Web Programming (4 Credits)
- COMP2150 Web Services (4 Credits)
- COMP2300 Java (4 Credits)
- COMP2310 Visual Basic.Net (4 Credits)

**Degree Description**

**** PENDING MnSCU APPROVAL ****

This certificate provides learners with the skills they need to install, troubleshoot and support computers and servers in small to medium sized computer networks. Through hands-on experience building, configuring, and managing computer network hardware and software, learners will develop a broad background in networking technologies, administration, and support. Successful graduates will be ready to pursue careers in network support and administration, and the electives included in the program allow learners to custom design their certificate based on their needs and employment goals. In addition, the program prepares learners for a wide variety of industry certification exams, including Network+, Linux+, LPI, MCP, Security+ and VCP in the areas of Cisco Networking, Microsoft, Security, and Technical Support. Students can take these exams at the South Central College Testing Center.

**Admission Dates: Spring Semester**

**Offered on the North Mankato Campus**

The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Computer Careers department. See the Computer Careers department page for more details.

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Web Programmer
Certificate • 20 Credits

Degree Description
This program is designed for the individual looking to expand their knowledge of web programming and applications. Learners will focus on skills and software that allow for the behind-the-scenes functions of a website.

These courses may also be applied to the Information Systems AAS degree.

Admission Dates: Fall and Spring Semester

Offered on the North Mankato Campus
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Computer Careers department. See the Computer Careers department page for more details

Required Technical Courses (5 Courses)
Complete all of the following courses:

- **COMP2145** Web Programming (4 Credits)
- **COMP2150** Web Services (4 Credits)
- **COMP2300** Java (4 Credits)
- **COMP2310** Visual Basic.Net (4 Credits)
- **GCC 1120** Graphic Software 1 (4 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Computer Integrated Machining
A.A.S. Degree • 72 Credits

Degree Description
The A.A.S degree program consists of opportunities for students to work with multiple aspects of Computer Integrated Machining including working with engineering drawings, CNC programming, lathe turning, vertical milling and grinding, jig and fixtures, and mold and die. During this A.A.S. degree program, learners will have the opportunity to receive eleven national credentials from the National Institute for Metalworking Skills (NIMS). In addition to the technical training, learners in the A.A.S. degree will receive the benefits of valuable Liberal Arts and Sciences courses.

Admission Dates: Fall Semester

Offered on the Faribault and North Mankato Campuses
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Computer Integrated Machining department. See the Computer Integrated Machining department page for more details

Required Technical Courses (24 Courses)
You must complete all of the following classes:

**CIM 1100** Interpreting Engineering Drawings I - Introduction (1 Credit)
**CIM 1101** Interpreting Engineering Drawings I - Application (1 Credit)
**CIM 1102** CNC Programming I (3 Credits)
**CIM 1103** Lathe Turning I (2 Credits)
**CIM 1104** Vertical Milling I (2 Credits)
**CIM 1105** Surface Grinding I (2 Credits)
**CIM 1106** Machine Tool Theory I (2 Credits)
**CIM 1150** Machining Computations (2 Credits)
**CIM 1201** Interpreting Engineering Drawings II (2 Credits)
**CIM 1202** CNC Programming II (3 Credits)
**CIM 1203** Lathe Turning II (3 Credits)
**CIM 1204** Vertical Milling II (2 Credits)
**CIM 1205** Surface Grinding II (2 Credits)
**CIM 1206** Machine Tool Theory II (2 Credits)
**CIM 1207** Internship (2 Credits)
**CIM 2108** Applications II (3 Credits)
**CIM 2110** Applications I (2 Credits)
**CIM 2102** CNC Programming III (3 Credits)
**CIM 2106** Jigs and Fixtures (2 Credits)
**CIM 2107** Quality Process and Inspection (2 Credits)
**CIM 2250** Applied Welding (2 Credits)
**CIM 2201** Interpreting Engineering Drawings IV (3 Credits)
**CIM 2202** CNC Programming IV (3 Credits)
**CIM 2207** Machining & Process Theory (2 Credits)
**CIM 2208** Applications III (3 - 4 Credits)

Required Liberal Arts and Sciences (2 Courses)
To complete an AAS Degree, students must complete 15 MNTC credits from 3 of the 10 MNTC Goal Areas.

Internship and Applications II (4 Credits)
Select four credits from the following:

**CIM 1107** Internship (2 Credits)
**CIM 2108** Applications II (2 - 4 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.

Additional Required Liberal Arts and Sciences (1 Course)
Select at least one course from MnTC Goals 3 or 4.
Choose two courses from the following:

COMM120  Small Group Communication (3 Credits)
Or
COMM140  Interpersonal Communication (3 Credits)

HUM 100  Critical Thinking (3 Credits)
Or
PHIL100  Ethics in Society (3 Credits)

**Elective Liberal Arts and Sciences**

Select an additional 5-6 credits from the MnTC goal areas to total the 15 credits required.
Computer Integrated Machining
Diploma • 66 Credits

Degree Description
The diploma program consists of opportunities for students to work with multiple aspects of Computer Integrated Machining including working with engineering drawings, CNC programming, lathe turning, vertical milling and grinding, jig and fixtures, and mold and die. During this diploma program, learners will have the opportunity to receive eleven national credentials from the National Institute for Metalworking Skills (NIMS).

Admission Dates: Fall Semester

Offered on the Faribault and North Mankato Campuses
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Computer Integrated Machining department. See the Computer Integrated Machining department page for more details

Required Technical Courses (25 Courses)
You must complete all of the following courses:

CIM 1100 Interpreting Engineering Drawings I - Introduction (1 Credit)
CIM 1101 Interpreting Engineering Drawings I - Application (1 Credit)
CIM 1102 CNC Programming I (3 Credits)
CIM 1103 Lathe Turning I (2 Credits)
CIM 1104 Vertical Milling I (2 Credits)
CIM 1105 Surface Grinding I (2 Credits)
CIM 1106 Machine Tool Theory I (2 Credits)
CIM 1150 Machining Computations (2 Credits)
CIM 1201 Interpreting Engineering Drawings II (2 Credits)
CIM 1202 CNC Programming II (3 Credits)
CIM 1203 Lathe Turning II (3 Credits)
CIM 1204 Vertical Milling II (2 Credits)
CIM 1205 Surface Grinding II (2 Credits)
CIM 1206 Machine Tool Theory II (2 Credits)
CIM 1207 Applications I (2 Credits)
CIM 2101 Interpreting Engineering Drawings III (3 Credits)
CIM 2102 CNC Programming III (3 Credits)
CIM 2106 Jigs and Fixtures (2 Credits)
CIM 2107 Quality Process and Inspection (2 Credits)
CIM 2201 Interpreting Engineering Drawings IV (3 Credits)
CIM 2202 CNC Programming IV (3 Credits)
CIM 2206 Mold and Die (3 Credits)
CIM 2207 Machining & Process Theory (2 Credits)
CIM 2208 Applications III (2 - 4 Credits)

Internship and Applications II (4 Credits)
Select four credits from the following:

CIM 1107 Internship (2 Credits)
CIM 2108 Applications II (2 - 4 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.

Required Liberal Arts and Sciences (3 Credits)
You must complete one of the following courses:

COMM120 Small Group Communication (3 Credits)
Or

Elective Liberal Arts and Science (3 Credits)
To complete the diploma, students must complete an additional 3
COMM140 Interpersonal Communication (3 Credits) credits from courses outside of MnTC Goal Area 1. Course must be selected in consultation with advisor/faculty.
Required Technical Courses (23 Courses)
Complete the following courses:
- **CART1800** Introduction to Food Service (2 Credits)
- **CART1803** Food and Beverage Control (1 Credit)
- **CART1855** Wok/Oriental Cookery (2 Credits)
- **CART1900** Specialty Breads (2 Credits)
- **FBMG2950** Specialty Option I (1 Credit)
- **FBMG2986** Hospitality Nutrition I (2 Credits)
- **FBMG2990** Advanced Culinary Skill Production (3 Credits)
- **HLTH1950** CPR (1 Credit)
- **HLTH1952** First Aid (1 Credit)
- **HRIC2860** Buffet Preparation and Service (2 Credits)
- **HRIC2870** Basic Management/Supervisory Skills (2 Credits)
- **HRIC2871** Purchasing and Receiving (2 Credits)
- **HRIC2875** Menu Design (2 Credits)
- **MKT 1800** Introduction to Sales (3 Credits)
- **OTEC2000** Employment Search Skills (2 Credits)
- **OTEC1001** Computer Software for College (2 Credits)
- **QFPR1840** Basic Cooking Principles (3 Credits)
- **QFPR1841** Basic Meat, Poultry, Fish/Shellfish Identification & Processing (4 Credits)
- **QFPR1842** Stocks, Sauces and Soups (3 Credits)
- **QFPR1846** Introduction to Breakfast and Pantry (3 Credits)
- **QFPR1850** Basic Baking (4 Credits)
- **QFPR1880** Quality Assurance (2 Credits)
- **QFPR1890** Quality Food Production (3 Credits)

Required Liberal Arts and Sciences (2 Courses)
To complete an AAS degree, students must complete 15 MNTC credits from 3 of the 10 MNTC Goal Areas. Courses must be approved by advisor/faculty.

The following courses are required:
- **COMM140** Interpersonal Communication (3 Credits)
- **ETHN101** American Racial Minorities (3 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your [catalog of record](#) may have different requirements.
Culinary Arts
Diploma • 55 Credits

Required Technical Courses (22 Courses)
- CART1800 Introduction to Food Service (2 Credits)
- CART1803 Food and Beverage Control (1 Credit)
- CART1855 Wok/Oriental Cookery (2 Credits)
- CART1900 Specialty Breads (2 Credits)
- FBMG2950 Specialty Option I (1 Credit)
- FBMG2986 Hospitality Nutrition I (2 Credits)
- FBMG2990 Advanced Culinary Skill Production (3 Credits)
- HLTH1950 CPR (1 Credit)
- HLTH1952 First Aid (1 Credit)
- HRIC2860 Buffet Preparation and Service (2 Credits)
- HRIC2870 Basic Management/Supervisory Skills (2 Credits)
- HRIC2871 Purchasing and Receiving (2 Credits)
- HRIC2875 Menu Design (2 Credits)
- OTEC1001 Computer Software for College (2 Credits)
- OTEC2000 Employment Search Skills (2 Credits)
- QFPR1840 Basic Cooking Principles (3 Credits)
- QFPR1841 Basic Meat, Poultry, Fish/Shellfish Identification & Processing (4 Credits)
- QFPR1842 Stocks, Sauces and Soups (3 Credits)
- QFPR1846 Introduction to Breakfast and Pantry (3 Credits)
- QFPR1850 Basic Baking (4 Credits)
- QFPR1880 Quality Assurance (2 Credits)
- QFPR1890 Quality Food Production (3 Credits)

Required Liberal Arts and Sciences (2 Courses)
Complete the following courses:
- COMM140 Interpersonal Communication (3 Credits)
- ETHN101 American Racial Minorities (3 Credits)

Please note: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.

Degree Description
The Culinary Arts program is designed to meet the varied needs of food service establishments. Learners are provided with a background of hot and cold food preparation, food service management, and cost control. Demonstrations and practical experience provided in our operational dining room/cafeteria permit learners to develop the necessary food preparation skills for gainful employment.

Admission Dates: Fall Semester

Offered on the North Mankato Campus
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Culinary Arts department. See the Culinary Arts department page for more details.
Dental Assisting
A.A.S. Degree • 63 Credits

Degree Description
Here is a list of courses required to earn the Dental Assisting Associate of Applied Science Degree.

Admission Dates: Fall Semester

Offered on the North Mankato Campus
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Dental Assisting department. See the Dental Assisting department page for more details.

Required Technical Courses (19 Courses)
The following courses must be completed:

- **DA 1810** Dental Technology (1 Credit)
- **DA 1811** Dental Science I (2 Credits)
- **DA 1812** Oral Anatomy (2 Credits)
- **DA 1813** Preclinical Dental Assisting (2 Credits)
- **DA 1814** Chairside Dental Assisting I (4 Credits)
- **DA 1815** Dental Materials (3 Credits)
- **DA 1816** Radiology I (3 Credits)
- **DA 1821** Dental Practice Management (2 Credits)
- **DA 1822** Dental Science II (2 Credits)
- **DA 1825** Dental Assisting Expanded Functions (5 Credits)
- **DA 1826** Radiology II (3 Credits)
- **DA 1827** Dental Nutrition (1 Credit)
- **DA 1828** Nitrous Oxide Sedation (1 Credit)
- **DA 1830** Chairside Dental Assisting II (4 Credits)
- **DA 1831** D.A. Internship I (4 Credits)
- **DA 1841** D.A. Internship II (4 Credits)
- **HLTH 1950** CPR (1 Credit)
- **HLTH 1952** First Aid (1 Credit)
- **HLTH 1954** Safety (1 Credit)

Choose one MATH course (MATH 115 or higher) from (1 Course)

- **MATH 115** Concepts in Math (4 Credits)
- **MATH 120** College Algebra (4 Credits)
- **MATH 125** Trigonometry (3 Credits)
- **MATH 130** Pre-Calculus (4 Credits)
- **MATH 131** Calculus I (4 Credits)
- **MATH 132** Calculus II (4 Credits)
- **MATH 154** Elementary Statistics (4 Credits)
- **MATH 231** Ordinary Differential Equations (4 Credits)
- **MATH 233** Multivariable Calculus (4 Credits)
- **MATH 240** Elementary Linear Algebra (4 Credits)

Required Liberal Arts & Sciences (3 Courses)
To complete an AAS Degree, students must complete 17 MNTC credits from 3 of the 10 MNTC Goal Areas. Courses must be approved by advisor/faculty. The following courses are required:

- **COMM 140** Interpersonal Communication (3 Credits)
- **ENGL 100** Composition (4 Credits)
- **PHIL 100** Ethics in Society (3 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.

Elective Liberal Arts and Sciences MnTC Goal 5 (3 Credits)
Select 3 credits from MnTC Goal 5: History and Social and Behavioral Sciences. Course should be chosen with Advisor approval.
Dental Assisting
Diploma • 52 Credits

Degree Description
Here is a list of courses required to earn the Dental Assisting Diploma of Occupational Proficiency.

Admission Dates: Fall Semester

Offered on the North Mankato Campus
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Dental Assisting department. See the Dental Assisting department page for more details.

Required Technical Courses (19 Courses)
Complete all of the following courses:

- **DA 1810** Dental Technology (1 Credit)
- **DA 1811** Dental Science I (2 Credits)
- **DA 1812** Oral Anatomy (2 Credits)
- **DA 1813** Preclinical Dental Assisting (2 Credits)
- **DA 1814** Chairside Dental Assisting I (4 Credits)
- **DA 1815** Dental Materials (3 Credits)
- **DA 1816** Radiology I (3 Credits)
- **DA 1821** Dental Practice Management (2 Credits)
- **DA 1823** Dental Science II (2 Credits)
- **DA 1825** Dental Assisting Expanded Functions (5 Credits)
- **DA 1826** Radiology II (3 Credits)
- **DA 1827** Dental Nutrition (1 Credit)
- **DA 1829** Nitrous Oxide Sedation (1 Credit)
- **DA 1830** Chairside Dental Assisting II (4 Credits)
- **DA 1831** D.A. Internship I (4 Credits)
- **DA 1841** D.A. Internship II (4 Credits)
- **HLTH1950** CPR (1 Credit)
- **HLTH1952** First Aid (1 Credit)
- **HLTH1954** Safety (1 Credit)

Required General Education (2 Courses)
Courses must be selected in consultation with advisor/faculty.

- **PHIL100** Ethics in Society (3 Credits)
- **COMM140** Interpersonal Communication (3 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Emergency Medical Technician

Degree Description

Emergency Medical Technician is NOT a program leading to a degree at South Central College. Rather, SCC offers a series of courses that lead to certifications which prepare learners to render emergency medical services to the public.

These certifications are not eligible for federal student aid.

Basic Entrance Requirements

Students must be 18 years of age prior to the start of the initial Emergency Medical Technician (EMT) course. There is not an age requirement for the First Responder course.

Student Background Studies

Minnesota law requires that any person who provides services that involve direct contact with patients and residents at a health care or child care facility licensed by the Minnesota Department of Health have a background study conducted by the state. An individual who is disqualified from having direct patient contact as a result of the background study, and whose disqualification is not set aside by the Commissioner of Health, will not be permitted to participate in a clinical placement in a Minnesota licensed health care or child care facility. Failure to participate in a clinical placement required by the program could result in ineligibility to qualify for completion of the course.

Admission Dates: Fall and Spring Semester

Offered on the Faribault and North Mankato Campuses

The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Emergency Medical Services department. See the Emergency Medical Services department page for more details

(4 Courses)

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEMS1200</td>
<td>Emergency Medical Technician Initial (160 Hours)</td>
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</tr>
<tr>
<td>HEMS1220</td>
<td>Emergency Medical Technician Refresher (24 Hours)</td>
<td>2</td>
</tr>
<tr>
<td>HEMS1300</td>
<td>First Responder Initial (48 Hours)</td>
<td>2</td>
</tr>
<tr>
<td>HEMS1320</td>
<td>First Responder Refresher (16 Hours)</td>
<td>1</td>
</tr>
</tbody>
</table>

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Required Technical Courses (12 Courses)

- **MECA1122** Electricity - Devices and Circuits I (3 Credits)
- **MECA1210** Digital Electronics (3 Credits)
- **MECA1220** Mechanical Systems (3 Credits)
- **MECA1222** Electricity - Devices and Circuits II (3 Credits)
- **MECA1250** Mechatronics Systems Operations I (3 Credits)
- **MECA1270** Modeling and Simulation (3 Credits)
- **MECA2110** Sensors and Control (3 Credits)
- **MECA2120** Fluid Power 1 (3 Credits)
- **MECA2130** Hydraulics (3 Credits)
- **RNEW1115** Mechanical Fundamentals (MN West) (3 Credits)
- **RNEW1300** Introduction to Traditional/Renewable Energy (MN West) (3 Credits)

- **HLTH1954** Safety (1 Credit)

And

- **ELWT1160** Environmental Health and Safety (MN West) (1 Credit)

Or

- **SHA 1600** Introduction to Industrial Safety & Health (Hibbing CC) (2 Credits)

Elective Credits (10 Credits)

Technical Courses (Specialty Emphasis) Select 10 credits from the following Energy Technology Specialty Options. Courses are offered at multiple MnSCU colleges. See your advisor for more information. Windsmith, Ethanol, Biodiesel, Solar Power, Fossil Fuels, Power Generation

**WIND POWER**

- **ELWT1100** Wind Energy Fundamentals (MN West) (3 Credits)
- **ELWT1170** OSHA Standards & Climbing Lab (MN West) (2 Credits)

**SOLAR**

- SEE ADVISOR

**ETHANOL**

- **RNEW1100** Process Dynamics (MN West) (3 Credits)
- **RNEW1101** Ethanol Process Fundamentals (MN West) (2 Credits)
- **RNEW1175** Industrial Water Treatment (MN West) (2 Credits)
- **RNEW2120** Ethanol Separation Technology (MN West) (2 Credits)

**BIODIESEL**

- **RNEW1100** Process Dynamics (MN West) (3 Credits)
- **RNEW1102** Biodiesel Process Fundamentals (MN West) (2 Credits)
- **RNEW1175** Industrial Water Treatment (MN West) (2 Credits)
- **RNEW1195** Feedstock, Technology & Regulations (MN West) (2 Credits)

**FOSSIL FUEL**

- SEE ADVISOR

**POWER GEN**

- **AAS 3482**

This credential is part of the Energy Technical Specialist department. See the Energy Technical Specialist department page for more details.

Degree Description

The Energy Technical Specialist Associate of Applied Science degree will convey the skills and knowledge necessary to be successful in both the traditional and renewable energy fields. Learners will have the option to take courses in windsmithe, ethanol, biodiesel, solar power, fossil fuels and power generation.

Admission Dates: Fall and Spring Semester

Offered on the North Mankato Campus

The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our [Catalog Archive](#).
Required Liberal Arts and Sciences (3 Courses)

To complete an AAS degree, students must complete courses in 3 of the 10 MNTC goal areas. These courses do not apply to the 53 technical credits and may appear elsewhere on your degree audit. Select the following courses:

**ENGL100** Composition (4 Credits)

**BIOL106** Introduction to Cell Biology (3 Credits)
And

**CHEM108** Introduction to Chemistry (4 Credits)

Or

**PHYS101** Introductory Physics (3 Credits)

Or

**PHYS211** Principles in Physics I (4 Credits)

**MATH120** College Algebra (4 Credits)

---

**ETEC2546** Power Plant Technology (St. Cloud TCC) (4 Credits)

(Credit)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Required Core Courses (8 Courses)
Complete the following courses:

- ENGL100 Composition (4 Credits)
- CHEM120 Principles of Chemistry I (5 Credits)
- PHYS221 General Physics I (4 Credits)
- PHYS222 General Physics II (4 Credits)
- MATH131 Calculus I (4 Credits)
- MATH132 Calculus II (4 Credits)
- MATH231 Ordinary Differential Equations (4 Credits)
- MATH233 Multivariable Calculus (4 Credits)

Select one of the following Engineering Specialties. (14 Credits)
You must complete at least one of the specialities in its entirety to graduate.

Civil Engineering Specialty

- ENGR2110 Statics (3 Credits)
- ENGR2211 Dynamics (3 Credits)
- ENGR2220 Mechanics of Materials (3 Credits)
- ENGR1110 Introduction to Engineering (2 Credits)
- ENGR2510 Thermodynamics (3 Credits)

Electrical Engineering Specialty (13 Credits)
Complete the following 13 credits:

- ENGR2311 Computer Programming (3 Credits)
- ENGR2231 Circuits I (4 Credits)
- ENGR2532 Circuits II (3 Credits)
- MECA1210 Digital Electronics (3 Credits)

Additional Required Liberal Arts and Sciences
To complete this AS degree, you must have a minimum of 30 credits in Liberal Arts and Sciences in at least 6 MnTC goal areas. The required Liberal Arts and Sciences courses satisfy goals 1, 3 and 4. You must complete an additional 6 credits in at least 3 MnTC goal areas to satisfy your degree requirements.

Please note: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.

Computer Engineering Specialty (13 Credits)
Complete the following 13 credits:

- ENGR2311 Computer Programming (3 Credits)
- ENGR2231 Circuits I (4 Credits)
- ENGR2532 Circuits II (3 Credits)
- MECA1210 Digital Electronics (3 Credits)

General Engineering Specialty (18 Credits)
Complete the following 18 credits:

- ENGR2110 Statics (3 Credits)
- ENGR2211 Dynamics (3 Credits)
- ENGR2220 Mechanics of Materials (3 Credits)
- ENGR1110 Introduction to Engineering (2 Credits)
- ENGR2311 Computer Programming (3 Credits)
- ENGR2231 Circuits I (4 Credits)

Degree Description
The Associate of Science in Broad Field Engineering is a rigorous curriculum in Mathematics, Physics and Engineering designed to prepare students for transfer to a four year Engineering program. Individuals will learn to apply math and science to help solve real-life problems. A key factor for learner success is the creation of a fabrication lab (Fab Lab) to allow learners to have access to equipment and instructors to assist in working on solving practical problems. Learners will learn to gain understanding of how to test theories by doing experiments in SCC's Fab Lab.

Admission Dates: Fall Semester

Offered on the North Mankato Campus

The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Engineering department. See the Engineering department page for more details.
Mechanical Engineering Specialty (21 Credits)
Complete the following 21 credits:
- **ENGR2110** Statics (3 Credits)
- **ENGR2211** Dynamics (3 Credits)
- **ENGR2220** Mechanics of Materials (3 Credits)
- **ENGR1110** Introduction to Engineering (2 Credits)
- **ENGR2510** Thermodynamics (3 Credits)
- **ENGR2311** Computer Programming (3 Credits)
- **ENGR2231** Circuits I (4 Credits)

Manufacturing Engineering Specialty (13 Credits)
Complete the following 13 credits:
- **ENGR2110** Statics (3 Credits)
- **ENGR2211** Dynamics (3 Credits)
- **ENGR2220** Mechanics of Materials (3 Credits)
- **ENGR2231** Circuits I (4 Credits)

Required Electives
Select an additional 0-8 credits of Electives or Liberal Arts and Sciences (MNTC) courses to meet the 60 credit requirement.
Courses may not have been used to satisfy requirements in your specialty area.

Select from the technical elective courses listed below or any additional MNTC approved courses.
- **ENGR2110** Statics (3 Credits)
- **ENGR2211** Dynamics (3 Credits)
- **ENGR1110** Introduction to Engineering (2 Credits)
- **ENGR1211** Engineering Drafting (2 Credits)
- **ENGR1211** Engineering Drafting (2 Credits)
- **ENGR1810** Surveying (2 Credits)
- **ENGR2510** Thermodynamics (3 Credits)
- **ENGR2311** Computer Programming (3 Credits)
- **MECA1140** Introduction to Geometric Dimensioning & Tolerancing (1 Credit)
- **MATH154** Elementary Statistics (4 Credits)
- **CHEM121** Principles of Chemistry II (5 Credits)

Elective Courses (Suggested)
These courses are not required but are suggested as courses which may be beneficial to you in this career field. You will graduate from this program even if you do not complete these courses.
- **ENGR2113** Engineering Design and Principles 3 (1 Credit)
- **ENGR2214** Engineering Design and Principles 4 (1 Credit)
Degree Description

The mission of English for Academic Purposes (EAP) at South Central College is to help English language learners attain their college and career goals by improving their academic language abilities. Mandatory placement in EAP courses is based on the ESL Listening and ESL Reading Accuplacer scores.

Learners scoring 40-100 on the ESL Reading Accuplacer test are required to enroll in and successfully complete EAP 0085 EAP College Writing and Grammar with a grade of C or better.

Learners scoring 45-100 on the ESL Listening Accuplacer test are required to enroll in and successfully complete EAP 0080 EAP Reading and Oral Communication with a grade of C or better.

After successfully completing the EAP courses, learners will complete ENGL 0090 and READ 0090 courses or retake the Accuplacer, for a small fee, to determine college readiness. Learners scoring below the ranges listed are required to meet with South Central College faculty and staff to discuss available options at the college.

South Central College is committed to preparing all learners for academic success and to assist learners in making a successful transition into the college academic environment.

Offered on the Faribault and North Mankato Campuses
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the English for Academic Purposes department. See the English for Academic Purposes department page for more details

(2 Courses)
EAP 0080 EAP Reading and Oral Communication (6 Credits)
EAP 0085 EAP College Writing and Grammar (6 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Farm Business Management
Diploma • 60 Credits

Degree Description
The Farm Business Management program is designed for those actively engaged in the operation and management of a farm business. The purpose of the program is to develop the manager’s ability to organize resources in order to meet business and family goals. Management is the utilization of resources to maximize the return to the scarcest resource which is a continuous decision-making process. The program emphasizes goal setting, the identification of resources, records management, business analysis and interpretation.

This program is eligible for state grant funding only.

Admission Dates: Fall, Spring, and Summer Semester

Offered on the Faribault and North Mankato Campuses
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Farm Business Management department. See the Farm Business Management department page for more details.

Required Technical Courses (12 Courses)
Complete the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FBMT1112</td>
<td>Foundations for Farm Business Management</td>
<td>4</td>
</tr>
<tr>
<td>FBMT1121</td>
<td>Preparation for Farm Business Analysis</td>
<td>4</td>
</tr>
<tr>
<td>FBMT1122</td>
<td>Implementing the System Management Plan</td>
<td>4</td>
</tr>
<tr>
<td>FBMT1131</td>
<td>Managing and Modifying Farm System Data</td>
<td>4</td>
</tr>
<tr>
<td>FBMT1132</td>
<td>Interpreting and Using Farm System Data</td>
<td>4</td>
</tr>
<tr>
<td>FBMT1141</td>
<td>Intro to Farm Business Management</td>
<td>4</td>
</tr>
<tr>
<td>FBMT2142</td>
<td>Interpreting Trends in Business Planning</td>
<td>4</td>
</tr>
<tr>
<td>FBMT2151</td>
<td>Strategies in Farm System Data Management</td>
<td>4</td>
</tr>
<tr>
<td>FBMT2152</td>
<td>Integrating System Information for Financial Planning</td>
<td>4</td>
</tr>
<tr>
<td>FBMT2161</td>
<td>Examination of the Context of Farm System Management</td>
<td>4</td>
</tr>
<tr>
<td>FBMT2162</td>
<td>Refining Farm System Management</td>
<td>4</td>
</tr>
</tbody>
</table>

Technical Electives (6 Credits)
Complete 6 credits from the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FBMT1113</td>
<td>Managing a Farm System in a Global Economy</td>
</tr>
<tr>
<td>FBMT1223</td>
<td>Using System Analysis in Total Farm Planning</td>
</tr>
<tr>
<td>FBMT1233</td>
<td>Application of Productive Enterprise Information</td>
</tr>
<tr>
<td>FBMT2200</td>
<td>Special Topics-General Farm Management</td>
</tr>
<tr>
<td>FBMT2239</td>
<td>Special Topics-Livestock</td>
</tr>
<tr>
<td>FBMT2243</td>
<td>Using Financial Instruments in Farm Systems Management</td>
</tr>
<tr>
<td>FBMT2253</td>
<td>System Plans and Projections</td>
</tr>
<tr>
<td>FBMT2263</td>
<td>Evaluating Farm System Programs</td>
</tr>
<tr>
<td>FBMT2300</td>
<td>Computer Applications in Business Management</td>
</tr>
<tr>
<td>FBMT2305</td>
<td>Legal Issues in Ag</td>
</tr>
<tr>
<td>FBMT2310</td>
<td>Environmental Interactions in Agriculture</td>
</tr>
<tr>
<td>FBMT2315</td>
<td>Effective Time Management</td>
</tr>
<tr>
<td>FBMT2320</td>
<td>Family Wellness and Business Relationships</td>
</tr>
<tr>
<td>FBMT2325</td>
<td>Ethics in this Business of Agriculture</td>
</tr>
<tr>
<td>FBMT2330</td>
<td>Business Math Principles</td>
</tr>
<tr>
<td>FBMT2335</td>
<td>Labor Economics and Management</td>
</tr>
<tr>
<td>FBMT2340</td>
<td>Rural Leadership</td>
</tr>
<tr>
<td>FBMT2345</td>
<td>CPR and First Aid</td>
</tr>
</tbody>
</table>

Please Note: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.

Required Liberal Arts and Sciences (6 Credits)
To complete the Diploma, students must complete 6 MnTC credits from 2 of the 10 MnTC goal areas. Courses must be selected in consultation with advisor/faculty.
Required Technical Courses (6 Courses)
Select the following courses:

- **FBMT2141** Interpreting and Evaluation of Financial Data (4 Credits)
- **FBMT2142** Interpreting Trends in Business Planning (4 Credits)
- **FBMT2151** Strategies in Farm System Data Management (4 Credits)
- **FBMT2152** Integrating System Information for Financial Planning (4 Credits)
- **FBMT2161** Examination of the Context of Farm System Management (4 Credits)
- **FBMT2162** Refining Farm System Management (4 Credits)

Required Electives (6 Credits)
Select 6 credits from the following courses:

- **FBMT1213** Managing a Farm System in a Global Economy (2 Credits)
- **FBMT1223** Using System Analysis in Total Farm Planning (2 Credits)
- **FBMT2200** Special Topics-General Farm Management (1 Credit)
- **FBMT2239** Special Topics-Livestock (2 Credits)
- **FBMT2243** Using Financial Instruments in Farm Systems Management (2 Credits)
- **FBMT2253** System Plans and Projections (2 Credits)
- **FBMT2263** Evaluating Farm System Programs (2 Credits)
- **FBMT2300** Computer Applications in Business Management (2 Credits)
- **FBMT2305** Legal Issues in Ag (2 Credits)
- **FBMT2310** Environmental Interactions in Agriculture (2 Credits)
- **FBMT2315** Effective Time Management (2 Credits)
- **FBMT2320** Family Wellness and Business Relationships (2 Credits)
- **FBMT2325** Ethics in this Business of Agriculture (2 Credits)
- **FBMT2330** Business Math Principles (2 Credits)
- **FBMT2335** Labor Economics and Management (2 Credits)
- **FBMT2340** Rural Leadership (2 Credits)
- **FBMT2345** CPR and First Aid (2 Credits)

Degree Description
Here is a list of courses required to earn the Applications in Farm Business Management Certificate of Training

Admission Dates: Fall, Spring, and Summer Semester

Offered on the Faribault and North Mankato Campuses
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Farm Business Management department. See the Farm Business Management department page for more details.

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Essentials of Farm Business Management
Certificate • 30 Credits

Required Technical Courses (6 Courses)
Select the following courses:
- FBMT1112 Foundations for Farm Business Management (4 Credits)
- FBMT1121 Preparation for Farm Business Analysis (4 Credits)
- FBMT1122 Implementing the System Management Plan (4 Credits)
- FBMT1131 Managing and Modifying Farm System Data (4 Credits)
- FBMT1132 Interpreting and Using Farm System Data (4 Credits)
- FBMT1211 Intro to Farm Business Management (4 Credits)

Required Electives (6 Credits)
Select 6 credits from the following courses:
- FBMT1213 Managing a Farm System in a Global Economy (2 Credits)
- FBMT1223 Using System Analysis in Total Farm Planning (2 Credits)
- FBMT1233 Application of Productive Enterprise Information (2 Credits)
- FBMT2200 Special Topics-General Farm Management (1 Credit)
- FBMT2239 Special Topics-Livestock (2 Credits)
- FBMT2243 Using Financial Instruments in Farm Systems Management (2 Credits)
- FBMT2253 System Plans and Projections (2 Credits)
- FBMT2263 Evaluating Farm System Programs (2 Credits)
- FBMT2300 Computer Applications in Business Management (2 Credits)
- FBMT2305 Legal Issues in Ag (2 Credits)
- FBMT2310 Environmental Interactions in Agriculture (2 Credits)
- FBMT2315 Effective Time Management (2 Credits)
- FBMT2320 Family Wellness and Business Relationships (2 Credits)
- FBMT2325 Ethics in this Business of Agriculture (2 Credits)
- FBMT2330 Business Math Principles (2 Credits)
- FBMT2335 Labor Economics and Management (2 Credits)
- FBMT2340 Rural Leadership (2 Credits)
- FBMT2345 CPR and First Aid (2 Credits)

Degree Description
Here is a list of courses required to earn the Essentials of Farm Business Management Certificate of Training

Admission Dates: Fall, Spring, and Summer Semester

Offered on the Faribault and North Mankato Campuses
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Farm Business Management department. See the Farm Business Management department page for more details.

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Required Technical Courses (12 Courses)

Select the following courses:

- **FBMA2100** Fundamentals of Financial Management as it Relates to Risk Management (3 Credits)
- **FBMA2101** Applied Financial Management as it Relates to Risk Management (3 Credits)
- **FBMA2110** Fundamentals of Financial Management/Strategic Planning Emphasis (3 Credits)
- **FBMA2111** Applied Financial Management/Strategic Planning Emphasis (3 Credits)
- **FBMA2120** Fundamentals of Financial Mgmt/Business Plan Emphasis (3 Credits)
- **FBMA2121** Applications in Financial Management/Business Plans (3 Credits)
- **FBMA2130** Directed Study - Decision Making (2 Credits)
- **FBMA2131** Directed Study - Communications (2 Credits)
- **FBMA2132** Directed Studies in Modern Agricultural Technology (2 Credits)
- **FBMA2133** Directed Studies in Farm Business and/or Family Transition (2 Credits)
- **FBMA2134** Directed Study - Personnel Management (2 Credits)
- **FBMA2135** Directed Study - Enterprise Alternatives (2 Credits)

Elective Credits (Suggested)

These courses are not required but are suggested as courses which may be beneficial to you in this career field. You will graduate from this program even if you do not complete these courses.

- **FBMT1213** Managing a Farm System in a Global Economy (2 Credits)
- **FBMT1223** Using System Analysis in Total Farm Planning (2 Credits)
- **FBMT1233** Application of Productive Enterprise Information (2 Credits)
- **FBMT2200** Special Topics-General Farm Management (1 Credit)
- **FBMT2239** Special Topics-Livestock (2 Credits)
- **FBMT2243** Using Financial Instruments in Farm Systems Management (2 Credits)
- **FBMT2253** System Plans and Projections (2 Credits)
- **FBMT2263** Evaluating Farm System Programs (2 Credits)
- **FBMT2300** Computer Applications in Business Management (2 Credits)
- **FBMT2305** Legal Issues in Ag (2 Credits)
- **FBMT2310** Environmental Interactions in Agriculture (2 Credits)
- **FBMT2315** Effective Time Management (2 Credits)
- **FBMT2320** Family Wellness and Business Relationships (2 Credits)
- **FBMT2325** Ethics in this Business of Agriculture (2 Credits)
- **FBMT2330** Business Math Principles (2 Credits)
- **FBMT2335** Labor Economics and Management (2 Credits)
- **FBMT2340** Rural Leadership (2 Credits)
- **FBMT2345** CPR and First Aid (2 Credits)
Required Technical Courses (3 Courses)
Complete the following courses:
GIS 2840 Introduction to Geographic Information Systems (4 Credits)
GIS 2841 Intermediate GIS (4 Credits)
And
GIS 2842 Field Mapping with GPS (4 Credits)
Or
GIS 2845 Introduction to Remote Sensing (4 Credits)

Elective Credits - Choose 4 credits from the following: (4 Credits)
GIS 2843 GIS Practicum (2 - 4 Credits)
GIS 2844 GIS Internship (2 - 4 Credits)
CAP 250 Associate of Arts Capstone Class (1 Credit)
FYE 100 First Year Experience (1 Credit)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Graphic Communications
A.A.S. Degree • 72 Credits

Degree Description

Through the Graphic Communications program, learners will develop the creative side of themselves while carrying out their creativity in an actual production setting. The program offers training and instruction for learners interested in graphic design, graphic production, web design and animation media. Introductory and advanced levels of illustration, layout and design, typography and product photography are also taught. Learners will learn how to prepare their work for production with classes in work flow, printing processes and web page design. Students receive hands-on training using the latest Adobe Creative Suite, which includes Photoshop, Illustrator, InDesign, Dreamweaver, Flash and Acrobat.

Admission Dates: Fall Semester

Offered on the North Mankato Campus
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Graphic Communications department. See the Graphic Communications department page for more details.

Required Technical Courses (16 Courses)
Complete the following courses:

- GCC 1100 Introduction to Graphic Communications (4 Credits)
- GCC 1120 Graphic Software 1 (4 Credits)
- GCC 1130 Layout and Typography (3 Credits)
- GCC 1141 Digital Image Exploration (3 Credits)
- GCC 1210 Drawing for Graphic Designers (3 Credits)
- GCC 1220 Graphic Software 2 (4 Credits)
- GCC 1260 Printing Processes (4 Credits)
- GCC 2110 Design and Illustration 1 (4 Credits)
- GCC 2120 Portfolio 1 (3 Credits)
- GCC 2150 Web/Interactive Media 2 (3 Credits)
- GCC 2161 Production Work Flow 1 (3 Credits)
- GCC 2210 Design and Illustration 2 (4 Credits)
- GCC 2220 Portfolio 2 (3 Credits)
- GCC 2250 Web/Interactive Media 3 (3 Credits)
- GCC 2261 Production Work Flow 2 (3 Credits)
- COMP1140 Web for Business (3 Credits)

Technical Courses (Optional)

The following courses are not required but are optional courses which may be beneficial to you in this career field. You will graduate from this program even if you do not complete these courses.

- GCC 2275 Special Problems (1 - 4 Credits)
- GCC 2290 Graphic Communications Internship (1 - 3 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.

Elective Liberal Arts and Sciences
Select 8 additional MnTC credits from goals 1 - 10.

The following courses are recommended: PSYC100, SOC100, ART100, ART110, ENGL130, PHIL100 and PHIL 215.
Graphic Communications
Diploma • 60 Credits

Degree Description
Through the Graphic Communications program, learners will develop the creative side of themselves while carrying out their creativity in an actual production setting. The program offers training and instruction for learners interested in graphic design, graphic production, web design and animation media. Introductory and advanced levels of illustration, layout and design, typography and product photography are also taught. Students will learn how to prepare their work for production with classes in work flow, printing processes and web page design. Learners receive hands-on training using the latest Adobe Creative Suite, which includes Photoshop, Illustrator, InDesign, Dreamweaver, Flash and Acrobat.

Admission Dates: Fall Semester

Offered on the North Mankato Campus
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Graphic Communications department. See the Graphic Communications department page for more details

Required Technical Courses (16 Courses)
Complete the following courses:

GCC 1100 Introduction to Graphic Communications (4 Credits)
GCC 1120 Graphic Software 1 (4 Credits)
GCC 1130 Layout and Typography (3 Credits)
GCC 1141 Digital Image Exploration (3 Credits)
GCC 1210 Drawing for Graphic Designers (3 Credits)
GCC 1220 Graphic Software 2 (4 Credits)
GCC 1260 Printing Processes (4 Credits)
GCC 2110 Design and Illustration 1 (4 Credits)
GCC 2120 Portfolio 1 (3 Credits)
GCC 2150 Web/Interactive Media 2 (3 Credits)
GCC 2161 Production Work Flow 1 (3 Credits)
GCC 2210 Design and Illustration 2 (4 Credits)
GCC 2220 Portfolio 2 (3 Credits)
GCC 2250 Web/Interactive Media 3 (3 Credits)
GCC 2261 Production Work Flow 2 (3 Credits)
COMP1140 Web for Business (3 Credits)

Technical Courses (Optional)
The following courses are not required but are optional courses which may be beneficial to you in this career field. You will graduate from this program even if you do not complete these courses.

GCC 2275 Special Problems (1 - 4 Credits)
GCC 2290 Graphic Communications Internship (1 - 3 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.

Required Liberal Arts & Sciences (2 Courses)
Complete the following courses:

COMM140 Interpersonal Communication (3 Credits)
Or
COMM110 Public Speaking (3 Credits)

ART 110 Art Structure (3 Credits)
Or
ART 130 Painting (3 Credits)
Or
ART 140 Digital Photography (3 Credits)
Required Courses (13 Courses)
Complete the following courses:
- **ENGL100** Composition (4 Credits)
- **COMM130** Intercultural Communication (3 Credits)
- **MATH120** College Algebra (4 Credits)
- **MATH154** Elementary Statistics (4 Credits)
- **BIOL100** Introduction to Biology (4 Credits)
  Or
- **BIOL106** Introduction to Cell Biology (3 Credits)
- **CHEM108** Introduction to Chemistry (4 Credits)
- **PSYC100** Introduction to Psychology (4 Credits)
  Or
- **PSYC110** Lifespan Psychology (3 Credits)
- **SOC 101** Introduction to Sociology (4 Credits)
- **PHIL100** Ethics in Society (3 Credits)
- **Biol270** Microbiology (4 Credits)
- **Biol225** Anatomy and Physiology I (4 Credits)
- **Biol235** Anatomy and Physiology II (4 Credits)
- **FCS 105** Nutrition and Healthy Living (3 Credits)

Elective Credits (11-13) (11 Credits)
Chosen based on selected baccalaureate degree program. Courses should be selected in consultation with advisor/faculty. You must complete enough elective credits (11-13) to total 60 credits in your program.

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Health Unit Coordinator
Certificate • 16 Credits

Degree Description

Our classes emphasize the importance of effective communication skills both in person and by phone with clients/patients, visitors, health care team members and ancillary departments. Courses have been developed based on industry standards and the learner is prepared to work in a variety of health care environments. Experienced instructors offer plenty of personal attention to each learner. This program will also help prepare you for the National Association of Health Unit Coordinators certification exam.

Admission Dates: Fall and Spring Semester

Offered on the North Mankato and Faribault Campuses

The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Health Unit Coordinator department. See the Health Unit Coordinator department page for more details.

Required Technical Courses (6 Courses)

Complete all of the following courses:
- **HUCF1200** Health Unit Coordinator Fundamentals (2 Credits)
- **HUCF1201** Health Unit Coordinator Procedures (3 Credits)
- **HC 1000** Medical Terminology (3 Credits)
- **HC 1500** Healthcare Foundation: Introduction to Health Careers (1 - 3 Credits)
- **HC 1550** Electronic Health Records (2 Credits)
- **MA 1020** Medical Office Procedures (3 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
<table>
<thead>
<tr>
<th>Required Technical Courses: (16 Courses)</th>
<th>Required Technical Electives (19 Credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete all of the following courses:</td>
<td>Complete 19 credits from the following courses:</td>
</tr>
<tr>
<td>HVAC2000 Electrical Circuits (2 Credits)</td>
<td>HVAC2470 Refrigeration Internship II (2 Credits)</td>
</tr>
<tr>
<td>HVAC2010 IPH Motors and Auxiliary Controls (2 Credits)</td>
<td>HVAC2450 Advanced Refrigeration Lab II (2 Credits)</td>
</tr>
<tr>
<td>HVAC2100 Refrigeration Theory (2 Credits)</td>
<td>HVAC2500 Advance Heating Lab I (1 Credit)</td>
</tr>
<tr>
<td>HVAC2110 Refrigeration Controls (2 Credits)</td>
<td>HVAC2510 Advanced Heating Lab II (2 Credits)</td>
</tr>
<tr>
<td>HVAC2120 Testing Refrigeration Systems (2 Credits)</td>
<td>HVAC2520 Heating Internship I (1 Credit)</td>
</tr>
<tr>
<td>HVAC2205 Coolers/Freezers Electrical Systems &amp; Components (3 Credits)</td>
<td>HLTH1952 First Aid (1 Credit)</td>
</tr>
<tr>
<td>HVAC2215 Coolers/Freezers Refrigeration Diagnostics &amp; Operations (3 Credits)</td>
<td>HVAC2530 Heating Internship II (2 Credits)</td>
</tr>
<tr>
<td>HVAC2220 Commercial Ice Makers (3 Credits)</td>
<td>HLTH1954 Safety (1 Credit)</td>
</tr>
<tr>
<td>HVAC2230 Commercial Alternative Systems (1 Credit)</td>
<td>MKT 1800 Introduction to Sales (3 Credits)</td>
</tr>
<tr>
<td>HVAC2240 Central Air Conditioning (2 Credits)</td>
<td>OTEC2000 Employment Search Skills (2 Credits)</td>
</tr>
<tr>
<td>HVAC2251 Brazing (2 Credits)</td>
<td>HVAC1000 Alternative Refrigeration Systems Lab I (1 Credit)</td>
</tr>
<tr>
<td>HVAC2301 Indoor Air Quality (1 Credit)</td>
<td>HVAC1200 Alternative Refrigeration Systems Lab II (2 Credits)</td>
</tr>
<tr>
<td>HVAC2310 Hydronic Heat (2 Credits)</td>
<td>HVAC2330 Alternative Heating Systems (2 Credits)</td>
</tr>
<tr>
<td>HVAC2320 Gas Heat (3 Credits)</td>
<td>HVAC2400 Advance Central A/C Lab 1 (1 Credit)</td>
</tr>
<tr>
<td>HVAC2325 Commercial Package Heat/Cool Units (2 Credits)</td>
<td></td>
</tr>
<tr>
<td>HVAC2340 Sheet Metal Ductwork Fabrication (3 Credits)</td>
<td></td>
</tr>
</tbody>
</table>

Other Elective Credits (3 Credits)

Technical Courses- Select three credits from any technical courses in consultation with advisor/faculty.

Required Liberal Arts and Sciences

To complete an AAS Degree, students must complete 15 MnTC credits from 3 of the 10 MnTC Goal Areas.

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Required Technical Courses (16 Courses)

Complete the following courses:

- HVAC2000 Electrical Circuits (2 Credits)
- HVAC2010 IPH Motors and Auxiliary Controls (2 Credits)
- HVAC2100 Refrigeration Theory (2 Credits)
- HVAC2110 Refrigeration Controls (2 Credits)
- HVAC2120 Testing Refrigeration Systems (2 Credits)
- HVAC2205 Coolers/Freezers Electrical Systems & Components (3 Credits)
- HVAC2215 Coolers/Freezers Refrigeration Diagnostics & Operations (3 Credits)
- HVAC2220 Commercial Ice Makers (3 Credits)
- HVAC2230 Commercial Alternative Systems (1 Credit)
- HVAC2240 Central Air Conditioning (2 Credits)
- HVAC2251 Brazing (2 Credits)
- HVAC2301 Indoor Air Quality (1 Credit)
- HVAC2310 Hydronic Heat (2 Credits)
- HVAC2320 Gas Heat (3 Credits)
- HVAC2325 Commercial Package Heat/Cool Units (2 Credits)
- HVAC2340 Sheet Metal Ductwork Fabrication (3 Credits)

Elective Credits (9 Credits)

Technical Courses - Select 9 credits from any HVAC course or MKT 1800.

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Required Technical Courses (16 Courses)

Complete the following courses:

HVAC2000  Electrical Circuits (2 Credits)
HVAC2010  IPH Motors and Auxiliary Controls (2 Credits)
HVAC2100  Refrigeration Theory (2 Credits)
HVAC2110  Refrigeration Controls (2 Credits)
HVAC2120  Testing Refrigeration Systems (2 Credits)
HVAC2205  Coolers/Freezers Electrical Systems & Components (3 Credits)
HVAC2215  Coolers/Freezers Refrigeration Diagnostics & Operations (3 Credits)
HVAC2220  Commercial Ice Makers (3 Credits)
HVAC2230  Commercial Alternative Systems (1 Credit)
HVAC2240  Central Air Conditioning (2 Credits)
HVAC2251  Brazing (2 Credits)
HVAC2301  Indoor Air Quality (1 Credit)
HVAC2310  Hydronic Heat (2 Credits)
HVAC2320  Gas Heat (3 Credits)
HVAC2325  Commercial Package Heat/Cool Units (2 Credits)
HVAC2340  Sheet Metal Ductwork Fabrication (3 Credits)

Technical Electives (19 Credits)

Complete 19 credits from the following courses:

HLTH1950  CPR (1 Credit)
HVAC2410  Advanced Central Air Conditioning Lab II (2 Credits)
HVAC2420  Air Conditioning Internship I (1 Credit)
HVAC2430  Air Conditioning Internship II (2 Credits)
HVAC2440  Advanced Refrigeration Lab I (1 Credit)
HVAC2450  Advanced Refrigeration Lab II (2 Credits)
HVAC2460  Refrigeration Internship I (1 Credit)
HVAC2470  Refrigeration Internship II (2 Credits)
HVAC2500  Advance Heating Lab I (1 Credit)
HVAC2510  Advanced Heating Lab II (2 Credits)
HVAC2520  Heating Internship I (1 Credit)
HLTH1952  First Aid (1 Credit)
HVAC2530  Heating Internship II (2 Credits)
HLTH1954  Safety (1 Credit)
MKT 1800  Introduction to Sales (3 Credits)
OTEC2000  Employment Search Skills (2 Credits)
HVAC1000  Alternative Refrigeration Systems Lab I (1 Credit)
HVAC1200  Alternative Refrigeration Systems Lab II (2 Credits)
HVAC2330  Alternative Heating Systems (2 Credits)
HVAC2400  Advance Central A/C Lab I (1 Credit)

Required Liberal Arts and Sciences (6 Credits)

To complete the Advanced Diploma, students must complete 6 MnTC credits from 2 of the 10 MnTC goal areas.
Required Technical Courses (12 Courses)
Complete the following courses:

- HVAC2000 Electrical Circuits (2 Credits)
- HVAC2010 IPH Motors and Auxiliary Controls (2 Credits)
- HVAC2100 Refrigeration Theory (2 Credits)
- HVAC2110 Refrigeration Controls (2 Credits)
- HVAC2120 Testing Refrigeration Systems (2 Credits)
- HVAC2205 Coolers/Freezers Electrical Systems & Components (3 Credits)
- HVAC2215 Coolers/Freezers Refrigeration Diagnostics & Operations (3 Credits)
- HVAC2220 Commercial Ice Makers (3 Credits)
- HVAC2230 Commercial Alternative Systems (1 Credit)
- HVAC2240 Central Air Conditioning (2 Credits)
- HVAC2251 Brazing (2 Credits)
- HVAC2325 Commercial Package Heat/Cool Units (2 Credits)
Required Technical Courses (7 Courses)

Complete the following courses:

- HVAC2000 Electrical Circuits (2 Credits)
- HVAC2010 IPH Motors and Auxiliary Controls (2 Credits)
- HVAC2301 Indoor Air Quality (1 Credit)
- HVAC2310 Hydronic Heat (2 Credits)
- HVAC2320 Gas Heat (3 Credits)
- HVAC2325 Commercial Package Heat/Cool Units (2 Credits)
- HVAC2340 Sheet Metal Ductwork Fabrication (3 Credits)

Technical Electives (11 Credits)

Complete 11 credits from the following courses:

- HLTH1950 CPR (1 Credit)
- HLTH1952 First Aid (1 Credit)
- HLTH1954 Safety (1 Credit)
- OTEC2000 Employment Search Skills (2 Credits)
- HVAC2330 Alternative Heating Systems (2 Credits)
- HVAC2500 Advance Heating Lab I (1 Credit)
- HVAC2510 Advanced Heating Lab II (2 Credits)
- HVAC2520 Heating Internship I (1 Credit)
- HVAC2530 Heating Internship II (2 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Intensive Care Paramedic Technician
A.A.S. Degree • 67 Credits

Degree Description

*** PENDING MnSCU APPROVAL ***

As the most highly trained pre-hospital emergency care provider in the EMS field, the paramedic accepts the challenging responsibility for patient care. A willingness to accept this challenge and direct others to carry out treatment plans is the first step in becoming a paramedic. Paramedicine is a relatively young field with a wide range of employment opportunities, including ambulance services, fire departments, police departments, hospitals, helicopter services and educational institutions. The program is fully accredited by the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professionals.

Admission Dates: Fall Semester

Offered on the North Mankato Campus

The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Intensive Care Paramedic Technician department. See the Intensive Care Paramedic Technician department page for more details.

Required Technical Courses (15 Courses)
Complete the following courses:

- ICP 1000 Introduction to Paramedicine (3 Credits)
- ICP 1005 Applied Anatomy and Physiology for EMS (3 Credits)
- ICP 1010 EMS Skills (5 Credits)
- ICP 1020 Pharmacology for EMS (3 Credits)
- ICP 1040 Cardiac Care in EMS (4 Credits)
- ICP 1050 Trauma Care (3 Credits)
- ICP 1060 Pathophysiology in EMS (5 Credits)
- ICP 2010 EMS Advanced Skills (5 Credits)
- ICP 2030 Critical Care I (3 Credits)
- ICP 2040 Critical Care II (3 Credits)
- ICP 2050 Field Internship I (3 Credits)
- ICP 2060 Field Internship II (3 Credits)
- ICP 2070 Special Populations (5 Credits)
- ICP 2080 Paramedic Refresher (3 Credits)
- ICP 2090 Hazardous Materials (1 Credit)

Required Liberal Arts & Sciences
To complete an AAS Degree, students must complete 15 MNTC credits from 3 of the 10 MNTC Goal Areas.

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
### Degree Description

As the most highly trained pre-hospital emergency care provider in the EMS field, the paramedic accepts the challenging responsibility for patient care. A willingness to accept this challenge and direct others to carry out treatment plans is the first step in becoming a paramedic. Paramedicine is a relatively young field with a wide range of employment opportunities, including ambulance services, fire departments, police departments, hospitals, helicopter services and educational institutions. The program is fully accredited by the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professionals.

### Admission Dates: Fall Semester

Offered on the North Mankato Campus

The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our [Catalog Archive](#).

This credential is part of the Intensive Care Paramedic Technician department. [See the Intensive Care Paramedic Technician department page for more details](#).

#### Required Technical Courses (15 Courses)

Complete the following classes:

- **ICP 1000** Introduction to Paramedicine (3 Credits)
- **ICP 1005** Applied Anatomy and Physiology for EMS (3 Credits)
- **ICP 1010** EMS Skills (5 Credits)
- **ICP 1020** Pharmacology for EMS (3 Credits)
- **ICP 1040** Cardiac Care in EMS (4 Credits)
- **ICP 1050** Trauma Care (3 Credits)
- **ICP 1060** Pathophysiology in EMS (5 Credits)
- **ICP 2010** EMS Advanced Skills (5 Credits)
- **ICP 2030** Critical Care I (3 Credits)
- **ICP 2040** Critical Care II (3 Credits)
- **ICP 2050** Field Internship I (3 Credits)
- **ICP 2060** Field Internship II (3 Credits)
- **ICP 2070** Special Populations (5 Credits)
- **ICP 2080** Paramedic Refresher (3 Credits)
- **ICP 2090** Hazardous Materials (1 Credit)

#### Required Liberal Arts and Sciences (6 Credits)

Complete 6 credits from any of the 10 MNTC Goal Areas.

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your [catalog of record](#) may have different requirements.
Community Paramedic
Certificate • 12 Credits

Degree Description

The Community Paramedic program responds to identified health needs in underserved communities, ultimately improving the quality of life and health of rural and remote citizens and visitors. The program seeks to prepare learners for roles that include the following: outreach, wellness, health screening assessments, health teaching, providing immunizations, wound care, recognition of mental health issues, and referral into the existing mental health care systems, and functioning as physician extenders in rural clinics and hospitals. Community Paramedic learners will also receive instruction in disease management, including a thorough understanding of monitoring diabetes, congestive heart failure and other high-cost diseases, and the methods and medications used to treat them.

NOTE:

Students must be admitted to the Community Paramedic program by following a defined application process. Requirements for admittance include: current certification as an Emergency Medical Technician Paramedic (EMT-P) and a record of at least two years of full time service as an EMT-P or the part time equivalent.

Admission Dates: Fall and Spring Semester

Offered on the North Mankato Campus

The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Intensive Care Paramedic Technician department. See the Intensive Care Paramedic Technician department page for more details.

Required Technical Courses (4 Courses)

Select the following courses:

- **CP 2500** Roles Advocacy and Outreach (2 Credits)
- **CP 2505** Community Assessment (2 Credits)
- **CP 2510** Care and Prevention Development Strategies (3 Credits)
- **CP 2520** Community Paramedic Clinical (5 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
# Marketing Management

## A.A.S. Degree • 60 Credits

### Degree Description

The Associate of Applied Science Marketing Management degree is designed to prepare individuals for employment in marketing, sales management, and retail management fields. Learners will learn current practices and acquire knowledge in marketing fundamentals, management, sales, retail operations, managing human resources, sales force management, managing a sales business for profitability and new applications in the art of selling. Learners are required to participate in a business and industry internship in positions including customer service, sales, retailing, marketing and advertising to reinforce newly acquired skills. In addition, the program requires Liberal Arts & Sciences courses designed to provide an understanding of the culture and environment in which we live. Advisors will work with students in developing a program of study, encouraging timely program completion. After completing an A.A.S. Degree in Marketing, graduates can transfer their program credits toward a Bachelor of Applied Science Degree in Marketing from Southwest Minnesota State University. Courses are offered at South Central via ITV, and online. See an advisor for program requirements.

### Admission Dates: Fall and Spring Semester

### Offered on the Faribault and North Mankato Campuses

The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our [Catalog Archive](#).

This credential is part of the Marketing Management department. See the [Marketing Management department page for more details](#).

<table>
<thead>
<tr>
<th>Required Technical Courses (11 Courses)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete all of the following courses:</td>
</tr>
<tr>
<td><strong>MKT 1800</strong> Introduction to Sales (3 Credits)</td>
</tr>
<tr>
<td><strong>MKT 1810</strong> Principles of Marketing (3 Credits)</td>
</tr>
<tr>
<td><strong>MKT 1820</strong> Introduction to Business (3 Credits)</td>
</tr>
<tr>
<td><strong>MKT 1830</strong> Customer Service (3 Credits)</td>
</tr>
<tr>
<td><strong>MKT 1840</strong> Principles of Advertising (3 Credits)</td>
</tr>
<tr>
<td><strong>MKT 1850</strong> Professional Development I (1 Credit)</td>
</tr>
<tr>
<td><strong>MKT 1900</strong> Principles of Management (3 Credits)</td>
</tr>
<tr>
<td><strong>MKT 1910</strong> Entrepreneurship (3 Credits)</td>
</tr>
<tr>
<td><strong>MKT 1920</strong> Marketing Research (3 Credits)</td>
</tr>
<tr>
<td><strong>MKT 1930</strong> Human Resource Management (3 Credits)</td>
</tr>
<tr>
<td><strong>MKT 1940</strong> Leadership Strategies (3 Credits)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Management Core (2 Courses)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select the following two courses:</td>
</tr>
<tr>
<td><strong>MGT 2810</strong> Retail Management (3 Credits)</td>
</tr>
<tr>
<td><strong>MGT 2820</strong> Introduction to Management Information Systems (3 Credits)</td>
</tr>
</tbody>
</table>

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your [catalog of record](#) may have different requirements.

<table>
<thead>
<tr>
<th>Technical Elective Credits (2 Credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete 2 additional credits from the following:</td>
</tr>
<tr>
<td><strong>MKT 1860</strong> Marketing and Business Management Practicum (2 Credits)</td>
</tr>
<tr>
<td><strong>MKT 1875</strong> Internet Marketing (2 Credits)</td>
</tr>
<tr>
<td><strong>MKT 1950</strong> Special Topics in Marketing (2 Credits)</td>
</tr>
<tr>
<td><strong>MKT 2827</strong> Marketing Management Internship (1 - 3 Credits)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Required Liberal Arts &amp; Sciences (2 Courses)</th>
</tr>
</thead>
<tbody>
<tr>
<td>To complete an AAS Degree, students must complete 15 MNTC credits from 3 of the 10 MNTC Goal Areas. Courses must be approved by advisor/faculty.</td>
</tr>
</tbody>
</table>
Marketing Management
Diploma • 53 Credits

Degree Description

The Marketing Management Diploma is designed to prepare individuals for employment in sales and marketing related positions requiring entry-level skills and knowledge necessary to perform typical job functions. Individuals seeking opportunities to upgrade present skills will also benefit from the diploma. Courses will cover the fundamentals of marketing, management, sales, retail operations, managing human resources, the art of selling, and entrepreneurship. Business and industry internships are required, with positions concentrating in a variety of areas including sales, customer service, retailing, advertising, and marketing. Liberal Arts & Sciences courses in public speaking and composition are required. Academic advisors will assist learners in choosing additional coursework for the diploma.

Admission Dates: Fall and Spring Semester

Offered on the North Mankato Campus
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Marketing Management department. See the Marketing Management department page for more details.

Required Technical Courses (15 Courses)
Complete all of the following courses:

- **MGT 2810** Retail Management (3 Credits)
- **MGT 2820** Introduction to Management Information Systems (3 Credits)
- **MKT 1800** Introduction to Sales (3 Credits)
- **MKT 1810** Principles of Marketing (3 Credits)
- **MKT 1817** Internship (3 Credits)
- **MKT 1820** Introduction to Business (3 Credits)
- **MKT 1830** Customer Service (3 Credits)
- **MKT 1840** Principles of Advertising (3 Credits)
- **MKT 1850** Professional Development I (1 Credit)
- **MKT 1900** Principles of Management (3 Credits)
- **MKT 1910** Entrepreneurship (3 Credits)
- **MKT 1920** Marketing Research (3 Credits)
- **MKT 1930** Human Resource Management (3 Credits)
- **MKT 1940** Leadership Strategies (3 Credits)
- **MKT 2817** Internship (3 Credits)

Required Liberal Arts and Sciences (2 Courses)
Complete the following courses:

- **COMM110** Public Speaking (3 Credits)
- **ENGL100** Composition (4 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.

Elective Credits (3 Credits)
Complete 3 additional credits from any MGT, MKT, ACCT, OTEC, COMP or Liberal Arts and Sciences courses. Courses must be approved by advisor/faculty.
Marketing Management
Certificate • 30 Credits

Degree Description

The Marketing Management Certificate is designed to provide skills for those individuals wishing to complete a compressed program of study with specific skills unique to their individual needs. With advisor approval, learners will develop a program of study consisting of 18 credits of technical courses and 12 credits of core management courses. Learners are encouraged to complete an internship, providing experience in the world of work.

Admission Dates: Fall and Spring Semester

Offered on the North Mankato Campus
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Marketing Management department. See the Marketing Management department page for more details.

Required Technical Courses (4 Courses)
Complete all of the following courses

- **MKT 1810** Principles of Marketing (3 Credits)
- **MKT 1820** Introduction to Business (3 Credits)
- **MGT 2810** Retail Management (3 Credits)
- **MGT 2820** Introduction to Management Information Systems (3 Credits)

Elective Credits (18 Credits)
Choose 18 credits from the following courses:

- **MKT 1800** Introduction to Sales (3 Credits)
- **MKT 1817** Internship (3 Credits)
- **MKT 1830** Customer Service (3 Credits)
- **MKT 1840** Principles of Advertising (3 Credits)
- **MKT 1850** Professional Development I (1 Credit)
- **MKT 1900** Principles of Management (3 Credits)
- **MKT 1910** Entrepreneurship (3 Credits)
- **MKT 1920** Marketing Research (3 Credits)
- **MKT 1930** Human Resource Management (3 Credits)
- **MKT 1940** Leadership Strategies (3 Credits)
- **MGT 2817** Internship (3 Credits)
- **MKT 2827** Marketing Management Internship (1 - 3 Credits)
- **OTEC2810** Computer Technology (3 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Required Technical Courses (15 Courses)
Select the following courses:

- MECA1000 Introduction to Mechatronics (3 Credits)
- MECA1122 Electricity - Devices and Circuits I (3 Credits)
- MECA1131 Computer Applications (3 Credits)
- MECA1222 Electricity - Devices and Circuits II (3 Credits)
- MECA1223 Mechanical Systems 1 (3 Credits)
- MECA1240 Quality Concepts in Manufacturing (2 Credits)
- MECA1250 Mechatronics Systems Operations I (3 Credits)
- MECA2110 Sensors and Control (3 Credits)
- MECA2120 Pneumatics Systems (3 Credits)
- MECA2123 Mechanical Systems 2 (3 Credits)
- MECA2130 Hydraulics (3 Credits)
- MECA2150 Mechatronics Systems Operations II (3 Credits)
- MECA2235 Robotics & Industrial Automation (3 Credits)
- MECA2240 Senior Project (5 Credits)
- MECA2250 Mechatronics Systems Operations III (3 Credits)

Required Liberal Arts and Sciences (4 Courses)
To earn an AAS degree, students must complete 18 MNTC credits in 3 of the 10 MNTC goal areas.

The following courses are required:

- ENGL100 Composition (4 Credits)
- ENGL240 Technical Communication (4 Credits)
- PHYS101 Introductory Physics (3 Credits)
- MATH120 College Algebra (4 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.

Degree Description
Mechatronics is a relatively new and rapidly growing field that integrates electronics, mechanics, pneumatics, hydraulics, and computer control systems to create new and improved automated manufacturing production systems. This program is designed for people who are interested in plant maintenance, set up, installation, and assembly. These jobs are found in medical, electronics, agriculture, biotechnology, and automotive industries.

Admission Dates: Fall and Spring Semester

Offered on the North Mankato Campus
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Mechatronics Engineering Technology department. See the Mechatronics Engineering Technology department page for more details.
Intermediate Mechatronics Engineering Technology
Diploma • 39 Credits

Degree Description

Mechatronics is a relatively new and rapidly growing field that integrates electronics, mechanics, pneumatics, hydraulics, and computer control systems to create new and improved automated manufacturing production systems. This program is designed for people who are interested in plant maintenance, set up, installation, and assembly. These jobs are found in medical, electronics, agriculture, biotechnology, and automotive industries.

Admission Dates: Fall and Spring Semester

Offered on the North Mankato Campus
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Mechatronics Engineering Technology department. See the Mechatronics Engineering Technology department page for more details.

Required Technical Courses (10 Courses)
Complete the following courses:

- MECA1000 Introduction to Mechatronics (3 Credits)
- MECA1122 Electricity - Devices and Circuits I (3 Credits)
- MECA1222 Electricity - Devices and Circuits II (3 Credits)
- MECA1223 Mechanical Systems 1 (3 Credits)
- MECA1240 Quality Concepts in Manufacturing (2 Credits)
- MECA1250 Mechatronics Systems Operations I (3 Credits)
- MECA2120 Fluid Power 1 (3 Credits)
- MECA2123 Mechanical Systems 2 (3 Credits)
- MECA2130 Hydraulics (3 Credits)
- MECA2150 Mechatronics Systems Operations II (3 Credits)

Required MATH course (1 Course)
Choose one of the following:

- MATH120 College Algebra (4 Credits)
- MATH1050 Mathematics for Technical Careers (3 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.

Required Liberal Arts and Sciences (2 Courses)
Complete the following courses:

- ENGL100 Composition (4 Credits)
- PHYS101 Introductory Physics (3 Credits)
Basic Mechatronics Engineering Technology
Certificate • 19 Credits

Degree Description
Mechatronics is a relatively new and rapidly growing field that integrates electronics, mechanics, pneumatics, hydraulics, and computer control systems to create new and improved automated manufacturing production systems. This program is designed for people who are interested in plant maintenance, set up, installation, and assembly. These jobs are found in medical, electronics, agriculture, biotechnology, and automotive industries.

Admission Dates: Fall and Spring Semester

Offered on the North Mankato Campus
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Mechatronics Engineering Technology department. See the Mechatronics Engineering Technology department page for more details

Required Technical Courses (7 Courses)
Complete the following courses:

- **CIM 2250** Applied Welding (2 Credits)
- **MECA1122** Electricity - Devices and Circuits I (3 Credits)
- **MECA1150** Boiler Operation Principles (1 Credit)
- **MECA1223** Mechanical Systems 1 (3 Credits)
- **MECA1240** Quality Concepts in Manufacturing (2 Credits)
- **MECA2120** Pneumatics Systems (3 Credits)
- **MECA2240** Senior Project (5 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Mechatronics Industrial Maintenance
Certificate • 19 Credits

Degree Description
This 19 credit certificate is designed to prepare learners to enter the Industrial Maintenance field in an entry-level position and to enhance the skills of those already employed in the field. This certificate will allow successful learners to be proficient in many different areas including plant safety, reading technical drawings, mechanical drives, bearings, lubrication, alignment, pneumatics, industrial electricity, motor controls, boilers and welding. This stackable certificate allows a pathway for learners to continue their education in Mechatronics.

Admission Dates: Fall Semester

Offered on the North Mankato Campus
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Mechatronics Engineering Technology department. See the Mechatronics Engineering Technology department page for more details.

Required Technical Courses (6 Courses)
Complete the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MECA1122</td>
<td>Electricity - Devices and Circuits I</td>
<td>3</td>
</tr>
<tr>
<td>MECA1223</td>
<td>Mechanical Systems 1</td>
<td>3</td>
</tr>
<tr>
<td>MECA1240</td>
<td>Quality Concepts in Manufacturing</td>
<td>2</td>
</tr>
<tr>
<td>MECA1250</td>
<td>Mechatronics Systems Operations I</td>
<td>3</td>
</tr>
<tr>
<td>MECA2120</td>
<td>Fluid Power 1</td>
<td>3</td>
</tr>
<tr>
<td>MECA2240</td>
<td>Senior Project</td>
<td>1 - 5</td>
</tr>
</tbody>
</table>

Required MATH course (1 Course)
Choose one of the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH120</td>
<td>College Algebra (4 Credits)</td>
</tr>
<tr>
<td>MATH1050</td>
<td>Mathematics for Technical Careers (3 Credits)</td>
</tr>
</tbody>
</table>

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Required Technical Courses (15 Courses)
Complete the following courses:

- **HC 1000** Medical Terminology (3 Credits)
- **HC 1001** Advanced Medical Terminology (3 Credits)
- **HC 1914** Anatomy & Physiology/Disease Conditions I (4 Credits)
- **HC 1924** Anatomy & Physiology Disease Conditions II (4 Credits)
- **HC 1550** Electronic Health Records (2 Credits)
- **HLTH 1950** CPR (1 Credit)
- **OTEC 1001** Computer Software for College (2 Credits)
- **MA 1000** Medical Assisting Orientation (3 Credits)
- **MA 1020** Medical Office Procedures (3 Credits)
- **MA 2000** Pharmacology for Medical Assistants (3 Credits)
- **MA 2010** Laboratory Skills for Medical Assistants (3 Credits)
- **MA 2015** Clinical Skills I (3 Credits)
- **MA 2020** Clinical Skills II (3 Credits)
- **MA 2030** Radiography Skills for Medical Assistants (3 Credits)
- **MA 2040** Medical Assistant Internship (4 Credits)

Required Liberal Arts and Sciences (5 Courses)
To complete an AAS degree, students must complete 16 MNTC credits from 3 of the 10 MNTC goal areas. Select the following required courses:

- **ENGL 100** Composition (4 Credits)
- **COMM 140** Interpersonal Communication (3 Credits)
- **HUM 100** Critical Thinking (3 Credits)
- **PSYC 110** Lifespan Psychology (3 Credits)
- **PHIL 150** Medical Ethics (3 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Medical Laboratory Technician
A.A.S. Degree • 70 Credits

Degree Description

*** PENDING MnSCU APPROVAL ***

The Medical Laboratory Technician curriculum includes a combination of general education and support courses, online lectures, face-to-face student laboratory sessions, and placement of students in a hospital or clinic internship experience. The program is considered a "hybrid" program because there are required face-to-face student laboratory sessions in which a student must physically be present on one of SCC’s two campuses in order to fulfill the requirements of the student laboratory sessions. Lab work is conducted under the supervision of a certified Clinical Laboratory Scientist. The experience allows the student to apply knowledge learned in the didactic phase in an employment-like setting. Students rotate through all areas of the clinical laboratory gaining experience and practice in basic clinical laboratory techniques, procedures, and phlebotomy.

Admission Process

Application to the Medical Laboratory Technician program requires a separate application process from admission to the college. Applications for the program are typically due on April 1st for a Fall Semester start. To obtain an application, please visit the MLT program website. Applicants must have completed or be in the process of completing the following sequence of courses with a grade of “C” or higher:

- HC 1000 Medical Terminology (3 credits)
- CHEM108 Introduction to Chemistry (4 credits)
- MDLT1810 Laboratory Techniques and Orientation (3 credits)
- BIOL162 Human Biology (4 credits)

Admission Dates: Fall Semester

Offered on the Faribault and North Mankato Campuses

The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Medical Laboratory Technician department. See the Medical Laboratory Technician department page for more details.

Required Technical Courses (12 Courses)

You must complete the following required courses:

- MDLT1810 Laboratory Techniques and Orientation (3 Credits)
- MDLT1815 Hematology I (3 Credits)
- MDLT1820 Coagulation (2 Credits)
- MDLT1825 Urinalysis/Body Fluids (3 Credits)
- MDLT1830 Hematology II (3 Credits)
- MDLT1835 Immunology (2 Credits)
- MDLT2806 Immunohematology I (2 Credits)
- MDLT2807 Immunohematology II (2 Credits)
- MDLT2811 Microbiology I (3 Credits)
- MDLT2816 Chemistry I (4 Credits)
- MDLT2818 Chemistry II (3 Credits)
- MDLT2821 Microbiology II (3 Credits)

Required Clinical Credits (8 Courses)

You must complete all of the following courses:

- MDLT2825 Clinical Practice & Orientation (1 Credit)
- MDLT2900 Clinical: Hematology (3 Credits)
- MDLT2901 Clinical: Chemistry (3 Credits)
- MDLT2907 Clinical: Urinalysis and Body Fluids (1 Credit)
- MDLT2903 Clinical: Immunohematology (4 Credits)
- MDLT2904 Clinical: Immunology (1 Credit)
- MDLT2905 Clinical: Microbiology (3 Credits)
- MDLT2906 Clinical: Coagulation (1 Credit)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.

Required Liberal Arts and Sciences (4 Courses)

Other Required Courses (4 Courses)
To complete an AAS Degree, students must complete 15 MNTC credits from 3 of the 10 MNTC Goal Areas.

The following courses are required:

COMM140 Interpersonal Communication (3 Credits)
Or
COMM110 Public Speaking (3 Credits)

BIOL162 Human Biology (4 Credits)
CHEM108 Introduction to Chemistry (4 Credits)

PSYC100 Introduction to Psychology (4 Credits)
Or
PSYC140 Psychology of Positive Adjustment (4 Credits)

Applicant must have completed or be in the process of completing the following pre-major courses with a grade of "C" or higher.

HC 1000 Medical Terminology (3 Credits)
OTEC1001 Computer Software for College (2 Credits)
Minnesota Transfer Curriculum (MNTC)

Degree Description

Completing the Minnesota Transfer Curriculum (MnTC) requirement alone satisfies the lower division general education requirement at all Minnesota two and four-year public colleges and universities.

To complete the Minnesota Transfer Curriculum students must:

1. Complete all ten goals.
2. Complete at least 40 college-level credits from courses listed within the ten goal areas MnTC.
3. Earn a cumulative GPA of 2.0 or higher and a 67% completion rate in coursework completed at South Central College.

If a student completes an MNTC goal area at South Central College and transfers to another MnSCU institution, the goal area will also be complete at the receiving institution.

Offered on the Faribault and North Mankato Campuses

The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Minnesota Transfer Curriculum (MNTC) department. See the Minnesota Transfer Curriculum (MNTC) department page for more details.

Goal Area 1 - Oral and Written Communication

The following courses apply to MNTC Goal 1. To complete the goal, students must complete ENGL 100 and one COMM course from COMM 100, 110, 120 or 140.

- ENGL100 Composition (4 Credits)
- COMM100 Introduction to Human Communication (3 Credits)
- COMM110 Public Speaking (3 Credits)
- COMM120 Small Group Communication (3 Credits)
- COMM140 Interpersonal Communication (3 Credits)
- ENGL240 Technical Communication (4 Credits)

Goal Area 2 - Critical Thinking

The following courses apply to MNTC Goal 2. Complete all 9 other MNTC goal areas OR select one course.

- HUM 100 Critical Thinking (3 Credits)
- PHIL100 Ethics in Society (3 Credits)
- PHIL130 Logic (4 Credits)
- CAP 250 Associate of Arts Capstone Class (1 Credit)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.

Goal Area 3 - Natural Sciences

The following courses apply to MNTC Goal 3. To complete the goal, students must select at least two courses from two different disciplines.

- BIOL100 Introduction to Biology (4 Credits)
- BIOL101 Introduction to Ecology (4 Credits)
- BIOL106 Introduction to Cell Biology (3 Credits)
- BIOL110 Biology of Disease (3 Credits)
- BIOL115 General Biology I (4 Credits)
- BIOL116 General Biology II (4 Credits)
- BIOL152 Tropical Rain Forest Ecology (4 Credits)
- BIOL162 Human Biology (4 Credits)
- BIOL220 Human Anatomy (4 Credits)
- BIOL225 Anatomy and Physiology I (4 Credits)
- BIOL230 Human Physiology (4 Credits)
- BIOL235 Anatomy and Physiology II (4 Credits)
- BIOL240 Pathophysiology (3 Credits)
- BIOL270 Microbiology (4 Credits)
- CHEM101 The Chemistry of Everything (3 Credits)

Goal Area 4 - Mathematical/Logical Reasoning

The following courses apply to MNTC Goal 4. To complete the goal, students must complete one course.

- MATH115 Concepts in Math (4 Credits)
- MATH120 College Algebra (4 Credits)
- MATH125 Trigonometry (3 Credits)
- MATH130 Pre-Calculus (4 Credits)
- MATH131 Calculus I (4 Credits)
- MATH132 Calculus II (4 Credits)
- MATH154 Elementary Statistics (4 Credits)
- MATH231 Ordinary Differential Equations (4 Credits)
- MATH233 Multivariable Calculus (4 Credits)
- MATH240 Elementary Linear Algebra (4 Credits)
- PHIL130 Logic (4 Credits)
Goal Area 5 - History and Social Sciences
The following courses apply to MNTC Goal 5. To complete the goal, students must complete at least two courses from two different disciplines.

ANTH100 Introduction to Anthropology (4 Credits)
ANTH121 Cultural Anthropology (4 Credits)
ECON110 Principles of Macroeconomics (3 Credits)
ECON120 Principles of Microeconomics (3 Credits)
ETHN101 The Immigrant Experience (3 Credits)
ETHN110 American Racial Minorities (3 Credits)
HIST120 U.S. History I (4 Credits)
HIST121 U.S. History II (4 Credits)
HIST160 World History I (4 Credits)
HIST161 World History II: The Rise of the West (4 Credits)
HIST162 World History III: The Twentieth Century (4 Credits)
HIST205 Special Topics in History; (1 - 4 Credits)
POL110 American Government (3 Credits)
PSYC100 Introduction to Psychology (4 Credits)
PSYC110 Lifespan Psychology (3 Credits)
PSYC140 Psychology of Positive Adjustment (4 Credits)
PSYC210 Social Psychology (4 Credits)
PSYC220 Health Psychology (4 Credits)
PSYC230 Abnormal Psychology (4 Credits)
PSYC240 Child and Adolescent Psychology (4 Credits)
PSYC250 Industrial Organizational Psychology (4 Credits)
PSYC280 Special Topics in Psychology; (4 Credits)
SOC101 Introduction to Sociology (4 Credits)
SOC106 Introduction to Criminal Justice (4 Credits)
SOC110 Social Problems (3 Credits)
SOC201 Marriage and Family (3 Credits)
SOC205 Special Topics in Sociology; (3 Credits)
SOC206 Juvenile Delinquency (3 Credits)
SOC210 Social Stratification - Who Gets What and Why? (3 Credits)
SOC251 Criminology and Criminal Behavior (4 Credits)
SOC259 Drugs and Society (3 Credits)

Goal Area 6 - Humanities and Fine Arts
The following courses apply to MNTC Goal 6. To complete the goal, students must select at least two courses from two different disciplines.

ART100 Art Appreciation (3 Credits)
ART110 Art Structure (3 Credits)
ART120 Metal Art (3 Credits)
ART125 Sculpture (3 Credits)
ART130 Painting (3 Credits)
ART135 Introduction to Watercolor (3 Credits)
ART140 Digital Photography (3 Credits)
ART150 Drawing I (3 Credits)
ART155 Visual Narrative (3 Credits)
ART165 Public Art (3 Credits)
ART170 Digital Video Production (3 Credits)
ART180 Digital Photography 2 (3 Credits)
ART201 Art History I (3 Credits)
ART202 Art History II (3 Credits)
ART270 Digital Video Production 2 (3 Credits)
ENGL110 Introduction to Literature (4 Credits)
ENGL120 Perspectives in Literature, Film, and American Diversity (4 Credits)
ENGL130 Perspectives in Literature, Film, and Global Cultures (4 Credits)
ENGL140 British Literature (4 Credits)
ENGL150 Introduction to Poetry (4 Credits)
ENGL160 Introduction to Short Story (4 Credits)
ENGL205 Special Topics in Literature & Film: (4 Credits)
ENGL206 Children's Literature (4 Credits)
ENGL208 African American Literature (4 Credits)
ENGL210 Introduction to Creative Writing (4 Credits)
ENGL220 Creative Writing: Fiction (4 Credits)
HUM111 Introduction to Film (4 Credits)
HUM121 Introduction to the Humanities (4 Credits)
HUM122 Introduction to Humanities II (4 Credits)
HUM150 Global Connections Travel Seminar (1 Credit)
HUM205 Special Topics in the Humanities; (1 - 4 Credits)
HUM250 Global Connections Travel Seminar II (1 - 3 Credits)
PHIL100 Ethics in Society (3 Credits)
PHIL105 World Religions (4 Credits)
PHIL110 Philosophy and Popular Culture (3 Credits)
PHIL150 Medical Ethics (3 Credits)
PHIL205 Special Topics in Philosophy; (1 - 3 Credits)
PHIL220 Philosophy and the Just Society (3 Credits)
MUSC100 Music in the Global Culture (3 Credits)
MUSC121 Class Guitar (2 Credits)
MUSC131 Music Theory 1 (2 Credits)
THTR100 Introduction to Theater (3 Credits)
THTR110 Introduction to Acting I (3 Credits)

Goal Area 7 - Human Diversity
The following courses apply to MNTC Goal 7. To complete the

Goal Area 8 - Global Perspective
The following courses apply to MNTC Goal 8. To complete the
goal, students must complete one course.

AIS 112 Native American Perspectives (4 Credits)
ANTH121 Cultural Anthropology (4 Credits)
ART 155 Visual Narrative (3 Credits)
COMM130 Intercultural Communication (3 Credits)
ENGL120 Perspectives in Literature, Film, and American Diversity (4 Credits)
ENGL208 African American Literature (4 Credits)
ETHN110 The Immigrant Experience (3 Credits)
HIST120 U.S. History I (4 Credits)
HIST121 U.S. History II (4 Credits)
PSYC110 Lifespan Psychology (3 Credits)
PSYC230 Abnormal Psychology (4 Credits)
PSYC240 Child and Adolescent Psychology (4 Credits)
PSYC250 Industrial Organizational Psychology (4 Credits)
SOC 110 Social Problems (3 Credits)
SOC 201 Marriage and Family (3 Credits)

Goal Area 9 - Ethical and Civic Responsibility
The following courses apply to MNTC Goal 9. To complete the goal, students must complete one course.

COMM110 Public Speaking (3 Credits)
ECON110 Principles of Macroeconomics (3 Credits)
ECON120 Principles of Microeconomics (3 Credits)
ENGL115 Global Peace and Social Justice (4 Credits)
ETHN101 American Racial Minorities (3 Credits)
ETHN110 The Immigrant Experience (3 Credits)
MASS110 Introduction to Mass Communication (4 Credits)
PHIL100 Ethics in Society (3 Credits)
PHIL140 Science in Society (3 Credits)
PHIL150 Medical Ethics (3 Credits)
PHIL210 Environmental Ethics (3 Credits)
PHIL215 Business Ethics (3 Credits)
PHIL220 Philosophy and the Just Society (3 Credits)
POL 110 American Government (3 Credits)
PSYC140 Psychology of Positive Adjustment (4 Credits)
SOC 106 Introduction to Criminal Justice (4 Credits)
SOC 205 Special Topics in Sociology: (3 Credits)
SOC 206 Juvenile Delinquency (3 Credits)
SOC 251 Criminology and Criminal Behavior (4 Credits)
SOC 259 Drugs and Society (3 Credits)

Goal Area 10 - People and the Environment
The following courses apply to MNTC Goal 10. To complete the goal, students must complete one course.

AIS 112 Native American Perspectives (4 Credits)
BIOL101 Introduction to Ecology (4 Credits)
BIOL152 Tropical Rain Forest Ecology (4 Credits)
GEOG101 Introduction to Physical Geography (3 Credits)
GEOG104 Introduction to Weather and Climate (3 Credits)
GEOG105 World Regional Geography (3 Credits)
HHP 101 Health and the Environment (3 Credits)
PHIL210 Environmental Ethics (3 Credits)
Multimedia Technology
A.S. Degree • 60 Credits

Required Courses (6 Courses)
Complete the following courses:
GCC 1120 Graphic Software 1 (4 Credits)
GCC 1130 Layout and Typography (3 Credits)
GCC 1220 Graphic Software 2 (4 Credits)
GCC 2150 Web/Interactive Media 2 (3 Credits)
GCC 2250 Web/Interactive Media 3 (3 Credits)
COMP1140 Web for Business (3 Credits)

Complete two of the following courses: (2 Courses)
MKT 1810 Principles of Marketing (3 Credits)
MKT 1820 Introduction to Business (3 Credits)
MKT 1840 Principles of Advertising (3 Credits)

Complete 4 credits of one or a combination of the (4 Credits)
following two courses:
MULT2295 Multimedia Technology Internship (1 - 4 Credits)
MULT2295 Multimedia Technology Capstone (1 - 4 Credits)

Required Liberal Arts and Sciences (6 Courses)
To complete the Multimedia Technology AS Degree, students must complete 30 MNTC credits from 6 of the 10 MNTC Goal Areas.

The following courses are required:
ENGL100 Composition (4 Credits)
Or COMM110 Public Speaking (3 Credits)
ART 140 Digital Photography (3 Credits)
ART 170 Digital Video Production (3 Credits)
ART 180 Digital Photography 2 (3 Credits)
ART 270 Digital Video Production 2 (3 Credits)
MASS110 Introduction to Mass Communication (4 Credits)
Or PHIL100 Ethics in Society (3 Credits)
Or PHIL215 Business Ethics (3 Credits)

Liberal Arts and Sciences Electives
Select an additional 11-12 credits to fulfill three other MNTC Goal Areas (MNTC Goals 2,3,4,5,7,8,10).
Nursing
A.S. Degree • 64 Credits

Degree Description
The South Central College Professional Nursing Associate in Science Degree is approved by Minnesota State Colleges and Universities and the Minnesota Board of Nursing and is working on the accreditation process with hopes of a site visit in the fall of 2015 by the Accreditation Commission of Nursing Education (ACEN).

The Associate in Science Degree in Nursing prepares learners for the role of a professional nurse, which includes providing safe and culturally competent care in a variety of settings. Learners will develop and maintain positive, healthy relationships with patients, families, and the community as they learn to practice according to legal, ethical, and professional standards. Evidence will support care, learning, and professional development as learners become advocates for quality health care.

Qualified licensed practical nurses admitted into the Nursing Program will be granted advanced standing for graduation prior to taking their first nursing class. A qualified LPN is one who has met the admission criteria for the SCC Nursing Program. Admitted LPN's will be required to complete a 4-credit “Nursing Transitions” course (NURS2200).

For students wishing to complete the program on a part-time basis, it is recommended they take as many of the required liberal arts and science courses as possible before beginning the program (during their “pre-nursing” time).

Admitted individuals are required to participate in a background study.

Individuals earning an Associate in Science Degree may transfer credits to a four-year institution to work towards a Bachelor’s Degree in Nursing. Learners will be required to take additional liberal arts and science courses, and should visit with whichever institution they wish to transfer to for further information.

Admission Dates: Fall and Spring Semester

Offered on the Faribault and North Mankato Campuses
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Nursing department. See the Nursing department page for more details.

Required Technical Courses (10 Courses)
Complete the following courses:

- NURS2210 Semester 1 Theory (2 Credits)
- NURS2275 Semester 1 Skills & Pharmacology I (4 Credits)
- NURS2250 Semester 1 Clinical Practice (2 Credits)
- NURS2310 Semester 2 Theory (5 Credits)
- NURS2375 Semester 2 Skills & Pharmacology II (2 Credits)
- NURS2350 Semester 2 Clinical Practice (4 Credits)
- NURS2410 Semester 3 Theory (4 Credits)
- NURS2450 Semester 3 Clinical Practice (4 Credits)
- NURS2510 Semester 4 Theory (2 Credits)
- NURS2550 Semester 4 Clinical Practice (4 Credits)

Required Liberal Arts and Sciences (7 Courses)
To complete an A.S. Degree, student must complete 31 MNTC credits from 6 of the 10 MNTC Goal Areas. Complete the following required courses:

- BIOL225 Anatomy and Physiology I (4 Credits)
- BIOL235 Anatomy and Physiology II (4 Credits)
- BIOL240 Pathophysiology (3 Credits)
- BIOL270 Microbiology (4 Credits)
- COMM130 Intercultural Communication (3 Credits)
- ENGL100 Composition (4 Credits)
- PSYC110 Lifespan Psychology (3 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.

Additional Liberal Arts and Sciences (6 Credits)
Students must complete 6 additional credits from at least two of the following MNTC Goal Areas: 2,4,6,9,10.
Practical Nursing
Diploma • 40 Credits

Degree Description

Learners pursuing the Practical Nursing diploma will be taught to collect data related to client physical and mental functioning, administer prescribed medications, demonstrate effective therapeutic communication, provide thorough reporting and recording, prioritize and care for multiple clients with a variety of disorders, perform technical nursing skills and understand the importance of maintaining confidentiality. After completion of the 40 credits of the Nursing Program, learners are qualified to receive the Practical Nursing Diploma and are eligible to take the NCLEX-PN examination.

Admitted Practical Nursing candidates are required to participate in a background study.

Admission Dates: Fall and Spring Semester

Offered on the Faribault and North Mankato Campuses

The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Nursing department. See the Nursing department page for more details

Required Technical Courses (10 Courses)
You must complete the following courses:

- **NURS1110** Foundation of Nursing (3 Credits)
- **NURS1150** Clinical Foundation (3 Credits)
- **NURS1175** Nursing Interventions (3 Credits)
- **NURS1275** Medication Administration (1 Credit)
- **NURS1210** Pharmacology for Practical Nurses (1 Credit)
- **NURS1310** Application of Nursing (4 Credits)
- **NURS1350** Clinical Application (4 Credits)
- **NURS1375** Laboratory Application (2 Credits)
- **NURS1410** Maternal Child Nursing (2 Credits)
- **NURS1610** Psychosocial Nursing (2 Credits)

Required Liberal Arts & Sciences (4 Courses)
Complete the following courses:

- **ENGL100** Composition (4 Credits)
- **BIOL225** Anatomy and Physiology I (4 Credits)
- **BIOL235** Anatomy and Physiology II (4 Credits)
- **PSYC110** Lifespan Psychology (3 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Nursing Assistant (Basic Nursing)

Degree Description

The Nursing Assistant-Home Health Aide Program prepares individuals to work in the hospitals, nursing homes and home care settings. Students learn to safely assist clients with basic physical and emotional needs.

Nursing Assistant is NOT a degree program at South Central College. Rather, it is a course designed to prepare you for the Nursing Assistant/Home Health Aide Competency Test.

This course may not be eligible for federal student aid if not taken as part of a designated program. See advisor for further information.

Minnesota law requires that all persons who provide services that involve direct contact with patients and residents at a health care facility be subject to a background study. A student who is disqualified from having direct patient contact as a result of the background study will not be permitted to participate in a clinical placement in a health care facility and will not be allowed to continue in the nursing program or Nursing Assistant Course. Students who have a disqualification that the Minnesota Commissioner of Health may consider setting aside will not be allowed to continue in the nursing program (an exception may be made for students enrolled in the Nursing Assistant Course).

Admission Dates: Fall, Spring, and Summer Semester

Offered on the Faribault and North Mankato Campuses

The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Nursing department. See the Nursing department page for more details

(1 Course)

HCTC1886 Nursing Assistant (4 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Administrative Office Management
A.S. Degree • 60 Credits

Degree Description

Learners enrolled in the Administrative Office Management Associate in Science (A.S.) Degree are prepared to manage functions in the office environment. This degree option is recommended for experienced office professionals as well as entry-level administrative professionals who are looking to increase their potential for promotion. Graduates with this degree receive training in a variety of office management functions including those in communications, information resources, and management. Learners earn half of the required credits (30) in business-related courses and the other half (30) in business-related liberal arts and sciences classes. Learners may also choose to transfer this degree to Winona State University's Bachelor of Science Degree in Business Education - Teaching to prepare as a business educator or as a corporate trainer.

Degree Student Learning Outcomes

1. Apply current office management procedures and techniques.

Admission Dates: Fall and Spring Semester

Offered on the Faribault and North Mankato Campuses

The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Office Administration and Technology department. See the Office Administration and Technology department page for more details

NOTE: Basic Entrance Requirement

Students must either currently have or attain the skills in OTEC 1001 Computer Software for College and OTEC 1790 Keyboarding for College before entry in the Office Administration and Technology programs.

Required Technical Courses (8 Courses)

Select the following courses:

- ACCT1810 Financial Accounting (4 Credits)
- ACCT1811 Managerial Accounting (4 Credits)
- OTEC1001 Computer Software for College (2 Credits)
- OTEC1820 Business English (3 Credits)
- OTEC1822 Microsoft Excel (4 Credits)
- OTEC1860 Microsoft Word (4 Credits)
- OTEC2820 Business Communications (3 Credits)
- OTEC2860 Office Management (3 Credits)

Required Liberal Arts and Sciences (4 Courses)

To complete an AS degree, students must complete 30 MNTC credits from 6 of the 10 MNTC goal areas. You are required to complete MNTC Goal 6 by taking two courses from two disciplines.

The following courses are required:

- ENGL100 Composition (4 Credits)
- COMM110 Public Speaking (3 Credits)
- COMM140 Interpersonal Communication (3 Credits)
- ECON110 Principles of Macroeconomics (3 Credits)
  Or
- ECON120 Principles of Microeconomics (3 Credits)
Additional Required Liberal Arts and Sciences: (1 Course)

Choose one course from the following list of MNCT Goal Area 3 courses:

- **BIOL100** Introduction to Biology (4 Credits)
- **BIOL101** Introduction to Ecology (4 Credits)
- **CHEM108** Introduction to Chemistry (4 Credits)
- **PHYS211** Principles in Physics I (4 Credits)

Additional required MNTC Goal Area 5 course: (1 Course)

Choose 1 additional History or Social Science course not in ECON.

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.

Additional required MATH Course (1 Course)

Choose one course from the following list:

- **MATH120** College Algebra (4 Credits)
- **MATH130** Pre-Calculus (4 Credits)
- **MATH154** Elementary Statistics (4 Credits)

Additional required MNTC Goal 6 Courses

Choose TWO courses from TWO different disciplines in MNTC Goal 6.
Administrative Office Specialist
A.A.S. Degree • 60 Credits

Degree Description
This degree is designed to prepare learners for employment as administrative assistants. Administrative assistants perform a variety of tasks, which may include the following: learn and use various computer applications, prepare and edit business documents, file, manage records, use electronic calendars, handle telephone calls, schedule meetings, make travel arrangements, greet visitors, and process mail. Other responsibilities may include the following: perform research, supervise or train others, record minutes at meetings, purchase equipment and supplies, and present data. After completion of this program, students will be proficient with verbal and written communications, as well as decision-making and problem-solving skills.

Offered on the Faribault and North Mankato Campuses
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Office Administration and Technology department. See the Office Administration and Technology department page for more details.

NOTE: Basic Entrance Requirement
Students must either currently have or attain the skills in OTEC 1001 Computer Software for College and OTEC 1790 Keyboarding for College before entry in the Office Administration and Technology programs.

Required Core Courses (8 Courses)
Complete all of the following courses:
- OTEC1820 Business English (3 Credits)
- OTEC1822 Microsoft Excel (4 Credits)
- OTEC1860 Microsoft Word (4 Credits)
- OTEC2800 Office Keyboarding (3 Credits)
- OTEC2810 Computer Technology (3 Credits)
- OTEC2814 Office Procedures (4 Credits)
- OTEC2815 Employment Portfolio (3 Credits)
- OTEC2820 Business Communications (3 Credits)

Required Emphasis Courses (6 Courses)
Complete the following courses:
- COMP1140 Web for Business (3 Credits)
- OTEC1840 Business Presentations (3 Credits)
- OTEC2830 Microsoft Publisher (3 Credits)
- OTEC2850 Integrated Information Systems (3 Credits)
- OTEC2870 Information Resource Management (3 Credits)
- MKT 1830 Customer Service (3 Credits)
  Or
- OTEC2855 Internship (3 Credits)

Required Liberal Arts and Sciences (2 Courses)
To complete an AAS Degree, students must complete 16 MNTC credits from 3 of the 10 MNTC Goal Areas.

The following courses are required:
- COMM130 Intercultural Communication (3 Credits)
  Or
- COMM140 Interpersonal Communication (3 Credits)
- PHIL100 Ethics in Society (3 Credits)
  Or
- PHIL215 Business Ethics (3 Credits)

Elective Liberal Arts and Sciences
Select 9 additional MNTC credits in consultation with advisor/faculty.

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Administrative Office Specialist
A.A.S. Degree • 60 Credits

Degree Description

This program is designed to prepare learners for employment as administrative office specialists in financial offices. Administrative office specialists in financial offices perform a variety of tasks, which may include learning and using various computer applications, preparing and editing business documents, filing, managing records, using electronic calendars, handling telephone calls, scheduling meetings, making travel arrangements, greeting visitors, and processing mail. Other responsibilities may include: routine calculating, posting, and verifying primary financial data in maintaining accounting records, preparing daily bank deposits, writing checks, and maintaining a cash disbursement system.

Offered on the Faribault and North Mankato Campuses
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Office Administration and Technology department. See the Office Administration and Technology department page for more details.

NOTE: Basic Entrance Requirement
Students must either currently have or attain the skills in OTEC 1001 Computer Software for College and OTEC 1790 Keyboarding for College before entry in the Office Administration and Technology programs.

Required Core Courses (8 Courses)
Complete all of the following courses:
- **OTEC1820** Business English (3 Credits)
- **OTEC1822** Microsoft Excel (4 Credits)
- **OTEC1860** Microsoft Word (4 Credits)
- **OTEC2800** Office Keyboarding (3 Credits)
- **OTEC2810** Computer Technology (3 Credits)
- **OTEC2814** Office Procedures (4 Credits)
- **OTEC2815** Employment Portfolio (3 Credits)
- **OTEC2820** Business Communications (3 Credits)

Required Emphasis Courses (5 Courses)
Complete the following courses:
- **ACCT1800** Business Law (3 Credits)
- **ACCT1810** Financial Accounting (4 Credits)
- **ACCT1811** Managerial Accounting (4 Credits)
- **ACCT1814** Payroll Accounting (3 Credits)
- **MKT 1830** Customer Service (3 Credits)
  Or
- **OTEC2855** Internship (3 Credits)

Required Liberal Arts and Sciences (3 Courses)
To complete an AAS Degree, students must complete 16 MNTC credits from 3 of the 10 MNTC Goal Areas.

The following courses are required:
- **COMM130** Intercultural Communication (3 Credits)
  Or
- **COMM140** Interpersonal Communication (3 Credits)
- **PHIL100** Ethics in Society (3 Credits)
  Or
- **PHIL215** Business Ethics (3 Credits)
- **ECON110** Principles of Macroeconomics (3 Credits)
  Or
- **ECON120** Principles of Microeconomics (3 Credits)

Elective Liberal Arts and Sciences
Select 7 additional MNTC credits in consultation with advisor/faculty.

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Administrative Office Specialist
A.A.S. Degree • 60 Credits

Degree Description

Legal administrative assistants perform the administrative tasks in a law office such as answering the telephone, managing the electronic and paper files, transcribing, preparing law office correspondence and legal documents, maintaining the calendar, personal contact with attorneys, courthouse personnel, law office personnel, and others. In addition, the legal administrative assistant drafts documents, gathers information relevant to the client’s case, has personal and phone contact with the client, and does minimal legal research. Overall, the legal administrative assistant manages the procedural tasks for clients in the law office with an attorney’s supervision. All courses in this program are offered online. Some courses are hybrid meaning that there is some live learner/instructor contact. All class sessions are recorded for those who can’t attend live. The difference between a Legal Administrative Assistant Degree and a Legal Administrative Assistant Diploma is that the degree has 16 credits of Liberal Arts and Sciences.

Degree Student Learning Outcomes

1. Create basic legal documents
2. Proofread, edit, and revise legal documents

Required Core Courses (8 Courses)

Required Emphasis Courses (6 Courses)

Complete all of the following courses:

- **OTECE1820**: Business English (3 Credits)
- **OTECE1822**: Microsoft Excel (4 Credits)
- **OTECE1860**: Microsoft Word (4 Credits)
- **OTECE2800**: Office Keyboarding (3 Credits)
- **OTECE2810**: Computer Technology (3 Credits)
- **OTECE2814**: Office Procedures (4 Credits)
- **OTECE2815**: Employment Portfolio (3 Credits)
- **OTECE2820**: Business Communications (3 Credits)

Complete the following courses:

- **OTECE1725**: Transactional Law (3 Credits)
- **OTECE1730**: Civil Procedures (3 Credits)
- **OTECE2735**: Family and Criminal Law (3 Credits)
- **OTECE2740**: Legal Editing and Proofreading (3 Credits)
- **OTECE2870**: Information Resource Management (3 Credits)
- **OTECE2850**: Integrated Information Systems (3 Credits)
- **OTECE2855**: Internship (3 Credits)

Elective Liberal Arts and Sciences

Select 9 additional MNTC credits in consultation with advisor/faculty.

Offered on the Faribault and North Mankato Campuses

The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our [Catalog Archive](#).

This credential is part of the Office Administration and Technology department. [See the Office Administration and Technology department page for more details](#).

**NOTE: Basic Entrance Requirement**

Students must either currently have or attain the skills in OTEC 1001 Computer Software for College and OTEC 1790 Keyboarding for College before entry in the Office Administration and Technology programs.

**Required Liberal Arts and Sciences (2 Courses)**

To complete an AAS Degree, students must complete 16 MNTC credits from 3 of the 10 MNTC Goal Areas.

The following courses are required:

- **COMM130**: Intercultural Communication (3 Credits)
- Or
- **COMM140**: Interpersonal Communication (3 Credits)
- **PHIL100**: Ethics in Society (3 Credits)
- Or
- **PHIL215**: Business Ethics (3 Credits)

Please note: All program plans are preliminary and curriculum may change without notice. Your [catalog of record](#) may have different requirements.
Administrative Office Specialist
A.A.S. Degree • 60 Credits

Degree Description
The Administrative Office Specialist-Medical program is designed for learners interested in working in a medical facility and who enjoy office work. Learners will become proficient in keyboarding, word processing, grammar and sentence structure, medical terminology, computer technology, and medical records. The increased technology in this field demands skilled office personnel as physicians and other health care professionals rely upon the expertise of the Administrative Office Specialist. Examples of duties include scheduling appointments, medical prior authorizations, and verifying medical insurance. The opportunity to work in many health care settings is appealing for those wishing to engage with health care specialists and patients. Employment opportunities would include clinics, hospitals, long-term care facilities, chiropractic clinics, and other health care related facilities.

Offered on the Faribault and North Mankato Campuses
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Office Administration and Technology department. See the Office Administration and Technology department page for more details.

NOTE: Basic Entrance Requirement
Students must either currently have or attain the skills in OTEC 1001 Computer Software for College and OTEC 1790 Keyboarding for College before entry in the Office Administration and Technology programs.

Required Core Courses (8 Courses)
Complete all of the following courses:
- OTEC1820 Business English (3 Credits)
- OTEC1822 Microsoft Excel (4 Credits)
- OTEC1860 Microsoft Word (4 Credits)
- OTEC2800 Office Keyboarding (3 Credits)
- OTEC2810 Computer Technology (3 Credits)
- OTEC2814 Office Procedures (4 Credits)
- OTEC2815 Employment Portfolio (3 Credits)
- OTEC2820 Business Communications (3 Credits)

Required Emphasis Courses (7 Courses)
Complete the following courses:
- COMP1140 Web for Business (3 Credits)
- HC1000 Medical Terminology (3 Credits)
- HC1500 Healthcare Foundation: Introduction to Health Careers (1 - 3 Credits)
- HC1550 Electronic Health Records (2 Credits)
- MA1020 Medical Office Procedures (3 Credits)
- MKT1830 Customer Service (3 Credits)
- OTEC1001 Computer Software for College (2 Credits)

Required Liberal Arts and Sciences (3 Courses)
To complete an AAS Degree, students must complete 15 MNTC credits from 3 of the 10 MNTC Goal Areas.

The following courses are required:
- COMM130 Intercultural Communication (3 Credits)
  Or
- COMM140 Interpersonal Communication (3 Credits)
- PHIL100 Ethics in Society (3 Credits)
  Or
- PHIL215 Business Ethics (3 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.

Elective Liberal Arts and Sciences
Select 9 additional MNTC credits in consultation with advisor/faculty.
Administrative Office Specialist
A.A.S. Degree • 60 Credits

Degree Description

** ** PENDING MnSCU APPROVAL ** **

This program is designed to prepare learners as Administrative Office Specialists with a focus on technical support. Learners will develop skills in computer software, electronic mail, network management, media management, applications support, systems administration tasks, computer maintenance, Internet, and emerging software technologies.

Degree Student Learning Outcomes
1. Demonstrate support of hardware and software applications.
2. Create and maintain web documents.

Offered on the Faribault and North Mankato Campuses
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Office Administration and Technology department. See the Office Administration and Technology department page for more details

NOTE: Basic Entrance Requirement
Students must either currently have or attain the skills in OTEC 1001 Computer Software for College and OTEC 1790 Keyboarding for College before entry in the Office Administration and Technology programs.

Required Core Courses (8 Courses)
Complete all of the following courses:

- OTEC1820 Business English (3 Credits)
- OTEC1822 Microsoft Excel (4 Credits)
- OTEC1860 Microsoft Word (4 Credits)
- OTEC2800 Office Keyboarding (3 Credits)
- OTEC2810 Computer Technology (3 Credits)
- OTEC2814 Office Procedures (4 Credits)
- OTEC2815 Employment Portfolio (3 Credits)
- OTEC2820 Business Communications (3 Credits)

Required Emphasis Courses (5 Courses)
Complete the following courses:

- COMP1140 Web for Business (3 Credits)
- COMP1200 PC Hardware and Software Essentials (4 Credits)
- COMP1360 Introduction to Data Communications and Networking (4 Credits)
- OTEC2870 Information Resource Management (3 Credits)
- MKT 1830 Customer Service (3 Credits)
  or
- OTEC2855 Internship (3 Credits)

Required Liberal Arts and Sciences (2 Courses)
To complete an AAS Degree, students must complete 16 MNTC credits from 3 of the 10 MNTC Goal Areas.

The following courses are required:

- COMM130 Intercultural Communication (3 Credits)
  or
- COMM140 Interpersonal Communication (3 Credits)

- PHIL100 Ethics in Society (3 Credits)
  or
- PHIL215 Business Ethics (3 Credits)

Elective Liberal Arts and Sciences
Select 10 additional MNTC credits in consultation with advisor/faculty.

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Administrative Office Specialist
Certificate • 16 Credits

Degree Description

The Administrative Office Specialist Business Software Certificate allows learners to upgrade their technology and software skills. Learners will learn the Microsoft Office applications including Word, Excel, and PowerPoint. Students may choose from a varied list of electives to tailor the certificate to their individual needs.

Offered on the Faribault and North Mankato Campuses

The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Office Administration and Technology department. See the Office Administration and Technology department page for more details.

Required Technical Courses (5 Courses)
Complete the following courses:

- **OTEC1815** Keyboarding for Speed and Accuracy (2 Credits)
- **OTEC1822** Microsoft Excel (4 Credits)
- **OTEC1840** Business Presentations (3 Credits)
- **OTEC1860** Microsoft Word (4 Credits)
- **OTEC2870** Information Resource Management (3 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Administrative Office Specialist
Certificate • 23 Credits

Degree Description
This program is designed to prepare learners for employment as a client relations specialist. Because client relations specialists answer questions from external and internal customers about the organization, they need to develop strong interpersonal and communication skills. Client relations specialists may be asked to perform general office responsibilities as well as client relations tasks.

Offered on the Faribault and North Mankato Campuses
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Office Administration and Technology department. See the Office Administration and Technology department page for more details.

Note: Keyboarding Prerequisite Requirement
Students must either currently have or attain the skills in OTEC1001 Computer Software for College and OTEC1790 Keyboarding for College before entry in the Office Administration and Technology programs.

Please Note: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.

Required Technical Courses (7 Courses)
Complete all of the following courses:

- **MKT 1830** Customer Service (3 Credits)
- **OTEC1815** Keyboarding for Speed and Accuracy (2 Credits)
- **OTEC1820** Business English (3 Credits)
- **OTEC1822** Microsoft Excel (4 Credits)
- **OTEC1860** Microsoft Word (4 Credits)
- **OTEC2800** Office Keyboarding (3 Credits)
- **OTEC2814** Office Procedures (4 Credits)
Pharmacy Technician
A.A.S. Degree • 60 Credits

Degree Description
The Pharmacy Technician A.A.S. Degree will prepare learners for the Pharmacy Technician Certification Exam (PTCE). Upon passing this exam, students will earn the credential: CPhT (Certified Pharmacy Technician).

Admission Dates: Fall Semester

Offered on the Faribault and North Mankato Campuses
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Pharmacy Technician department. See the Pharmacy Technician department page for more details.

Required Technical Courses (14 Courses)
Complete all of the following courses:
- **HC 1000** Medical Terminology (3 Credits)
- **HC 1914** Anatomy & Physiology/Disease Conditions I (4 Credits)
- **HHP 210** Stress Management (3 Credits)
- **OTEC1001** Computer Software for College (2 Credits)
- **PHRM1110** Pharmacy Technician Orientation (1 Credit)
- **PHRM1111** Pharmacy Law and Ethics (1 Credit)
- **PHRM1112** Retail Pharmacy (2 Credits)
- **PHRM1113** Pharmacy Math (4 Credits)
- **PHRM2114** Pharmacology (4 Credits)
- **PHRM2115** Pharmacy Non-Sterile Compounding (2 Credits)
- **PHRM2116** Institutional Pharmacy (4 Credits)
- **PHRM2117** Community Pharmacy Internship (4 Credits)
- **PHRM2118** Pharmacy Technician Seminar (1 Credit)
- **PHRM2119** Institutional Pharmacy Internship (4 Credits)

Required Liberal Arts and Sciences (6 Courses)
To complete an AAS Degree, students must complete 21 MNTC credits from 3 of the 10 MNTC Goal areas.
- **ETHN101** American Racial Minorities (3 Credits)
- **ENGL100** Composition (4 Credits)
- **HUM 100** Critical Thinking (3 Credits)
- **CHEM108** Introduction to Chemistry (4 Credits)
- **PSYC100** Introduction to Psychology (4 Credits)
- **COMM140** Interpersonal Communication (3 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Phlebotomy
Certificate • 18 Credits

Degree Description
The goals of the Phlebotomy program are to provide academic education for individuals to acquire the knowledge, skills, and attitudes necessary for becoming a specialist in obtaining blood specimens by venipuncture, arterial, and microtechniques, for the purpose of laboratory analysis. A phlebotomist must have knowledge of the healthcare system, the anatomy and physiology related to laboratory testing and phlebotomy, the collection and transport requirements for tests performed in all areas of the laboratory, documentation and patient records, and interpersonal skills needed to provide quality patient care.

Admission Dates: Fall Semester

Offered on the Faribault Campus
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Phlebotomy department. See the Phlebotomy department page for more details.

Required Technical Courses (4 Courses)
Complete the following courses:
- **MDLT1810** Laboratory Techniques and Orientation (3 Credits)
- **PHLE1000** Anatomy & Physiology (2 Credits)
- **PHLE1100** Legal/Ethical Issues for Phlebotomists (1 Credit)
- **PHLE1200** Multiskilling for Phlebotomists (3 Credits)

Other Required Courses (3 Courses)
Please complete the following courses:
- **FYE 100** First Year Experience (1 Credit)
- **HC 1000** Medical Terminology (3 Credits)
- **OTEC1001** Computer Software for College (2 Credits)

Please NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.

Required Liberal Arts and Sciences (3 Credits)
Please complete one of the following courses:
- **COMM140** Interpersonal Communication (3 Credits)
- Or
- **COMM110** Public Speaking (3 Credits)
Required Technical Courses (8 Courses)
Select all of the following courses:

- **SBMT1110** SBM Organizational Planning (2 Credits)
- **SBMT1120** SBM Business Systems (3 Credits)
- **SBMT1210** SBM Financial Systems (3 Credits)
- **SBMT1220** SBM Financial Management (3 Credits)
- **SBMT1230** SBM Financial Analysis (3 Credits)
- **SBMT1310** SBM Marketing Systems (2 Credits)
- **SBMT1320** SBM Marketing Management (2 Credits)
- **SBMT1410** SBM Personnel Systems (3 Credits)

Required Technical Course Electives (18 Credits)
You must complete 18 credits of electives from the following lists.

- **SBMT2130** SBM Record Keeping (3 Credits)
- **SBMT2131** SBM Asset & Inventory Management (2 Credits)
- **SBMT2132** SBM A/R & A/P Management (2 Credits)
- **SBMT2133** SBM Reconciliation & Closing Accounts (2 Credits)
- **SBMT2134** SBM Payroll Systems (3 Credits)
- **SBMT2135** SBM Payroll Reports (2 Credits)
- **SBMT2136** SBM Year End Closing (1 Credit)
- **SBMT2240** SBM Organizational Structure (1 Credit)
- **SBMT2241** SBM Financial & Tax Planning (2 Credits)
- **SBMT2242** SBM Risk Management (1 Credit)
- **SBMT2243** SBM Cost Analysis (2 Credits)
- **SBMT2244** SBM Pro-Forma Financial Statements (2 Credits)
- **SBMT2330** SBM Sales & Marketing Analysis (2 Credits)
- **SBMT2331** SBM Marketing Research (1 Credit)
- **SBMT2332** SBM e-Business Sales (2 Credits)
- **SBMT2333** SBM Customer Information Systems (1 Credit)
- **SBMT2334** SBM Customer Service (2 Credits)
- **SBMT2420** SBM Supervisory Skills 1 (2 Credits)
- **SBMT2421** SBM Supervisory Skills 2 (2 Credits)
- **SBMT2422** SBM Employee Compensation (2 Credits)
- **SBMT2531** SBM Business Communications (1 Credit)
- **SBMT2532** SBM Business Math (1 Credit)
- **SBMT2533** SBM Time Management Skills (1 Credit)
- **SBMT2534** SBM Stress Management Skills (1 Credit)
- **SBMT2610** SBM Computerization-Accounting (3 Credits)
- **SBMT2611** SBM Computerization-Sales & Marketing (3 Credits)
- **SBMT2612** SBM Computerization-Human Resources (3 Credits)
- **SBMT2700** SBM Going Into Business (3 Credits)
- **SBMT2900** SBM Special Projects (1 - 3 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Small Business Management
Certificate • 21 Credits

Degree Description
The SBM certificate provides a broad spectrum of education in the management of a small business. The curriculum focuses on strategic planning, record keeping, financial analysis, marketing and personnel management through the required classes. No electives are available for this certificate.

Admission Dates: Fall, Spring, and Summer Semester

Offered on the Faribault and North Mankato Campuses
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Small Business Management department. See the Small Business
Management department page for more details

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.

Required Technical Courses (8 Courses)
Complete all of the following courses:

- **SBMT1110** SBM Organizational Planning (2 Credits)
- **SBMT1120** SBM Business Systems (3 Credits)
- **SBMT1210** SBM Financial Systems (3 Credits)
- **SBMT1220** SBM Financial Management (3 Credits)
- **SBMT1230** SBM Financial Analysis (3 Credits)
- **SBMT1310** SBM Marketing Systems (2 Credits)
- **SBMT1320** SBM Marketing Management (2 Credits)
- **SBMT1410** SBM Personnel Systems (3 Credits)
Small Business Management Financial Management
Certificate • 14 Credits

Degree Description
The SBM certificate provides a broad spectrum of education in the management of a small business. The curriculum focuses on strategic planning, record keeping, financial analysis, marketing and personnel management through the required classes. No electives are available for this certificate.

Admission Dates: Fall, Spring, and Summer Semester

Offered on the Faribault and North Mankato Campuses
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Small Business Management department. See the Small Business Management department page for more details.

Required Technical Courses (5 Courses)
Complete all of the following courses:

- SBMT1110 SBM Organizational Planning (2 Credits)
- SBMT1120 SBM Business Systems (3 Credits)
- SBMT1210 SBM Financial Systems (3 Credits)
- SBMT1220 SBM Financial Management (3 Credits)
- SBMT1230 SBM Financial Analysis (3 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Small Business Management Human Resources
Certificate • 12 Credits

Degree Description

The SBM Human Resources certificate provides a focus on HR skills needed by the small business owner or manager. Required classes cover the basics of small business management and personal or human resources management. Electives allow the business owner or manager to focus on areas of specific need or interest.

Admission Dates: Fall, Spring, and Summer Semester

Offered on the Faribault and North Mankato Campuses
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Small Business Management department. See the Small Business Management department page for more details.

Required Technical Courses (3 Courses)
Complete all of the following courses:
SBMT1110 SBM Organizational Planning (2 Credits)
SBMT1120 SBM Business Systems (3 Credits)
SBMT1410 SBM Personnel Systems (3 Credits)

Choose 4 credits from the following list: (4 Credits)
SBMT2420 SBM Supervisory Skills 1 (2 Credits)
SBMT2421 SBM Supervisory Skills 2 (2 Credits)
SBMT2422 SBM Employee Compensation (2 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Required Technical Courses (4 Courses)
Complete all of the following courses:
- SBMT1110 SBM Organizational Planning (2 Credits)
- SBMT1120 SBM Business Systems (3 Credits)
- SBMT1310 SBM Marketing Systems (2 Credits)
- SBMT1320 SBM Marketing Management (2 Credits)

Choose 5 credits from the following list: (5 Credits)
- SBMT2330 SBM Sales & Marketing Analysis (2 Credits)
- SBMT2331 SBM Marketing Research (1 Credit)
- SBMT2332 SBM e-Business Sales (2 Credits)
- SBMT2333 SBM Customer Information Systems (1 Credit)
- SBMT2334 SBM Customer Service (2 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Small Business Management Record Keeping
Certificate • 18 Credits

Degree Description

The SBM Record Keeping certificate provides a focus on record keeping skills needed by the small business owner or manager. Required classes cover the basics of small business management and record keeping. Electives allow the business owner or manager to focus on areas of specific need or interest.

Admission Dates: Fall, Spring, and Summer Semester

Offered on the Faribault and North Mankato Campuses
The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

This credential is part of the Small Business Management department. See the Small Business Management department page for more details.

Required Technical Courses (4 Courses)
Complete all of the following courses:

- SBMT1110 SBM Organizational Planning (2 Credits)
- SBMT1120 SBM Business Systems (3 Credits)
- SBMT1210 SBM Financial Systems (3 Credits)
- SBMT1230 SBM Financial Analysis (3 Credits)

Choose 7 credits from the following list: (7 Credits)

- SBMT2130 SBM Record Keeping (3 Credits)
- SBMT2131 SBM Asset & Inventory Management (2 Credits)
- SBMT2132 SBM A/R & A/P Management (2 Credits)
- SBMT2133 SBM Reconciliation & Closing Accounts (2 Credits)
- SBMT2134 SBM Payroll Systems (3 Credits)
- SBMT2135 SBM Payroll Reports (2 Credits)
- SBMT2136 SBM Year End Closing (1 Credit)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.
Degree Description

The Welding Program at South Central College is designed to help you quickly develop technical knowledge and hands-on skills for a high demand job. You have the option to complete the full 16-credit program or take any individual class through the Center for Business and Industry (cbi.southcentral.edu/enroll). With these options, novices and advanced level students can benefit from the program.

Admission Dates: Fall and Spring Semester

Offered on the Faribault Campus

The course requirements listed below are specific to the 2014-2015 school year. If you need to view the program from previous years view our Catalog Archive.

Required Technical Courses (10 Courses)

Complete all of the following courses:

- WELD1005 Blueprint Reading (1 Credit)
- WELD1006 Blueprint Reading for Welding (1 Credit)
- WELD1010 OSHA 10 Hour and Welding Safety (1 Credit)
- WELD1011 OSHA 10 Hour and Welding Safety II (1 Credit)
- WELD1025 Introduction to Shielded Metal Arc Welding (SMAW) (2 Credits)
- WELD1026 Shield Metal ARC Welding II (1 Credit)
- WELD1035 Introduction to Gas Metal Arc Welding (GMAW) (2 Credits)
- WELD1036 Gas Metal Arc Welding II (1 Credit)
- WELD1045 Introduction to Gas Tungsten Arc Welding (3 Credits)
- WELD1055 Introduction to Oxy-Fuel Welding and Cutting (3 Credits)

PLEASE NOTE: All program plans are preliminary and curriculum may change without notice. Your catalog of record may have different requirements.