Northwest Technical College

Bemidji, Minnesota

COLLEGE CATALOG

2025-2026

NORTHWEST TECHNICAL COLLEGE
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ABOUT THIS CATALOG

The purpose of the Catalog is to provide students, advisors, staff, faculty and college administration a convenient vehicle for viewing information about NTC's programs and courses. While NTC is committed to communicating in a timely and accurate manner, it is important for all Catalog users to understand that this publication is not intended to create any guarantees about current program/course offerings. NTC reserves the right to change or vary the content of this publication, without notice to current or potential users, when in its sole discretion such changes, updates or variations are warranted. It is the user's responsibility to seek clarification and/or assistance from a college advisor or administrator regarding any content questions. The most current publication of NTC's Online Catalog supersedes all prior print or online publications and can be found by visiting our website at www.ntcmn.edu.

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U.S. Department of Health and Human Services
233 N. Michigan Ave., Suite 240
Chicago, IL 60601
Telephone: 800.368.1019
Fax: 312.886.1807
TDD: 800.537.7697
Email: OCRMail@hhs.gov

MINNESOTA STATE

A member of Minnesota State. An Equal Opportunity/Affirmative Action/Veterans/Disability employer/educator committed to the principles of diversity.

ABOUT **NORTHWEST TECHNICAL COLLEGE**

MISSION

Northwest Technical College engages, supports, and prepares students for rewarding careers through innovative programs and hands-on learning.

VISION

Northwest Technical College will be a regional leader in providing accessible and innovative education to meet the evolving needs of our diverse students, communities, and workforce.

NTC HISTORY

Northwest Technical College possesses a rich history of growth and change, evolving from a post-secondary vocational institution to a technical college and now into a new model of higher education.

From its beginnings in 1965 with only 99 enrollees, NTC growth now boasts an enrollment of over 1,000 students. Program and offerings started with just 2 to now over 40 in the areas of Business & IT Careers, General Education, Human & Protective Services, and Skilled Trades.

A unique alignment between Bemidji State University and Northwest Technical College gives NTC students the option to utilize many of BSU's services. These include residence hall living, meal plans, the Gillett Wellness Center, health services, the library, and access into the many campus events. The two campuses are only a short 10 minutes apart. It is the only such partnership between a technical college and a university within the state. NTC students can have the best of both worlds – a taste of university life and a focused, technology-based education, which can get them on the road to their careers faster.

Step inside NTC and you will enter a unique 21st century learning environment where technology is the foundation of all instruction, and academic programs present a global perspective. It is a place where students of all ages and backgrounds can start a new career or advance in their chosen professions. NTC is decorated with inspiring artwork for a warm, inviting feel. Cultural diversity is respected, and students become part of a close community of classmates, faculty, and staff.

Learn more at
ntcmn.edu

NTC Northwest Technical College

NORTHWEST TECHNICAL COLLEGE **ACCREDITATIONS**

Northwest Technical College is accredited by the Higher Learning Commission, an institutional accreditation agency recognized by the U.S. Department of Education.
230 South LaSalle St., Suite 7-500, Chicago, IL 60604 Website: www.hlcommission.org Email: info@hlccommission.org Phone: 800.612.7440 or 312.263.0456

Programs accredited/approved/licensed by additional agencies include:

Cosmetology
Minnesota Board of Cosmetology
1000 University Ave. W, Suite 100, St. Paul, MN 55104 Phone: 651.201.2742 |
Email: cosmetology@state.mn.us
Website: mn.gov/boards/cosmetology

Automotive Service & Performance
Automotive Service of Excellence Education Foundation (ASE EF)
1503 Edwards Ferry Rd., NE, Suite 401
Leesburg, VA 20176
Phone: 703.669.6650
Email: info@ASEeducationFoundation.org

Nursing (AS)
Minnesota Board of Nursing
1210 Northland Dr., Suite 120, Mendota Heights, MN 55120
Phone: 612.317.3000
Email: nursing.board@state.mn.us
Website: mn.gov/boards/nursing

Dental Assisting
Commission on Dental Accreditation (CODA) 211 East Chicago Ave., Chicago, IL 60611
Phone: 800.621.8099
Website: coda.ada.org

Practical Nursing (Diploma)
Minnesota Board of Nursing
1210 Northland Dr., Suite 120
Mendota Heights, MN 55120
Phone: 612.317.3000
Email: nursing.board@state.mn.us
Website: mn.gov/boards/nursing

Nursing Programs Accreditation Agency:
Accreditation Commission for Education in Nursing (ACEN)
33423 Peachtree Road NE, Suite 850
Atlanta, GA 30326
(404) 975-5000
Website: acenursing.org

NORTHWEST TECHNICAL COLLEGE
DIRECTORY OF COLLEGE SERVICES

ADMINISTRATION

President of Northwest Technical College
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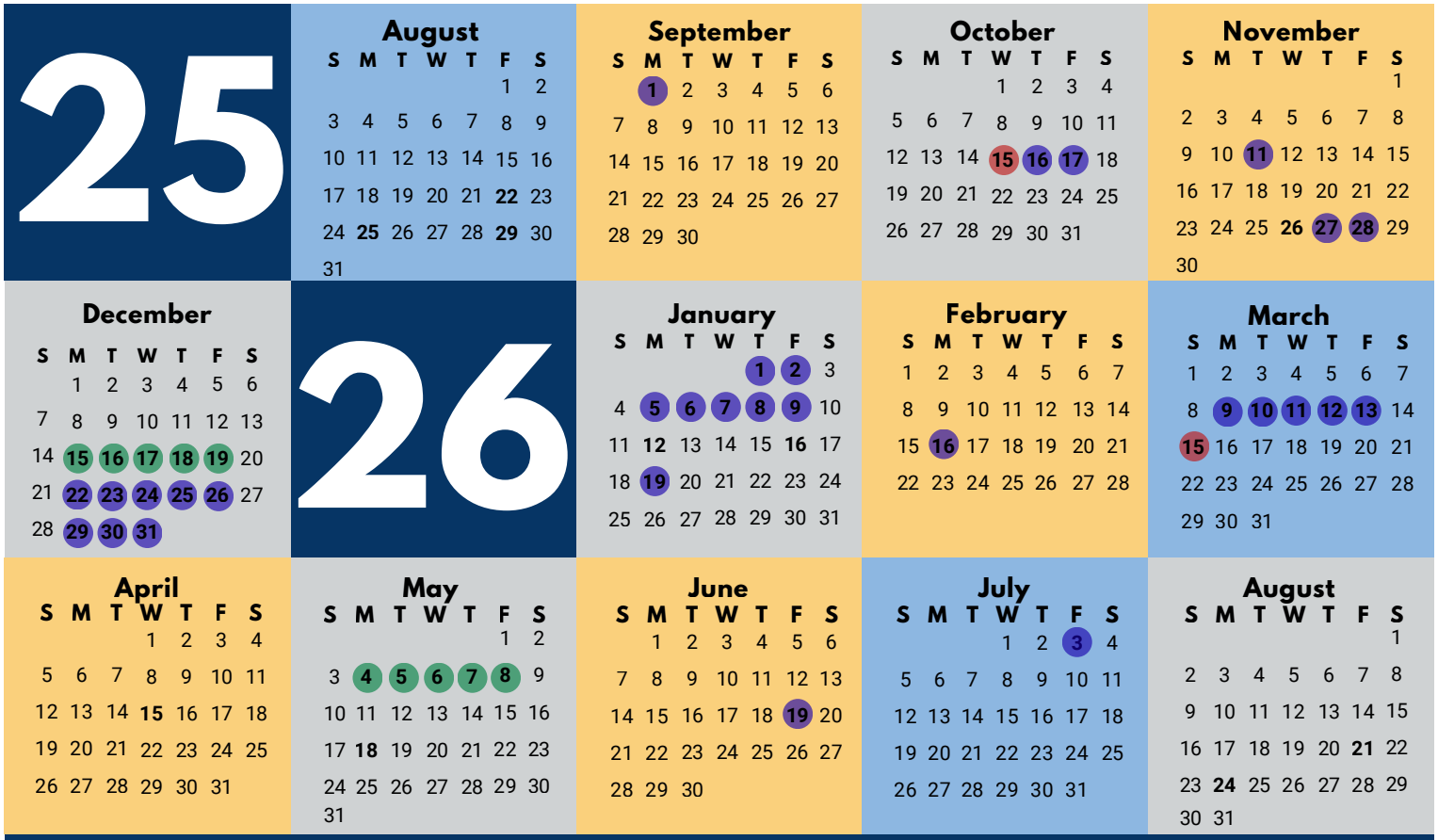
Nicholle Bieberdorf.....218.333.6611

STUDENT SERVICES

Accessibility Services.....218.333.6656
Admissions.....218.333.6600
Advising.....218.333.6655
Affirmative Action.....218.755.4053
American Indian Resource Center.....218.333.6656
Assessment/Accuplacer.....218.333.6600
Automotive Service.....218.333.6637
Bookstore.....218.751.1987
Business Services.....218.333.6614
Career Services.....218.755.2038
Cosmetology Academy.....218.444.4247
Customized Training Solutions.....218.755.4902
Distance Minnesota.....800.657.3930
Diversity, Equity & Inclusion.....218.755.2068
Enrollment Services.....218.333.6600
Financial Aid.....218.333.6654
Health & Counseling.....218.755.2053
Housing & Residential Life.....218.755.3750
Information Technology Services.....218.333.6651
Library.....218.333.6655
NTC Foundation.....218.759.2057
Public Safety.....218.755.3888
Records & Registration.....218.333.6647
Student Employment.....218.333.6600
Student Life.....218.333.6655
Student Success Center.....218.333.6655
Testing/Proctoring Center.....218.333.6655
Tutoring.....218.333.6655
Veteran Services.....218.208.7544

Learn more at
ntcmn.edu

NTC Northwest Technical College



2025-2026 NTC ACADEMIC CALENDAR

AUGUST 2025

22 | NTC Welcome Day
25 | Fall semester begins
29 | Last day to add or drop full-term fall semester courses

SEPTEMBER 2025

1 | Labor Day **COLLEGE CLOSED**

OCTOBER 2025

15 | Spring & Summer 2026 registration open
16-17 | Fall break
No Classes/College Open

NOVEMBER 2025

11 | Veterans Day **COLLEGE CLOSED**
26 | Last day to withdraw from full-term fall semester courses
27-28 | Thanksgiving break **COLLEGE CLOSED**

DECEMBER 2025

15-19 | Final exams
22-31 | Semester break
No classes/College open
25 | Christmas Day **COLLEGE CLOSED**

JANUARY 2026

1 | New Year's Day **COLLEGE CLOSED**
1-9 | Semester break
No Classes/College Open
12 | Spring semester begins
16 | Last day to add or drop full-term spring semester courses
19 | Martin Luther King Jr. Day **COLLEGE CLOSED**

FEBRUARY 2026

16 | Presidents Day **COLLEGE CLOSED**

MARCH 2026

9-13 | Spring break No Classes/College Open
15 | Fall 2026 registration open

APRIL 2026

15 | Last day to withdraw from full term spring semester courses

MAY 2026

4-8 | Final exams
8 | Spring semester ends
8 | Commencement
18 | Summer term begins

JUNE 2026

19 | Juneteenth **COLLEGE CLOSED**

JULY 2026

3 | Independence Day **COLLEGE CLOSED**

AUGUST 2026

21 | NTC Welcome Day
24 | Fall semester begins (2026-2027 School Year)

No classes | Final exams | Registration | **BOLD** Important Dates

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MN Transfer Curriculum Goal Area Courses 2025-2026

1. Communication

Goal: To develop writers and speakers who useC the English language effectively and who read,C write, and listen critically.

ENGL1111-College Writing I
ENGL1113-College Writing II
SPCH1110-Introduction to Public SpeakingC
SPCH1120-Interpersonal Communications

2. Critical Thinking

Goal: To develop thinkers who are able to unify factual, creative, rational, and value-sensitive modes of thought. Critical thinking skills will be taught and used in courses across the general education curriculum.

ANTH1110-Cultural Anthropology
ENGL1111-College Writing I
ENGL1113-College Writing II
PHIL2210-Bioethical Issues in Contemporary Society

3. Natural Sciences

Goal: To improve students' understanding of natural science principles and of the methods of scientific inquiry, i.e., the ways in which scientists investigate natural science phenomena.

BIOL1111-General Biology
BIOL2130-Principles of Nutrition
BIOL2221-Microbiology
BIOL2256-Advanced Physiology
BIOL2260-Anatomy & Physiology I
BIOL2262-Anatomy & Physiology II

4. Mathematic/Logical Reasoning

Goal: To increase students' knowledge about mathematical and logical modes of thinking. This will enable students to appreciate the breadth of applications of mathematics, evaluate arguments, and detect fallacious reasoning.

MATH1110-College Algebra
MATH1200- Mathematics for Business and Industry
MATH1930-Introduction to Math Sciences
MATH2200-Statistics

5. History and the Social and Behavioral Sciences

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

ANTH1110-Cultural Anthropology
ECON2204-Markets & Resource Allocation
ECON2404-Macroeconomics and the Business Cycle
GERO1100-Intro to Gerontology
PSYC1105-General Psychology
PSYC2201-Lifespan Psychology
PSYC2220-Psychological Disorders
SOCI1110-Introduction to Sociology

MN Transfer Curriculum Goal Area Courses 2025-2026

6. Humanities and the Fine Arts

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

PHIL1201-Ethics

PHIL2210-Bioethical Issues in Contemporary Society

7. Human Diversity, Race, Power, and Justice in the United States

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

GERO1100-Intro to Gerontology

8. Global Perspective

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

SGNL1100-American Sign Language I

SGNL2100-American Sign Language II

SOCI1110-Introduction to Sociology

9. Ethical and Civic Responsibility

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

ACCT1001-Financial Literacy

PHIL1201-Ethics

PHIL2210-Bioethical Issues in Contemporary Society

10. People and the Environment

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

NSCI2203-Environmental Science

MN Transfer Curriculum Associate Degree Requirements

2025-2026

General education curricula assist individual development as a person and a citizen. Technical education prepares the student to achieve success within a chosen career area.

NTC requires that each Associate Degree program include a minimum number of Minnesota Transfer Curriculum General Education credits. The Minnesota Transfer Curriculum General Education courses listed below are identified by the Minnesota Transfer Curriculum (MnTC) goal(s) that they address and are typically accepted as individually transferable to/from other institutions. (NOTE: transfer of credits is determined by the receiving institution.)

Program faculty members, in conjunction with industry and advisory committees, determine general education course requirements for individual programs.

The minimum credit requirements are outlined in the MnTC Credit Requirements table below.

Degree	Required MN Transfer Curriculum Credits	Required Goal Area Categories
Associate of Science	30 credits	6 categories
Associate of Applied Science	15 credits	3 categories

ACADEMIC PROGRAMS
2025-2026

ACCOUNTING

Associate of Applied Science - 60 credits

This 60-credit degree program provides the knowledge and skills necessary to examine, analyze, interpret and correct accounting data for the purpose of preparing financial statements, budgets, forecast accounting reports, payroll reports and state and federal income tax returns. Instruction and hands-on training include principles of accounting, business law, spreadsheet concepts, cost accounting, microcomputer databases and accounting for governmental and non-profit agencies.

Course #	Course Name	Credits
ACCT2201	Accounting I: Financial Accounting	4
ACCT2203	Accounting II: Managerial Accounting	4
ACCT1134	Computerized Accounting Applications	3
ACCT1104	Payroll	3
ACCT1001	Financial Literacy	3
ACCT1124	Spreadsheet Concepts	3
ACCT2200	Income Tax	3
ADMS1116	Business Communications	3
MKTG1108	Customer Relations Management	3
ACCT1120	Legal Environment	3
ACCT2204	Intermediate Accounting I	4
ACCT2218	Fund/Nonprofit Accounting	3
CPTR1104	Computerized Business Applications	3
ECON2204	Markets & Resource Allocation	3
ENGL1111	College Writing I	3
MATH1110	College Algebra	3
ACCT2205	Intermediate Accounting II	4
PHIL1201	Ethics	3
	General Education Electives	2
	PROGRAM CREDITS	60

ACCOUNTING

Certificate - 18 credits

This 18-credit certificate program provides the essential foundations of accounting for those who want to enter the accounting field or advance their studies with a diploma or Associate of Applied Science (AAS) degree. Applicable coursework will include two levels on the principles of accounting and singular courses on the legal environment, computerized accounting and computerized business.

Course #	Course Name	Credits
ACCT1120	Legal Environment	3
ACCT1134	Computerized Accounting Applications	3
ACCT2201	Accounting I: Financial Accounting	4
ACCT2203	Accounting II Managerial Accounting	4
CPTR1104	Computerized Business Applications	3
CRLT1102	Contemporary Career Search	1
	PROGRAM CREDITS	18

ACCOUNTING CLERK

Diploma - 32 credits

This major provides the knowledge and skills necessary to perform routine calculating, journalizing, posting, and verifying duties to maintain accounting records, prepare payroll reports, and state and federal tax returns. Both manual and computerized accounting concepts and applications are included.

Course #	Course Name	Credits
ACCT1000	Financial Information for Life	3
ACCT1124	Spreadsheet Concepts	3
ACCT1134	Computerized Accounting Applications	3
ACCT2200	Income Tax	3
ACCT2201	Accounting I: Financial Accounting	4
ACCT2203	Accounting II: Managerial Accounting	4
ADMS1116	Business Communications	3
ADMS2124	Advanced Micro Computer	3
MKTG1108	Customer Relations Management	3
CPTR1104	Computerized Business Applications	3
	PROGRAM CREDITS	32

ACCOUNTING TRANSFER PATHWAY

Associate of Science - 60 credits

The Accounting Transfer Pathway offers students a powerful option: the opportunity to complete an Associate of Science degree with course credits that directly transfer to designated accounting bachelor's degree programs at Minnesota State universities. *The curriculum has been specifically designed so that students completing this pathway degree and transferring to one of the seven Minnesota State universities enter the university with junior-year status. All courses in the transfer pathway associate degree will directly transfer and apply to the designated bachelor's degree programs in a related field. *Universities within the Minnesota State system include Bemidji State University; Metropolitan State University; Minnesota State University, Mankato; Minnesota State University Moorhead; Southwest Minnesota State University; St. Cloud State University; and Winona State University.

Course #	Course Name	Credits
ENGL1111	College Writing I	3
SPCH1110	Intro to Public Speaking	3
MATH1110	College Algebra	3
MATH2200	Statistics	4
PHIL1201	Ethics	3
ECON2204	Markets & Resource Allocation	3
ECON2404	Macroeconomics and the Business Cycle	3
SELECT ONE GOAL AREA 3 COURSE WITH LAB		3/4
ACCT1120	Legal Environment	3
ACCT2201	Accounting I: Financial Accounting	4
ACCT2203	Accounting II: Managerial Accounting	4
CPTR1104	Computerized Business Applications	3
MKTG2100	Principles of Marketing	3
MKTG2200	Principles of Management	3
SELECT FROM ACCOUNTING ELECTIVES BELOW		10-12
	ACCT1001, ACCT 1134, ACCT 2200, ACCT2204, or ACCT2218	
GENERAL EDUCATION ELECTIVES		5+
	PROGRAM CREDITS	60

ADMINISTRATIVE BUSINESS SPECIALIST

Certificate - 18 credits

This program prepares individuals to use computers and a variety of software application programs to perform document processing and file management tasks, as well as create informational marketing pieces, and perform basic data and text entry in a business setting. Includes instruction in keyboarding skills, personal computer processes, and various software programs used for tasks such as word processing, spreadsheets, and databases.

Course #	Course Name	Credits
ADMS1100	Keyboarding I	3
ADMS1102	Keyboarding II	3
ADMS1112	Desktop Publishing/Presentation Graphics	3
ADMS1126	Business Office Management	3
ADMS2124	Advanced Micro Computer	3
CPTR1104	Computerized Business Applications	3
	PROGRAM CREDITS	18

AUTOMOTIVE SERVICE & PERFORMANCE

Diploma - 66 credits

The Automotive Service and Performance program is designed for people working in an exciting and rapidly changing industry. Learners in this program will receive training in the many service and diagnostic procedures necessary to maintain our nation on wheels. Learners are trained in modern laboratories equipped with current service and testing equipment. Opportunities for advancement may include factory and dealer representatives, management, and self-employment.

Course Number	Course Name	Credits
AMST1000	Intro to Automotive Repair	2
AMST1002	Introduction to Automotive Electrical/Electronics	4
AMST1003	Engine Theory/Service	4
AMST1016	Brakes	4
AMST1104	Power Train Systems	4
AMST1105	Steering, Suspension and Alignment	4
AMST1130	Automotive Electrical II	4
AMST1220	Automatic Transmissions and HP Drivelines	4
AMST1330	Advanced Engine Performance/HP Fuels	4
AMST2113	Heating Ventilation A/C	2
AMST2214	Automotive Welding	2
AMST2216	Engine Performance	2
AMST2217	Engine Performance Lab	4
AMST2220	Introduction to Hybrid and Electric Vehicles	2
AMST2230	Light Duty Diesels	3
AMST2236	Dyno Testing and Tuning	2
AMST2244	Drivability and Forced Induction Systems	4
AMST2800	Simulated Shop	4
COMM1102	Applied Communications	3
HLTH1410	First Aid / CPR	1
MATH1200	Mathematics of Business and Industry	3
	PROGRAM CREDITS	66

BUSINESS

Associate of Applied Science - 60 credits

The Business AAS program is designed to meet the diverse employment & skill areas needed in the Business field. This program will prepare students for existing and emerging business careers. Students can pursue a specific business career area, enhance their general business skills foundation, and diversify their skill base by adding an additional specific career certification.

Course #	Course Name	Credits
ENGL1111	College Writing I	3
MATH1110	College Algebra	3
PHIL1201	Ethics	3
PSYC1105	General Psychology	3
SPCH1110	Intro to Public Speaking	3
ACCT1001	Financial Literacy	3
MKTG1108	Customer Relations Management	3
ADMS1116	Business Communications	3
SUPL1104	Intro to Business	3
CPTR1104	Computerized Business Applications	3
Complete two certificates from the list below		
ACCOUNTING CERTIFICATE		15
ADMINISTRATIVE BUSINESS SPECIALIST CERTIFICATE		15
COMPUTER SUPPORT CERTIFICATE		15
HUMAN RESOURCES CERTIFICATE		15
SALES & MARKETING CERTIFICATE		15
MANAGEMENT & ENTREPRENEURSHIP CERTIFICATE		15
	PROGRAM CREDITS	60

BUSINESS

Associate of Science - 60 credits

This program is a university-parallel program equivalent to the first two years of a bachelor's degree program. This program prepares student for majors in such areas as accounting, management, marketing, human resources, economics, and other business-related fields. This program includes business and general education courses to provide a sound background for study and a career in business.

Course #	Course Name	Credit
ENGL1111	College Writing I	3
SPCH1110	Public Speaking	3
MATH1110	College Algebra	3
MATH2200	Statistics	4
PHIL1201	Ethics	3
ECON2204	Markets & Resource Allocation	3
ECON2404	Macroeconomics and the Business Cycle	3
General Education Credits (MnTC courses) - an additional 9 credits from 3 of the following Goal areas: 6, 7, 8, 9, 10		9
ACCT1120	Legal Environment	3
ACCT2201	Financial Accounting/ Acct I	4
ACCT2203	Managerial Accounting/ Acct II	4
CPTR1104	Computerized Business Applications	3
MKTG2100	Principles of Marketing	3
MKTG2200	Principles of Management	3
General Electives (may be additional MNTC courses)		9
	PROGRAM CREDITS	60

BUSINESS FOUNDATIONS

Certificate - 16 credits

NTC's Business Foundations program is designed to provide fundamental business occupational training necessary for rewarding employment in today's professional workplace. Upon completion of the certificate, you will develop effective communication skills, financial management skills and gain an understanding of business environments and opportunities. Students will learn to build and maintain good working relationships with fellow employees and develop exceptional customer service skills. All Business Foundation courses transition to NTC Business Diplomas & AAS Degrees.

Course #	Course Name	Credits
ACCT1001	Financial Literacy	3
MKTG1108	Customer Relations Management	3
ADMS1116	Business Communications	3
SUPL1104	Intro to Business	3
	Technical Electives	4
	PROGRAM CREDITS	16

BUSINESS: TRANSFER PATHWAY

Associate of Science - 60 credits

The Business Transfer Pathway offers students a powerful option: the opportunity to complete an Associate of Science degree with course credits that directly transfer to designated Business bachelor's degree programs at Minnesota State universities.* The curriculum has been specifically designed so that students completing this pathway degree and transferring to one of the seven Minnesota State universities enter the university with junior-year status. All courses in the Transfer Pathway associate degree will directly transfer and apply to the designated bachelor's degree programs in a related field. *Universities within the Minnesota State system include Bemidji State University; Metropolitan State University; Minnesota State University, Mankato; Minnesota State University Moorhead; Southwest Minnesota State University; St. Cloud State University; and Winona State University. This program prepares a student for majors in business-related fields such as management, marketing, finance, human resources, international business, or accounting.

Course #	Course Name	Credit
ENGL1111	College Writing I	3
SPCH1110	Public Speaking	3
MATH1110	College Algebra	3
MATH2200	Statistics	4
PHIL1201	Ethics	3
ECON2204	Markets & Resource Allocation	3
ECON2404	Macroeconomics and the Business Cycle	3
General Education Credits (MnTC courses) - an additional 9 credits from 3 of the following Goal areas: 6, 7, 8, 9, 10		9
ACCT1120	Legal Environment	3
ACCT2201	Financial Accounting/ Acct I	4
ACCT2203	Managerial Accounting/ Acct II	4
CPTR1104	Computerized Business Applications	3
MKTG2100	Principles of Marketing	3
MKTG2200	Principles of Management	3
General Electives (may be additional MNTC courses)		9
	PROGRAM CREDITS	60

COMMUNITY HEALTH WORKER

Certificate - 16 credits

The Community Health Worker (CHW) program will prepare you to obtain employment in a variety of organizations. Community Health Workers perform a broad range of health-related functions and play an important role in bridging the gap between cultures and health care systems. A CHW will work with health care organizations to increase cultural competence, improve access to health care for racial and ethnic minorities, improve the quality of care for the chronically ill, promote healthy communities, and educate families about access to and use of health care coverage.

Course #	Course Name	Credits
CMHW1000	Community Health Worker Role, Advocacy, Outreach & Resources	3
CMHW1100	Health Communication, Teaching & Capacity Building	3
CMHW1200	Documentation, Legal & Ethical Issues in Community Health Work	3
CMHW1300	Health Promotion	5
CMHW1400	Community Health Worker Internship	2
	PROGRAM CREDITS	16

COMPUTER SUPPORT

Certificate - 18 credits

The certificate prepares students to become a Computer Support Specialist troubleshooting and resolving various computer and software issues. They may work in a help-desk environment or provide technical support in an organization's IT department. This certificate can lead into a Business diploma or AAS.

Course #	Course Name	Credits
CPTR1138	Information Systems	3
CPTR1142	Network Essentials	3
CPTR1148	Microcomputer Operating Systems	3
CTEC1106	Helpdesk Operations	3
CTEC1108	E-Merging Technologies	3
CPTR1104	Computerized Business Applications	3
	PROGRAM CREDITS	18

COSMETOLOGY

Diploma - 56 credits

The Cosmetology diploma includes instruction in theory and practical application techniques of hair, skin, and nail services Instruction in hair care services includes analysis of hair, styling, cutting, coloring, permanent waving, and chemical hair relaxing. Instruction in nail care services includes analysis of nails, shaping, polishing, massage of hands and feet, and the application of artificial nails. Instruction in skin care services includes analysis of skin, skin exfoliation, massage techniques, facial services, makeup application, waxing services, and eyelash services. Completion of this diploma meets the 1550 hours required by the MN Board of Cosmetology and prepares students to take the state written exams as well as complete the practical skill test required by MN Board of Cosmetology.

Course #	Course Name	Credits
COS1100	Preclinical Fundamentals for Hair	1
COS1110	Preclinic Hair Care	2
COS1120	Preclinic Hair Design	2
COS1125	Design Fundamentals	2
COS1130	Preclinic Hair Cutting	4
COS1140	Preclinic Chemical Control	3
COS1145	Preclinic Hair Color	3
COS1200	Preclinical Fundamental Nails	1
COS1210	Preclinic Nail Care	3
COS1300	Preclinical Fundamentals Skin	1
COS1310	Preclinic Skin Care	3
COS1400	Minnesota Laws and Rules 1	2
COS1420	Minnesota Laws and Rules 2	2
COS1440	Salon Success and Readiness	1
COS1510	Clinic 1	3
COS1520	Clinic 2	3
COS1530	Clinic 3	3
COS1540	Clinic 4	3
COS1550	Clinic 5	3
COS1560	Clinic 6	3
COS1570	Clinic 7	2
COS1580	Clinic 8	2
COS1600	Clinic Capstone	4
	PROGRAM CREDITS	56

DENTAL ASSISTING

Associate of Applied Science - 60 credits

The Dental Assisting program provides knowledge necessary for the dental assistant to assist in performing general clinical assisting and support functions, intraoral clinical procedures, business office procedures and laboratory tasks. The curriculum includes content in general studies; biomedical, dental, and clinical sciences; clinical practice; and additional intraoral clinical functions. Certain biomedical and dental science courses offered in the curriculum are common to both Dental Assisting and Dental Hygiene majors. Graduates are eligible to write the Dental Assisting National Board Certification Exam and the Minnesota State Board of Dentistry Registration Exam.

Course #	Course Name	Credits
BIOL2221	Microbiology	3/4
or BIOL2260	Anatomy & Physiology I	
ENGL1111	College Writing I	3
PSYC1105	General Psychology	3
SPCH1110	Intro to Public Speaking	3
HLTH1410	First Aid / CPR	1
DENT1010	Infection Control	1
DENT1100	Biomaterials	3
DENT1106	Biodental Science	2
DENT1112	Dental Anatomy	3
DENT1114	Dental Radiology	4
DENT1122	Dental Ethics & Jurisprudence	1
DENT1124	Clinical Assisting I	4
DENT1126	Clinical Assisting II	4
DENT1130	Dental Practice Management	1
DENT1132	Credentialing Exam Preparation	1
DENT1134	Clinical Affiliation	7
DENT1136	Advanced Functions	7
DENT1500	Dental Health	3
	General Education Electives	6
	PROGRAM CREDITS	60

DENTAL ASSISTING

Diploma - 45 credits

The Dental Assisting program provides knowledge necessary for the dental assistant to assist in performing general clinical assisting and support functions, intraoral clinical procedures, business office procedures and laboratory tasks. The curriculum includes content in general studies; biomedical, dental, and clinical sciences; clinical practice; and additional intraoral clinical functions. Certain biomedical and dental science courses offered in the curriculum are common to both Dental Assisting and Dental Hygiene majors. Graduates are eligible to write the Dental Assisting National Board Certification Exam and the Minnesota State Board of Dentistry Registration Exam.

Course #	Course Name	Credits
COMM1102	Applied Communications	3
HLTH1410	First Aid / CPR	1
DENT1010	Infection Control	1
DENT1100	Biomaterials	3
DENT1106	Biodental Science	2
DENT1112	Dental Anatomy	3
DENT1114	Dental Radiology	4
DENT1122	Dental Ethics & Jurisprudence	1
DENT1124	Clinical Assisting I	4
DENT1126	Clinical Assisting II	4
DENT1130	Dental Practice Management	1
DENT1132	Credentialing Exam Preparation	1
DENT1134	Clinical Affiliation	7
DENT1136	Advanced Functions	7
DENT1500	Dental Health	3
	PROGRAM CREDITS	45

EARLY CHILDHOOD EDUCATION CAREERS

Associate of Applied Science - 60 credits

The Associate of Applied Science (AAS) in Early Childhood Education is designed to provide students with comprehensive knowledge and practical skills necessary for a successful career in early childhood education. This 60-credit program combines theoretical coursework with over 400 hours of hands-on field experience, ensuring graduates are well-prepared to meet the needs of young children in various educational settings. Courses include a comprehensive understanding of child development prenatal through age 8, behavior guidance, health, nutrition, safety, culturally sensitive teaching strategies, early childhood special education, professional practices and program and learning environment design. Graduates of the AAS in Early Childhood Education program can pursue careers such assistant teachers and teachers in a center-based setting such as a child care center, early childhood family education program, or Head Start, family child care, paraprofessionals in a school setting, nannies, child life specialist, and other non-teaching roles in a variety of career fields. The program can be completed in two academic years, with flexible scheduling options available to accommodate working students, parenting students, and individuals with diverse personal commitments.

Course #	Course Name	Credits
ENGL1111	College Writing I	3
SGNL1100	American Sign Language (ASL) I	4
SGNL2100	American Sign Language (ASL) II	4
PSYC1105	General Psychology	3
COMM1102	Applied Communications	3
ECED1101	Healthy, Wellness, and Nutrition	3
ECED1104	Child Growth and Development	3
ECED1107	Intro to Early Childhood Education	3
ECED1111	Practicum I	3
ECED1114	Diverse Children and Family Relations	3
ECED1116	Behavior Guidance	3
ECED1135	Creative Activities and Environments	3
ECED1138	Observing & Assessing	3
ECED2208	Infant/Toddler Learning Experience	3
ECED2220	Foundations of Early Childhood	3
ECED2222	School-Age Development	2
ECED2224	Introduction to Language and Literacy	3
ECED2230	Introduction to Special Education	3
ECED2237	Parent and Professional Relations	3
ECED2240	Practicum II	3
	PROGRAM CREDITS	60

EARLY CHILDHOOD EDUCATION CAREERS

Certificate - 18 credits

The Early Childhood Education Certificate program is designed to equip students with the foundational knowledge and practical skills necessary to work effectively with young children in various educational settings. This 22-credit program emphasizes child development, learning environments, and instructional strategies tailored to early childhood education. Upon completion of the program and state required experience hours, students will be prepared to join the workforce as an assistant teacher in child care centers. The program can be completed in one academic year, with flexible scheduling options available to accommodate working students, parenting students, and other diverse personal commitments.

Course #	Course Name	Credits
ECED1101	Healthy, Wellness, and Nutrition	3
ECED1104	Child Growth and Development	3
ECED1114	Diverse Children and Family Relations	3
ECED1116	Behavior Guidance	3
ECED1135	Creative Activities and Environments	3
ECED1138	Observing & Assessing	3
	PROGRAM CREDITS	18

EARLY CHILDHOOD EDUCATION: TRANSFER PATHWAY

Associate of Science - 60 credits

The Associate of Science Transfer Pathway (ASTP) in Early Childhood Education is designed to provide students with comprehensive knowledge and practical skills necessary for a successful career in early childhood education. This 60-credit program combines theoretical coursework with over 200 hours of hands-on field experience, ensuring graduates are well-prepared to meet the needs of young children in various educational settings. Courses include a comprehensive understanding of child development prenatal through age 8, behavior guidance, health, nutrition, safety, culturally sensitive teaching strategies, early childhood special education, professional practices and program and learning environment design. Graduates of the ASTP in Early Childhood Education program can pursue careers such assistant teachers and teachers in a center-based setting such as a child care center, early childhood family education program, or Head Start, family child care, paraprofessionals in a school setting, nannies, child life specialist, and other non-teaching roles in a variety of career fields. The program can be completed in two academic years, with flexible scheduling options available to accommodate working students, parenting students, and individuals with diverse personal commitments. This program is designed to transfer to Universities to be used towards a four year degree in Early Childhood Education and may be used toward Elementary Education, Birth-3rd grade degrees at the University's discretion.

Course #	Course Name	Credits
ENGL1111	College Writing I	3
ENGL1113	College Writing II	3
PSYC1105	General Psychology	3
SOCI1110	Intro to Sociology	3
SPCH1110	Intro to Public Speaking	3
SGNL1100	American Sign Language (ASL) I	4
SGNL2100	American Sign Language (ASL) II	4
MATH1930	Introduction to Mathematical Sciences	3
NSCI2203	Environmental Science	4
ECED1101	Healthy, Wellness, and Nutrition	3
ECED1104	Child Growth and Development	3
ECED1107	Intro to Early Childhood Education	3
ECED1111	Practicum I	3
ECED1114	Diverse Children and Family Relations	3
ECED1116	Behavior Guidance	3
ECED1135	Creative Activities and Environments	3
ECED1138	Observing & Assessing	3
	PROGRAM CREDITS	60

ELECTRICAL CONSTRUCTION AND MAINTENANCE

Associate of Applied Science - 60 credits

This program prepares students for work installing and maintaining systems in residential, commercial, and industrial applications. Courses include a mix of theory and hands-on lab applications. The program includes courses in wiring practices, electrical theory, National Electrical Code application, programmable controllers, and troubleshooting. Minnesota Transfer Credits earned through the Associate of Applied Science (AAS) degree at NTC will transfer for graduates wishing to further their education.

Course #	Course Name	Credits
CONE1102	Basic Electrical Circuit Theory	5
CONE1104	Intro to NEC	2
CONE1106	Wiring I	5
CONE1114	National Electrical Code I	2
CONE1115	Electrical Blueprint/Estimating	2
CONE1119	Wiring II	6
CONE1130	Construction Safety & Tools	2
CONE1300	Electrical Safety	2
CONE1400	A.C. Circuits and Transformers	3
CONE2000	Industry Career Skills	1
CONE2100	Instrumentation Process Control	2
CONE2106	Wiring III	5
CONE2107	Wiring IV	5
CONE2114	National Electrical Code II	2
CONE2200	Building Automation	3
CONE2210	Electronic Motor Control	2
CONE2226	Motor Control Lab	4
CONE2242	Alternate Energy Methods	2
CONE2248	Code Applications	2
CONE2300	Programmable Logic Controllers	3
CONE2400	Adv Programmable Logic Control	2
CONE2600	Grounding and Bonding	2
CONE2800	Capstone	3
MATH1930	Intro to Math Sciences or higher	3
	General Education Electives	12
	PROGRAM CREDITS	82

ELECTRICAL CONSTRUCTION AND MAINTENANCE

Diploma - 74 credits

This program prepares students for work installing and maintaining systems in residential, commercial, and industrial applications. Courses include a mix of theory and hands-on lab applications. The program includes courses in wiring practices, electrical theory, National Electrical Code application, programmable controllers, and troubleshooting.

Course #	Course Name	Credits
CONE1102	Basic Electrical Circuit Theory	5
CONE1104	Intro to NEC	2
CONE1106	Wiring I	5
CONE1114	National Electrical Code I	2
CONE1115	Electrical Blueprint/Estimating	2
CONE1119	Wiring II	6
CONE1130	Construction Safety & Tools	2
CONE1300	Electrical Safety	2
CONE1400	A.C. Circuits and Transformers	3
CONE2000	Industry Career Skills	1
CONE2100	Instrumentation Process Control	2
CONE2106	Wiring III	5
CONE2107	Wiring IV	5
CONE2114	National Electrical Code II	2
CONE2200	Building Automation	3
CONE2210	Electronic Motor Control	2
CONE2226	Motor Control Lab	4
CONE2242	Alternate Energy Methods	2
CONE2248	Code Applications	2
CONE2300	Programmable Logic Controllers	3
CONE2400	Adv Programmable Logic Control	2
CONE2600	Grounding and Bonding	2
CONE2800	Capstone	3
INDT1300	Math for Trades	3
	General Education Electives	4
	PROGRAM CREDITS	74

ESTHETICS *

Certificate - 24 credits

The Esthetics Certificate program prepares the students to perform facials, waxing/temporary hair removal in all areas of the body, makeup consultation and application, eyelash extensions, as well as light peels. Students will learn how to improve clients' lives through proper skin care treatments and home care products. The program includes instruction in skin anatomy, physiology, and health; principles of nutrition, decontamination, and infection control; health and safety; color and skin analysis; and exfoliation. Licensing requirements include completing 600 hours of education in a licensed school, along with required quotas, required practical experience, and written exams. Upon completion of the program, the students will have all the necessary requirements for licensure through the Minnesota Board of Cosmetology. Graduates may work as an Esthetician or Skin Care Specialist.

Course #	Course Name	Credits
COS 1300	Preclinical Fundamentals Skin	1
COS 1310	Preclinic Skin Care	3
COS 1325	Fundamentals for Esthetics	3
COS 1400	Minnesota Laws and Rules 1	2
COS 1420	Minnesota Laws and Rules 2	2
COS 1440	Salon Success and Readiness	1
COS 1540	Clinic 4	3
COS 1550	Clinic 5	3
COS 1560	Clinic 6	3
COS 1625	Esthetics Capstone	3
	PROGRAM CREDITS	24

* FINANCIAL AID ELIGIBILITY PENDING

GERONTOLOGY

Certificate - 18 credits

Graduates of the gerontology certificate program have the knowledge and skills needed to provide seamless quality service to the aging population and their families. Gerontology career pathways include a wide variety of service and leadership opportunities related to diversity; coping strategies related to death, dying and bereavement; economics; housing options; health and wellness; programs and services for the elderly, public policy and advocacy; and consumer service.

Course #	Course Name	Credits
GERO1100	Intro to Gerontology	3
GERO1200	Biology of Aging	3
GERO1230	Healthy Aging	3
GERO1250	Dementia & Alzheimer's Care	3
GERO1300	Death & Dying	3
GERO1305	Psychosocial Aspects of Aging	3
	PROGRAM CREDITS	18

HEALTHCARE ADMINISTRATIVE LEADERSHIP

Associate of Applied Science - 60 credits

This 60-credit Associate of Applied Science (AAS) degree prepares graduates for a position in health care leadership. Graduates gain the knowledge and technical skills needed for medical office management. The degree includes a strong foundation in professional skills with coursework in college writing, ethics, intro to public speaking, human resources management, and supervisory leadership.

Course #	Course Name	Credits
ADMM1120	Medical Office Procedures	3
ADMM1125	US Healthcare Systems	3
ADMM1140	Medical Billing/Insurance	3
ADMM1151	AAPC Medical Coding I	3
ADMM1175	AAPC Medical Coding II	3
ADMM2200	Medical Language Applications	3
ADMM2245	Inpatient Billing	3
ADMM2270	Healthcare Leadership	3
ADMM2288	Healthcare Leadership Capstone	2
ADMS1100	Keyboarding I	3
ADMS1116	Business Communications	3
CPTR1105	Intro to Computers - Medical Applications	3
CRLT1102	Contemporary Career Search	1
ENGL1111	College Writing I	3
MKTG1108	Customer Relations Management	3
MKTG2200	Principles of Management	3
PHIL1201	Ethics	3
PHIL2210	Bioethical Issues in Contemporary Society	3
PSYC1105	General Psychology	3
SPCH1110	Introduction to Public Speaking	3
SUPL1104	Intro to Business	3
	PROGRAM CREDITS	60

HEALTHCARE ADMINISTRATIVE SUPPORT

Diploma - 40 credits

This 40 credit diploma prepares graduates for a position in health care administrative support to assist with medical office management. Coursework concentrates on administrative skills such as patient scheduling, medical record maintenance, patient billing and medical office management, as well as a strong emphasis in medical terminology.

Course #	Course Name	Credits
ADMM1120	Medical Office Procedures	3
ADMM1125	US Healthcare Systems	3
ADMM1140	Medical Billing/Insurance	3
ADMM1151	AAPC Medical Coding I	3
ADMM1175	AAPC Medical Coding II	3
ADMM2200	Medical Language Applications	3
ADMM2245	Inpatient Billing	3
ADMM2270	Healthcare Leadership	3
ADMS1100	Keyboarding I	3
ADMS1116	Business Communications	3
CPTR1105	Intro to Computers - Medical Applications	3
CRLT1102	Contemporary Career Search	1
MKTG1108	Customer Relations Management	3
SPCH1110	Introduction to Public Speaking	3
	PROGRAM CREDITS	40

HEALTH SCIENCES BROAD FIELD: TRANSFER PATHWAY

Associate of Science - 60 credits

The Health Sciences Broad Field Associate of Science program at Northwest Technical College is designed for those who choose to double major or consider transferring to another health and human service related program. Some programs that have common prerequisite expectations include, nursing, social work, nutrition, corrections, health education, and exercise science. This program positions a learner to begin their education at Northwest Technical College, transfer to a baccalaureate program and achieve a career in a high demand health and human service areas. The basic sciences and health occupations curriculum is a solid base for many health and human services careers. Learners completing the Health Sciences Broad Field Associate of Science degree will work closely with a knowledgeable adviser to outline an education pathway to their choice of Minnesota State Universities.

Course #	Course Name	Credits
Goal Area 1 - Communication		
ENGL1111	College Writing I	3
SPCH1110	Intro to Public Speaking	3
Goal Area 3 - Natural Sciences		
BIOL1111	General Biology	4
CHEM1100	Intro to Chemistry	4
Goal Area 4 - Math Logic		
MATH1110	College Algebra	3
MATH2200	Statistics	3
Goal Area 5 - History Social Sciences		
PSYC1105	General Psychology	3
PSYC2201	Lifespan Psychology	3
SOCI1110	Intro to Sociology	3
OR PSYC2250	Social Psychology	3
Goal Area 6 - Humanities - Fine Arts		
PHIL1201	Ethics	3
Required Courses		
BIOL2130	Principles of Nutrition	3
BIOL2221	Microbiology	3
BIOL2260	Anatomy & Physiology I	4
BIOL2262	Anatomy & Physiology II	4
HLTH1000	Intro to Health Careers	2
Select a minimum of 10 elective credits with the help of an advisor that are most suited for the student's intended Health Sciences Baccalaureate major will be recommended. Select from subject areas below. Additional elective options may be selected with advisor approval.		9
ADMM, CMHW, COMM, ECED, ECON, GERO, HLTH, MATH, PHIL, PSYC, SGNL, SOCI, SPCH, SSCI		
	PROGRAM CREDITS	60

HEATING, AIR, AND REFRIGERATION TECHNOLOGY

Diploma - 60 credits

Students pursuing their degree in Heating, Air, Refrigeration Technology at NTC have the opportunity to work with state-of-the-art equipment on campus and in the field. The 60-credit diploma includes courses in electrical theory, advanced electronics and motor controls with specialized coursework exploring Heating, Ventilation, Air Conditioning & Refrigeration systems and equipment. The program provides training and coursework that directly correlates to business and industry requests.

Course #	Course Name	Credits
MATH1200	Mathematics of Business and Industry	3
SSCI1104	Human Relations	3
HART1100 & HART1101	Electrical Theory for HVAC/R & Lab	4
HART1110 & HART1111	Career Planning & Job Safety & Lab	3
HART1120 & HART1121	Forced Air Systems Theory & Lab	4
HART1200 & HART1201	Introduction to Refrigeration Systems & Lab	4
HART1210 & HART1211	Refrigerant Recovery and Certification & Lab	4
HART1220 & HART1221	HVAC/R Design and Installation I & Lab	4
HART2100 & HART2101	Heating, Air, & Refrigeration Control Systems & Lab	4
HART2110	HVAC/R Code Interpretation	3
HART2120 & HART2121	HVACR Design and Installation II & Lab	4
HART2130 & HART2131	Commercial Refrigeration Racks & Chillers Theory & Lab	4
PLBG2151 & PLBG2152	Hydronic Design and Controls & Lab	4
HART2200 & HART2201	HVAC/R Design and Installation III & Lab	4
HART2210	Heating, Air, & Refrigeration Technology Internship	4
HART2220 & HART2221	Commercial Controls and Electronics & Lab	4
	PROGRAM CREDITS	60

HUMAN RESOURCES

Certificate - 18 credits

The program will prepare individuals for human resource practices at the technical, operational, and management level. Students completing this program will posses the skills needed for entry level roles in the growing Human Resources field. This progam will also lead to other program options.

Course #	Course Name	Credits
ACCT1104	Payroll	3
ACCT1120	Legal Environment	3
MKTG2220	Human Resource Management	3
MKTG2200	Principles of Management	3
SUPL1120	Supervisory Leadership	3
CPTR1104	Computerized Business Applications	3
	PROGRAM CREDITS	18

MANAGEMENT AND ENTREPRENEURSHIP

Certificate - 18 credits

A dynamic marketplace and advancing technology have changed the way we do business and created a competitive marketplace. This program will help you develop the skills you need to achieve satisfying management positions in a variety of industries. The program will focus on introductory level training in management and entrepreneurial skills. You will learn how to manage a business and how to start a small business from the ground up.

Course #	Course Name	Credits
MKTG2100	Principles of Marketing	3
MKTG2200	Principles of Management	3
MKTG2220	Human Resource Management	3
MKTG2236	Small Business Management	3
ACCT1100	Principles of Bookkeeping	3
CPTR1104	Computerized Business Applications	3
	PROGRAM CREDITS	18

MEDICAL CODING

Associate of Applied Science - 60 credits

This 60-credit Associate of Applied Science (AAS) degree prepares graduates for a career in medical coding with comprehensive training. The NTC Medical Coding programs use the American Academy of Professional Coders (AAPC) curriculum to provide training to prepare the student to take the AAPC Certified Professional Coder (CPC) exam using nationally recognized coding systems to classify procedures and diagnoses related to medical treatment. The AAS program includes coursework in anatomy and physiology, pharmacology, U.S. health care systems and medical billing and insurance, as well as college-level courses in writing, bioethical issues in contemporary society, general psychology, intro to public speaking, and business communications. Medical coders are needed for patient account management, medical billing and insurance claims processing.

Course #	Course Name	Credits
ADMM1120	Medical Office Procedures	3
ADMM1125	US Healthcare Systems	3
ADMM1140	Medical Billing/Insurance	3
ADMM1151	AAPC Medical Coding I	3
ADMM1175	AAPC Medical Coding II	3
ADMM2200	Medical Language Applications	3
ADMM2245	Inpatient Billing	3
ADMM2270	Healthcare Leadership	2
ADMM2280	Advanced Medical Coding	3
ADMS1116	Business Communications	3
CPTR1105	Intro to Computers - Medical Applications	3
BIOL1004	Intro to Anatomy & Physiology	3
ENGL1111	College Writing I	3
HLTH1000	Intro to Health Careers	3
HLTH1106	Medical Terminology	2
HLTH2002	Pharmacology	2
HLTH2208	Pathophysiology	3
PHIL1201	Ethics	3
PHIL2210	Bioethical Issues in Contemporary Society	3
PSYC1105	General Psychology	3
SPCH1110	Intro to Public Speaking	3
	PROGRAM CREDITS	60

MEDICAL CODING

Diploma - 40 credits

This 40-credit diploma prepares graduates for a career in medical coding or to advance their studies with an Associate of Applied Science (AAS) degree in medical coding. The NTC Medical Coding programs use the American Academy of Professional Coders (AAPC) curriculum to provide training to prepare the student to take the AAPC Certified Professional Coder (CPC) exam using nationally recognized coding systems to classify procedures and diagnoses related to medical treatment. The diploma program includes coursework in anatomy and physiology, pharmacology, U.S. health care systems and medical billing and insurance. Medical coders are needed for patient account management, medical billing and insurance claims processing.

Course #	Course Name	Credits
ADMM1120	Medical Office Procedures	3
ADMM1125	US Healthcare Systems	3
ADMM1140	Medical Billing/Insurance	3
ADMM1151	AAPC Medical Coding I	3
ADMM1175	AAPC Medical Coding II	3
ADMM2200	Medical Language Applications	3
ADMM2245	Inpatient Billing	3
ADMM2280	Advanced Medical Coding	3
CPTR1105	Intro to Computers - Medical Applications	3
BIOL1104	Intro to Anatomy & Physiology	3
HLTH1000	Intro to Health Careers	3
HLTH1106	Medical Terminology	2
HLTH2002	Pharmacology	2
HLTH2208	Pathophysiology	3
	PROGRAM CREDITS	40

MEDICAL CODING

Certificate - 29 credits

This 29 credit certificate prepares graduates for entry-level medical coding positions or to advance their studies with a diploma or an Associate of Applied Science (AAS) degree in medical coding. The NTC Medical Coding programs use the American Academy of Professional Coders (AAPC) curriculum to provide training to prepare the student to take the AAPC Certified Professional Coder (CPC) exam using nationally recognized coding systems to classify procedures and diagnoses related to medical treatment. Medical coders are needed for patient account management, medical billing and insurance claims processing.

Course #	Course Name	Credits
ADMM1120	Medical Office Procedures	3
ADMM1140	Medical Billing/Insurance	3
ADMM1151	AAPC Medical Coding I	3
ADMM1175	AAPC Medical Coding II	3
ADMM2200	Medical Language Applications	3
ADMM2245	Inpatient Billing	3
CPTR1105	Intro to Computers - Medical Applications	3
BIOL1004	Intro to Anatomy & Physiology	3
HLTH1106	Medical Terminology	2
HLTH2208	Pathophysiology	3
	PROGRAM CREDITS	29

NAIL TECHNICIAN *

Certificate - 14 credits

The Nail Technician Certificate program prepares individuals to perform manicures, pedicures, and artificial nail enhancements using the latest materials and techniques. Students acquire the knowledge and skills to care for nails and to create artistic nail applications. Licensing requirements include completing 350 hours of education in a licensed school, along with required quotas, required practical experience, and written exams. Upon completion of the program, the students will have all the necessary requirements for licensure through the Minnesota Board of Cosmetology. Graduates may work as a Nail Technician in a salon of their choosing.

Course #	Course Name	Credits
COS 1210	Preclinical Nail Care	3
COS 1225	Fundamentals for Nail Tech	3
COS 1420	Minnesota Laws and Rules 2	2
COS 1440	Salon Success and Readiness	1
COS 1560	Clinic 6	3
COS 1570	Clinic 7	2
	PROGRAM CREDITS	14

* THIS PROGRAM IS NOT FINANCIAL AID ELIGIBLE

NURSING- STEP-IN RN

Associate of Science - 64 credits

The AS in Nursing (ASN) program is a mobility program which allows the Licensed Practical Nurse (LPN) to advance their knowledge and skill for licensure and practice as a registered nurse (RN). This program is approved by the MnSCU system and Minnesota Board of Nursing. The program offers full-time and may offer limited part-time options.

Course #	Course Name	Credits
BIOL2221	Microbiology	3
BIOL2260	Anatomy & Physiology I	4
BIOL2262	Anatomy & Physiology II	4
CHEM1100	Intro to Chemistry	4
ENGL1111	College Writing I	3
PSYC2201	Lifespan Psychology	3
Select one course from the options listed below		
MATH1110	College Algebra	3
or MATH1930	Introduction to Mathematical Sciences	
Select one course from the options listed below		
PHIL1201	Ethics	3
or PHIL2210	Bioethical Issues in Contemporary Society	
General Education Elective: from Goal Areas 1-10		3
ADNG1150	Nursing I	4
ADNG1300	Transition to Professional Nursing	4
ADNG2050	Advanced Skills	2
ADNG2100	Clinical II	4
ADNG2150	Nursing II	4
ADNG2200	Clinical III	4
ADNG2250	Leadership	2
ADNG2300	Advanced Standing	6
ADNG2350	Maternal-Newborn Nursing	2
ADNG2400	Psychosocial Nursing	2
	PROGRAM CREDITS	64

NURSING- TRADITIONAL RN

Associate of Science - 64 credits

The AS in Nursing (ASN) program is a mobility program which allows the Licensed Practical Nurse (LPN) to advance their knowledge and skill for licensure and practice as a registered nurse (RN). This program is approved by the MnSCU system and Minnesota Board of Nursing. The program offers full-time and may offer limited part-time options.

Course #	Course Name	Credits
BIOL2221	Microbiology	3
BIOL2260	Anatomy & Physiology I	4
BIOL2262	Anatomy & Physiology II	4
CHEM1100	Intro to Chemistry	4
ENGL1111	College Writing I	3
PSYC2201	Lifepsan Psychology	3
Select one course from the options listed below		
MATH1110	College Algebra	3
or MATH1930	Introduction to Mathematical Sciences	
Select one course from the options listed below		
PHIL1201	Ethics	3
or PHIL2210	Bioethical Issues in Contemporary Society	
General Education Elective		3
HLTH1100	Pharmacology	2
ADNG1000	Foundations of Nursing	2
ADNG1050	Foundation – Nursing Skills	4
ADNG1150	Nursing I	4
ADNG1200	Clinical I	2
ADNG2050	Advanced Skills	2
ADNG2100	Clinical II	4
ADNG2150	Nursing II	4
ADNG2200	Clinical III	4
ADNG2250	Leadership	2
ADNG2350	Maternal-Newborn Nursing	2
ADNG2400	Psychosocial Nursing	2
	PROGRAM CREDITS	64

PRACTICAL NURSING

Diploma - 41 credits

This 41-credit diploma prepares nurses to provide bedside care and interact closely with patients. Practical nurses care for ill, injured, or convalescing patients or persons in hospitals, nursing homes, clinics, private homes, group homes, and similar institutions. Tasks and activities for practical nurses may include: Administering medications; charting; dressing wounds; assisting in the delivery, care, and feeding of infants; sterilizing equipment and supplies; taking and recording patients' vital signs.

Course #	Course Name	Credits
HLTH1106	Medical Terminology	2
BIOL2260	Anatomy & Physiology I	4
BIOL2262	Anatomy & Physiology II	4
PSYC2201	Lifespan Psychology	3
HLTH1100	Pharmacology	2
PNSG1110	Adult Nursing I	4
PNSG1112	Technical Skills I	3
PNSG1125	Clinical I	4
PNSG1150	Adult Nursing II	4
PNSG1155	Technical Skills II	3
PNSG1160	Maternal/Child Nursing	2
PNSG1180	Psychosocial Nursing	2
PNSG1185	Clinical Practice II	4
	PROGRAM CREDITS	41

RESIDENTIAL PLUMBING TECHNOLOGY

Diploma - 37 credits

The Plumbing Technology program prepares the student to begin their career in the plumbing professions. Coursework provides the student with a technical knowledge and skills development by integrating theory and practical experience. The successful graduate is eligible for earned hours towards state apprenticeship requirements and employment in an advanced apprenticeship level in the residential plumbing industry. Our specialized residential plumbing/HVAC program will provide an understanding of technology-driven, high-efficiency products and their proper installation, operation and repair. Classroom and hands-on courses will cover traditional heating systems, water-saving solutions, eco-friendly private sewage disposal systems, renewable energy solutions, thermal solar design, and geothermal technology.

Course #	Course Name	Credits
SSCI1104	Human Relations	3
MATH1200	Mathematics of Business and Industry	3
PLBG1000 & PLBG1001	Introduction to Plumbing Technology	3
PLBG1055	Plumbing Code Interpretation	4
PLBG1085 & PLBG1086	Piping System Fabrication I	4
PLBG1091 & PLBG1092	Plumbing Design and Installation I	4
PLBG1145 & PLBG1146	Piping Systems Fabrication II	4
PLBG1147 & PLBG1148	Plumbing Design and Installation II	4
PLBG1155 & PLBG1156	Plumbing Repair and Service Technology	4
PLBG2151 & PLBG2152	Hydronic Design and Controls	4
	PROGRAM CREDITS	37

SALES, MARKETING, AND MANAGEMENT

Associate of Applied Science - 60 credits

This program is designed to prepare learners to succeed in the marketplace of the 21st century. This major is designed to provide learners with the essential skills necessary for a variety of careers in the sales, marketing, and management fields. Curriculum includes instruction in the following areas: sales, marketing, research, customer service, telemarketing, and small business planning.

Course #	Course Name	Credits
ACCT1001	Financial Literacy	3
ACCT1100	Principles of Bookkeeping	3
or ACCT1134	Computerized Accounting Applications	
ADMS1112	Desktop Publishing and Presentation Graphics	3
ADMS1116	Business Communications	3
CPTR1104	Computerized Business Applications	3
MKTG1106	Professional Selling	3
MKTG1108	Customer Relations Management	3
MKTG1116	Advertising & Promotion	3
MKTG2100	Principles of Marketing	3
MKTG2200	Principles of Management	3
MKTG2214	E-Marketing	3
MKTG2220	Human Resource Management	3
MKTG2236	Small Business Management	3
SUPL1104	Introduction to Business	3
SUPL1120	Supervisory Leadership	3
ECON2204	Markets & Resource Allocation	3
ENGL1111	College Writing I	3
SPCH1110	Intro to Public Speaking	3
	General Education Electives	6
	PROGRAM CREDITS	60

SALES AND MARKETING

Diploma - 32 credits

This program prepares graduates to enter a Sales and Marketing career. Positions are available in marketing, merchandising, selling, retailing, and service businesses. This major includes courses in computer technology, selling strategies, customer service, telemarketing, and retailing and marketing concepts.

Course #	Course Name	Credits
ACCT1001	Financial Literacy	3
CPTR1104	Computerized Business Applications	3
ADMS1112	Desktop Publishing & Presentation Graphics	3
ADMS1116	Business Communications	3
MKTG1106	Professional Selling	3
MKTG1108	Customer Relations Management	3
MKTG1116	Advertising & Promotion	3
MKTG2100	Principles of Marketing	3
MKTG2214	E-Marketing	3
SUPL1104	Introduction to Business	3
	Technical Electives	2
	PROGRAM CREDITS	32

SALES AND MARKETING

Certificate - 18 credits

This program can help you prepare for a dynamic career in sales, marketing, merchandising, selling, retailing and service businesses. The program offers diverse training including courses in computer technology, selling strategies, marketing skills, customer service, e-marketing, and retail management concepts. Students completing this program will possess the skills needed for entry roles in these exciting fields. This certificate can also lead into other educational program options.

Course #	Course Name	Credits
MKTG1106	Professional Selling	3
MKTG1116	Advertising & Promotion	3
MKTG2100	Principles of Marketing	3
MKTG2214	E-Marketing	3
ADMS1112	Desktop Publishing & Presentation Graphics	3
CPTR1104	Computerized Business Applications	3
	PROGRAM CREDITS	18

COURSE DESCRIPTIONS 2025-2026

COURSE DESCRIPTIONS

ACCT1001 Financial Literacy 3 3/0/NA

An introduction to the use and interpretation of financial information needed to be a functioning member of society. Topics include the financial planning process, personal budgets and financial statements, the importance of saving, how to compute interest rates on loans and investments, the basic impact of federal taxes on personal finance decisions, banking transactions, consumer credit issues, the need for adequate insurance coverage, and introduction to investments and retirement and estate planning.

ACCT1100 Principles of Bookkeeping 3 2/1/NA

This course covers the basic accounting cycle for service and merchandising businesses. Topics include the analyses of business transactions, recording transactions in a variety of journals, payroll procedures and the preparation of financial reports.

ACCT1104 Payroll 3 3/0/NA

This course covers the various tax laws pertaining to the computation and payment of salaries and wages.Topics include preparation of employment records, payroll registers, timecards, employee earnings records, and governmental payroll reports.

ACCT1120 Legal Environment 3 3/0/NA

This course is an introduction to the principles of law as they apply to citizens and businesses. Topics include the court system, legal system, contract, negotiable instruments, agency and the employer/employee relationship.

ACCT1124 Spreadsheet Concepts 3 2/1/NA

This course covers the use of a computerized spreadsheet system for accounting applications. Topics include document creation, storage, and retrieval, editing, printing, creating charts, database applications, and file distribution.

Prerequisite(s): CPTR1104

ACCT1134 Computerized Accounting Applications 3 1/2/NA

This course is an introduction to computerized accounting applications and software used in the business environment.Topics may include general ledger accounting, payroll procedures, accounts receivable, accounts payable, inventory and depreciation.

Prerequisite(s): ACCT1100 or ACCT2201 or instructor permission

ACCT2200 Income Tax 3 2/1/NA

This course provides an explanation and interpretation of the Internal Revenue Code as applied to income tax returns.Topics may include filing requirements, filing status, gross income inclusions and exclusions, gains and losses, itemized deductions, and deductions for adjusted gross income, business income and expenses, business tax credits, and payment of estimated taxes.

ACCT2201 Accounting I: Financial Accounting 4 3/1/NA

This course is an introduction to the fundamental accounting concepts and principles used to analyze and record business transactions. Topics include the accounting cycle, accounting for a merchandising business, accounting system design, inventory and depreciation methods, calculating payroll.

ACCT2203 Accounting II: Managerial Accounting 4 3/1/NA

This course is an introduction to the use and interpretation of financial information needed to be a functioning member of society. Topics include business and non-business financial statements, compound interest related to loans and investment opportunities, banking transactions, personal financial statements, and the basic impact of Federal taxes on personal financial decisions.

Prerequisite(s): ACCT2201

ACCT2204 Intermediate Accounting I 4 3/1/NA

This course is a comprehensive study of accounting theory and concepts with an analysis of the influence on accounting by various boards, associations, and government agencies.Topics include the purpose of financial reporting and the significance of the FASB's conceptual framework, preparation of financial statements, adjusting and closing entries, classification of balance sheet items, and various revenue recognition methods.Other miscellaneous topics may be included.

Prerequisite(s): ACCT2203

ACCT2205 Intermediate Accounting II 4 3/1/NA

This is the second of a two course intermediate accounting series. This course is designed to further develop knowledge of financial accounting theory, concepts, practice, and procedures related to depreciation, impairment, intangible assets, debt and equity financing, revenue recognition, income taxes, post-retirement benefits, and statement of cash flows. This course also incorporates financial statement analysis to develop the students' ability to identify key performance areas within the financial statements or possible errors/irregularities within the financial statements.

Prerequisite(s): ACCT2204

COURSE DESCRIPTIONS

ACCT2218 Fund/Nonprofit Accounting 3 2/1/NA

This course is concerned with the fundamentals involved in fund/nonprofit accounting. It prepares the student to apply the basic governmental accounting principles and to prepare financial statements for fund/nonprofit organizations.
Prerequisite(s): ACCT2201

ACCT2240 Accounting Internship 3 0/0/3

This course provides students with actual work experiences in accounting careers. A competency-based internship plan is developed for each student.
Prerequisite(s): Advisor approval

ADMM1125 US Healthcare Systems 3 3/0/NA

This course is a study of the historical development of the health care delivery system. The student is given an opportunity to learn about the role of the health information professional and how this role is integrated into the health care delivery system.

ADMM1140 Medical Billing/Insurance 3 3/0/NA

Medical insurance plays an important role in the financial well-being of every healthcare business. This course is designed to emphasize the revenue cycle - ten steps that clearly identify all the components needed to successfully manage the medical insurance claims process. The cycle shows how administrative medical professionals "follow the money". This course covers both outpatient physician and inpatient/outpatient hospital situations.

ADMM1151 AAPC Medical Coding I 3 3/0/NA

This course teaches the fundamentals of medical coding including both diagnosis coding utilizing International Classification of Diseases, Clinical Modification, 10th revision (ICD-10-CM) and procedural coding utilizing Current Procedural Terminology (CPT). A review of medical terminology and anatomy is also presented. Course content is based on American Academy of Professional Coders (AAPC)-approved curriculum and prepares students to take the Certified Professional Coder (CPC) exam.

ADMM1175 AAPC Medical Coding II 3 3/0/NA

This course teaches the fundamentals of medical coding including both diagnosis coding utilizing International Classification of Diseases, Clinical Modification, 10th revision (ICD-10-CM) and procedural coding utilizing Current Procedural Terminology (CPT) and focuses on the coding of Digestive System, Urinary System and Male Genital System, Female Reproductive System and Maternity Care & Delivery, Endocrine System and Nervous System, Special Senses (Ocular and Auditory), Anesthesia, Radiology, Pathology and Laboratory, Evaluation and Management, Medicine sections. A review of medical terminology and anatomy is also presented. Course content is based on American Academy of Professional Coders (AAPC)-approved curriculum and prepares students to take the Certified Professional Coder (CPC) exam.
Prerequisite(s): ADMM1151

ADMM2200 Medical Language Applications 3 3/0/NA

This course covers appropriate usage of medical language in written documentation. Authentic medical documentation will be reviewed. Proofreading for errors, analysis of content, spelling and phonetic problem solving are emphasized. A solid foundation of medical terminology is necessary for success in this class.

ADMM2245 Inpatient Billing 3 3/0/NA

This course is designed to transition the student's knowledge of billing and coding concepts to billing and coding in a hospital environment. The course provides an introduction to the hospital environment and billing process.Coding concepts are reviewed in the context of hospital coding. Discussion on the relationship between billing, coding, documentation, claims forms and reimbursement is presented in various sections to provide an overall view of the connection between various elements in the billing process.

ADMM2270 Healthcare Leadership 3 3/0/NA

This course will develop necessary skills to lead a healthcare support team. The topics will include leadership styles, communication, problem solving, and team development.

ADMM2280 Advanced Medical Coding 3 2/1/NA

This course simulates medical coding in the real world and is designed to give a full account of the healthcare code sets used within medical coding: Current Procedural Terminology (CPT), Healthcare Common Procedural Coding System (HCPCS), International Classification of Diseases, 10th revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, 10th revision, Procedure Coding System (ICD-10-PCS). Codes are presented along with an account of healthcare billing basics, as well as a description of the interconnectedness of medical coding and billing. Students gain knowledge in use of American Health Information Management Association (AHIMA) VLab software, specifically 3M Coding and Reimbursement System. Career search and advanced coding certification research is also performed.
Prerequisite(s): ADMM1150 & ADMM1175

ADMM2288 Healthcare Leadership Capstone 2 0/0/2

This final semester course will help students learn the fundamentals and practical application of communication, change management, leadership of team, performance improvement, data analysis, and how to build relationships with other team members.
Prerequisite(s): Advisor approval

ADMS1100 Keyboarding I 3 1/2/NA

This course covers the development of keyboarding and formatting techniques. Emphasis is on building speed and accuracy in the operation of the alphabetic, numeric, symbol, and service keys and in introducing document formatting concepts. Proofreading skills are stressed.

ADMS1102 Keyboarding II 3 1/2/NA

This course covers the development of formatting and text editing techniques. Emphasis is on building speed and accuracy in the operation of the alpha, numeric, symbol, and service keys and in developing text editing concepts, critical thinking and decision making. Proofreading skills are stressed.
Prerequisite(s): ADMS1100

ADMS1112 Desktop Publishing/Presentation Graphics 3 1/2/NA

This course introduces the concepts, terminology, techniques, and applications of desktop publishing.Students will integrate word processing and graphics to facilitate the designing of printed pages and presentations.Students learn to manipulate text and graphics to produce professional publications and business presentations using microcomputer software. Students will reinforce critical thinking skills in planning, designing, and evaluating business documents and presentations.
Prerequisite(s): CPTR1104

ADMS1116 Business Communications 3 2/1/NA

This course covers composing, editing, and proofreading memos, letters, and other business documents. The principles of grammar, punctuation, spelling, and word use are developed and applied. The application of teamwork and critical thinking skills is included in the course.
Prerequisite(s): ENGL0100 or appropriate assessment scores

ADMS1126 Business Office Management 3 1/2/NA

This course covers office support functions appropriate in a variety of business settings such as: work organization, time management, scheduling, organizing meetings, records management, transcription techniques, document production and arranging travel.

ADMS2124 Advanced Microcomputer Technology 3 2/1/NA

Advanced Microcomputer Technology is a "literacy" course. This course provides an overview of microcomputer concepts such as hardware devices, types of software, networking, internet applications, and computer security.

ADNG1000 Foundations of Nursing 2 2/0/NA

The course introduces the fundamentals of nursing care and the interactive role of the nurse. Physiological topics covered include integumentary system, elimination, infection control, safety, and assessment across the lifespan. Psychosocial topics covered include therapeutic and professional interpersonal communication and cultural competence. Nursing professional topics include: the nursing process, evidence-based practice (EBP), confidentiality, patient education, professionalism, scope of practice, and nursing informatics.
Prerequisite(s): Admission to the program, Nursing Assistant Certification/Training, BIOL2221, BIOL2260, ENGL1111

Corequisite(s): ADNG1050, BIOL2262, MATH1110/1930

ADNG1050 Foundations of Nursing Skills 4 0/4/NA

The course introduces the fundamentals of nursing care and the interactive role of the Nurse. Skills addressed include Vital signs, documentation, physical assessment, nursing process, wound management, care of the surgical patient, vision-hearing screening, enteral feedings, urinary catheterization, ostomy care, airway management, and oxygen delivery devices.Medication administration concepts and associated psychomotor skills will be presented. Essential components of provider orders and the nursing role related to safe medication administration will be addressed.

Prerequisite(s): Admission to the program, Nursing Assistant Certification/Training, BIOL2221, BIOL2260, ENGL1111

Corequisite(s): ADNG1000, BIOL2262, MATH1110/1930

ADNG1150 Nursing I 4 4/0/NA

This course explores foundational concepts related to the pathophysiological processes affecting homeostatic balance and cell survival in the human system. Concepts of fluid & electrolytes, acid-base, oxygenation & gas exchange, hematology, nutrition, and elimination will be discussed. Learners will use assessment data to evaluate expected and unexpected outcomes and form the basis for prioritizing expected medical and nursing management of care. The nursing process, clinical reasoning, and use of research-based nursing actions are integrated throughout the course as the foundation for assisting clients across the lifespan experiencing disruptions in the health-illness continuum.

Prerequisite(s): ADNG1000, 1050 (or ADNG2300), BIOL2262, MATH1110/1930

Corequisite(s): ADNG1200 or 1300, CHEM1100, PSYC2201

ADNG1200 Clinical I 2 0/2/NA

This course will introduce the student to the role of the professional nurse in the clinical setting with the geriatric population. Emphasis will be placed on development as a member of the team, the establishment of therapeutic nurse-client relationships, and application of concepts and skills on stable patients. Role development will occur in a long-term care environment. The nursing process will be integrated throughout all aspects of the course.

Prerequisite(s): ADNG1000, 1050, BIOL2262, MATH1110/1930

Corequisite(s): ADNG1150, CHEM1100, HLTH1100, PSYC2201

ADNG1300 Transition to Professional Nursing 4 2/2/NA

This course is designed to help the LPN prepare for the transition to the RN role. Transitional topics include scope of practice and role differentiation, physical assessment, nursing process, patient education and evidence-based practice. Safety, infection control, and select clinical skills will be addressed. This course addresses the integration and application of professional values and beliefs necessary for effective role transition. Fees attached to course for Lab supplies- varies each year based on cost of supplies.

Prerequisite(s): Admission to program with LPN Advanced Standing, BIOL2262, BIOL2221, CHEM1100, ENGL1111, MATH1110/1930, PSYC2201

Corequisite(s): ADNG1150

ADNG1500 Nurse Internship 1 1/0/NA

This course provides clinical based learning opportunities to encourage application of skills and theory in supervised clinical practice. Students will engage in experiences to enhance the development of their professional nursing role. This is an online course that will require weekly interaction in addition to internship hours. This course requires permission to register and is not financial aid eligible.

Prerequisite(s): Departmental approval

ADNG2050 Advanced Skills 2 1/1/NA

This course develops the role and competencies of the professional nurse as they relate to management of advanced nursing skills used in the healthcare setting. Skills and/or procedures addressed include Intravenous (IV) therapy & critical care nursing concepts. Skills are presented within the context of the nursing process, evidence-based practice, and industry certified standards of practice. Course fees include Lab Pack purchased through NTC bookstore. Cost varies annually.

Prerequisite(s): ADNG2100, ADNG2150, ADNG2400, BIOL2262

Corequisite(s): ADNG2200, ADNG2250, ADNG2350, PHIL1201 or 2210

ADNG2100 Clinical II 4 0/4/NA

This course will prepare the student to function in the clinical setting as a professional nurse with emphasis on utilization of the nursing process, therapeutic communication, client education, evidence-based practice, and critical thinking. The student will holistically assess, plan, implement, and evaluate care in an effort to promote, maintain, and/or restore health to a variety of patients.

Prerequisite(s): Traditional RN: ADNG1100, 1150, 1200, CHEM1100, HLTH1100, PSYC2201

Step-In RN: ADNG1150, 1300

Corequisite(s): ADNG2400, ADNG2150

ADNG2150 Nursing II 4 4/0/NA

This course explores the complex pathophysiological processes related to immunologic function, cardiovascular function, and the integration and regulation of the human system. Students will use assessment data to evaluate critical patient indicators as the basis for prioritizing care. Students will examine expected medical and nursing management of clients experiencing disruptions in health. The nursing process, clinical reasoning, and EBP (evidence-based practice) nursing actions are integrated throughout the course, forming the foundation for assisting clients across the lifespan experiencing disruptions in the health-illness continuum.

Prerequisite(s): Traditional RN: ADNG1150, 1200, CHEM1100, HLTH1100, PSYC2201

Prerequisite(s): Step-In RN: ADNG1150, 1300

Corequisite(s): ADNG2100, 2400, BIOL2262

ADNG2200 Clinical III 4 0/4/NA

This course will provide an opportunity for the student to implement care in a variety of clinical settings.Emphasis will be on the integration of the cognitive, psychomotor, and affective domains of the professional role.Students will be expected to integrate skills learned in previous courses to provide safe, holistic, compassionate care, in a manner that respects the dignity and value of a variety of clients. Students learn to adapt and maintain effectiveness in new settings in an effort to promote, maintain, and/or restore health to a variety of patients.

Prerequisite(s): ADNG2100, 2150, 2400, BIOL2262

Corequisite(s): ADNG2050, 2250, 2350, PHIL1201 or 2210

ADNG2250 Leadership 2 2/0/NA

This course prepares the student to function in a multi-disciplinary, multicultural, dynamic environment.Scope of practice and role differentiation of health care practitioners is explored. The principles of leadership-management, delegation-supervision, teaching-learning, evidence-based practice, conflict management, and change are presented in the context of assimilating the ethics and standards of the profession.

Prerequisite(s): ADNG2100, 2150, 2400, BIOL2262

Corequisite(s): ADNG2050, 2200, 2350, PHIL1201 or 2210

ADNG2300 Advanced Standing 6 6/0/NA

LPN Advanced Standing credits are provided to the LPN to RN step-in student to complete their 64-credit requirement for the associate of science degree in Nursing, upon admission to the Associate of Science (A.S.) program. Advanced standing credits represent the completion of the Practical Nursing program.

ADNG2350 Maternal-Newborn Nursing 2 2/0/NA

This course focuses on nursing care, health promotion, safety, and collaborative interventions for individuals and families experiencing care in the maternal-newborn environment.Potential complications of the mother and newborn will be addressed. Emphasis will be placed on accurate interpretation of client assessment data, recognition of deviations from normal, and identification of priority nursing and collaborative interventions to achieve optimal patient outcomes.

Prerequisite(s): ADNG2100, 2150, 2400, BIOL2262

Corequisite(s): ADNG2050, 2200, 2250, PHIL1201 or 2210

ADNG2400 Psychosocial Nursing 2 2/0/NA

The foundation of this course recognizes that mental health and mental illness occurs on a continuum. This course will focus on the therapeutic environment and implementation of the nursing process for clients across the lifespan experiencing mental health problems. Emphasis will be placed on understanding biological and environmental influences on mental health, recognizing clients in need of care, accurate interpretation of client assessment data, health promotion, identification of priority nursing and collaborative interventions to achieve optimal patient outcomes, and evaluation of the plan of care.

Prerequisite(s): Traditional RN: ADNG1150, 1200, CHEM1100, HLTH1100, PSYC2201

Prerequisite(s): Step-In RN: ADNG1150, 1300

Corequisite(s): ADNG2100, 2150, BIOL2262

COURSE DESCRIPTIONS

AMST1000 Intro to Automotive Repair 2 1/1/NA

This course covers occupational safety, shop operation procedures, power and hand tools use, shop equipment applications, fasteners, measuring instruments, service literature, general service knowledge, acceptable work habits, industry standards and expectations.

AMST1002 Introduction to Automotive Electrical/Electronics 4 2/2/NA

This course teaches the theory and operation of electricity related to the automotive industry, and the use of related testing equipment.

AMST1003 Engine Theory/Service 4 1/3/NA

This course covers the fundamentals of internal combustion engine operation, repair and maintenance. The procedures for removal, replacement, diagnosing, rebuilding and assembly. Proper tool and equipment applications, and failure diagnosis are emphasized in this course. The service portion of this course covers the disassembly, diagnosis, measurement, service, assembly and adjustment of engines and components.

AMST1016 Brakes 4 1/3/NA

This course teaches principles of brakes, hydraulic system foundations, disc and drum brakes, parking brakes, and power assist units. Emphasis is placed on operation, diagnosis, and repair of various types of brake systems. Electronic Anti-lock Brake Systems, Traction Control Systems, and Stability Control Systems are also covered.

AMST1104 Power Train Systems 4 1/3/NA

This course covers standard automotive and light truck clutches, drive line, differential/4x4, and manual transmission/transaxle. The clutch section includes design, adjustment, overhaul, diagnosis and repair of mechanical and hydraulic systems. The drive line section includes phasing, alignment, and balance. The differential/4x4 section covers the operation designs of various off-road, recreational, and highway vehicles. The manual transmission/transaxle section teaches the operating theory and repair procedures of manual transmissions and transaxles. Basic automatic transmission service is also covered.

AMST1105 Steering, Suspension and Alignment 4 1/3/NA

This course covers the principles and operation of suspension and steering systems. Steering systems included are steering columns, power assist systems, steering gears, and rack & pinion systems. Suspension systems covered are independent, non-independent suspension, coil spring, leaf spring, torsion bar, conventional shocks, and strut systems. Alignment theory will be covered and 4 wheel alignment procedures will be performed. Advanced suspension systems, electronic ride height, level control analysis and service are addressed. Tire and wheel service will also be addressed.

AMST1130 Automotive Electrical II 4 2/2/NA

This course teaches diagnosis and repair of charging and starting systems, interior and exterior lighting, safety devices, body electrical systems, comfort systems, and door, window, & seat control systems. The learner will use wiring diagrams to pinpoint body electrical problems and troubles. Window, door, and seat control service will also be performed. Common vehicle accessories will also be addressed.

AMST1220 Automatic Transmissions and HP Drivelines 4 2/2/NA

This course covers the principles of high performance Transmissions, Differentials and related drive train parts.Students will perform tasks related to ring and pinion set-up, and traction aids. Theory and application of automatic transmissions, and modifications that will include torque converter applications and trans-brakes. High performance manual transmission theory and service will also be covered.

AMST1330 Advanced Engine Performance/HP Fuels 4 2/2/NA

This course covers the principles of different engine performance systems/devices for race and street applications. Systems tested will include fuel systems, intake & exhaust systems, ignitions systems and engine management systems.

AMST2113 Heating Ventilation A/C 2 1/1/NA

This course teaches the principles of air conditioning and its relationship to the heating system. The various types, the diagnosis of malfunctions, testing and repair are studied in the classroom. Practical experience is performed on live systems: recovering, evacuating, component replacement, charging and performance testing of the heating and air-conditioning systems.

COURSE DESCRIPTIONS

AMST2214 Automotive Welding 2 1/1/NA

This course covers the skills required to perform repairs to the automotive chassis. Using Oxi-Fuel, GMAW & GTAW welding procedures. Plasma cutting, grinding skills, metalworking, basic sheet metal work, tube bending and notching will be covered.

AMST2216 Engine Performance 2 2/0/NA

This course will study the many electronic control systems used on today's passenger cars and light trucks. Examples of these systems are fuel injection, fuel delivery, ignition, emissions, engine management, and the second-generation OBD-II strategy. The environmental impact of automobiles will be addressed. Use of service literature is emphasized.

AMST2217 Engine Performance Lab 4 0/4/NA

In this course, students will work with scan tools, oscilloscopes, and other test equipment to diagnose the many electronic, and mechanical engine systems used on today's passenger cars and light trucks. Students will also remove and install components related to the following systems: fuel injection, fuel delivery, ignition, emissions, engine management, and the mechanical systems of the automotive engine. Students will compare the results of their diagnoses to the manufacturers specifications and determine necessary repairs. The use of service literature is emphasized.

AMST2220 Introduction to Hybrid and Electric Vehicles 2 2/0/NA

This course covers the theory of hybrid and electric vehicle systems and their operation. The environmental impact of carbon based fuels will be covered. Manufacturer specific information related to hybrid and electric vehicles and working safely on hybrid vehicles. Other alternate fuel systems will also be covered in this course.

AMST2230 Light Duty Diesels 3 2/1/NA

This course will cover principles of automotive diesel engines, combustion chamber designs, injection pumps/injectors, common rail fuel injection and turbocharger operation. Air induction and exhaust treatment systems will also be covered.

AMST2236 Dyno Testing and Tuning 2 1/1/NA

This course is designed to provide an opportunity for the student to gain proficiency in dynamometer operation, including software use, vehicle inspection, and properly installing vehicles and engines.

AMST2244 Drivability and Forced Induction Systems 4 2/2/NA

This course covers the basic theory of operation for turbochargers and superchargers. How to service and maintain stock turbo and supercharger systems. High performance forced induction systems will be covered. Related systems will be addressed to ensure safe engine operation with forced induction systems.

AMST2800 Simulated Shop 4 0/4/NA

This lab course covers the daily operations of an automotive shop. Students will have to work with customers, fill out work orders, diagnosis vehicle systems, and repair vehicle systems to industry standards. The application of commission-based work will be used.

ANTH1110 Cultural Anthropology 3 3/0/NA

Meets MnTC goal area(s): 2,5. The course is meant to introduce students both to the diversity of human cultures and to the diversity within each of them, with an emphasis on so-called traditional societies. It looks at the major human institutions: kinship and marriage, economic production and reciprocity, gender and domestic relations, political power and forms of stratification, religious and healing beliefs and techniques, rites of passage and the life cycle. It attempts to make sense of cultural relativity: how seemingly very different customs or institutions can actually be so similar, in structure or function; but also, how apparently very similar institutions can, in different societies, be in fact so different.

BIOL1004 Intro to Anatomy & Physiology 3 3/0/NA

This course is designed to assist the student in developing a basic understanding of the normal structure and function of the body.

BIOL11111 General Biology 4 3/1/NA

Meets MnTC goal area(s) 3 & 10 This is an introductory level course where students study fundamental concepts of cell biology, the chemical and physical basis of life, concepts in genetics, evolution, and the impact that biological and genetic advances have on society and the biosphere. This course includes 3 lecture hours and 2 lab hours per week.

BIOL2130 Principles of Nutrition 3 3/0/NA

Meets MnTC Goal: 3 Principles of Nutrition provides an introduction to the basic concepts related to nutrients in foods and their metabolic functions. The course will also focus on methods for assessing nutritional status and dietary adequacy, as well as its applications to phases of the human life cycle.

BIOL2221 Microbiology 3 2/1/NA

Meets MnTC goal area(s):3 This course is an introduction to fundamental theories, principles and methods of microbiology. Structure, function, effects of physical factors, and inhibition and killing of microorganisms will be studied. Microbial interactions with humans and their immune system are introduced.Students are familiarized with the concepts of medical and environmental microbiology and microbial diversity, as well as the necessary laboratory techniques needed to study those organisms. This course includes a laboratory component.

BIOL2256 Advanced Physiology 2 2/0/NA

Meets MnTC goal area(s):3 This course is designed to increase the students understanding of the mechanisms involved in the normal functioning of the human body, with lesser emphasis regarding the effects of disease on that functioning. Focus is on the body defenses and interaction and integration of body processes. Upon completion of this course, students should have an enhanced knowledge and appreciation to the complexities of the human body by learning both the human anatomy of physiology for multiple organ systems and an understanding of cellular and molecular mechanisms that underlie human physiology. This is a general education course for all students interested in better understanding of human physiology. This course includes lab-like activities and exercises.

Prerequisite(s): BIOL2262 or Anatomy & Physiology II

BIOL2260 Anatomy & Physiology I 4 3/1/NA

Meets MnTC Goal area(s):3 This is designed as the first of a two-semester general human anatomy and physiology course series. The course offers a comprehensive overview of human anatomy and physiology, covering the structure of the human body from the cells, tissues, and individual organ systems to the integrated whole. Both lecture and laboratory components are required.

Prerequisite(s): BIOL1004 or appropriate score on the science assessment

BIOL2262 Anatomy & Physiology II 4 3/1/NA

Meets MnTC Goal area(s):3 This course is designed as the second semester course of a two-semester general human anatomy and physiology course series. The course covers aspects of human anatomy and physiology, focusing on the structure, function, and development of the organ systems. Both lecture and laboratory components are required.

Prerequisite(s): BIOL2260 or Anatomy & Physiology I

BUSN1100 Entrepreneurial Finance 3 3/0/NA

This course will provide the student with the information and tools necessary to fund a small business. The student will be exposed to various methods of raising both start-up and operating capital. These methods include bank loans, SBA loans, and venture financing.The student will practice presenting his or her company in preparation for presenting to bankers and investors.The key topics include evaluating new business ideas and ventures, reading and understanding financial statements of rapidly growing companies, and developing financing strategies.There will also be discussion on various debt and equity alternatives of financing, the different valuation techniques, and key tactics and approaches to negotiating term sheets.

CHEM1100 Intro to Chemistry 4 3/1/NA

Meets MnTC Goal Area(s):3 This course is designed to provide the student with an understanding of principles and theories of chemistry, atomic and molecular structure, elements, compounds, mixtures, the periodic table, the nature of gasses, liquids and solid states, chemical reactions and stoichiometry. This course includes a laboratory component.

Prerequisite(s): MATH0081 or appropriate placement scores.

CMHW1000 Community Health Worker Role, Advocacy, Outreach, & Resources 3 3/0/NA

This course defines the role of the Community Health Worker (CHW). Students will explain strategies for personal safety in relations to home visits.Students will also gain an understanding of value of self-care, and personal wellness. Students will also become familiar with the health-related needs of their communities and cultural considerations. Students will learn about their role as a liaison, connecting clients and appropriate community resources.

CMHW1100 Health Communication, Teaching & Capacity Building 3 3/0/NA

This course will introduce concepts of verbal and non-verbal communication required for the Community Health Worker (CHW) to effectively interact with clients, their families and healthcare providers of all backgrounds. Students apply skills such as active listening and motivational interviewing. This course also focuses on the CHW's role as a teacher to increase the capability of the community and the client to access the health care and social services systems. Course materials will emphasis empowering clients to become self-sufficient in achieving personal health goals within the role of the CHW.

CMHW1200 Documentation, Legal & Ethical Issues in Community Health Work 3 3/0/NA

This course focuses on the legal and ethical dimensions of the Community Health Worker's (CHW) role. Included are boundaries of the CHW position, agency policies, confidentiality, liability, mandatory reporting, and cultural issues that can influence legal and ethical responsibilities. This course also focuses on the importance and ability of the CHW to gather, document and report client visits and other activities. The emphasis is on appropriate, accurate and clear documentation considering legal and agency requirements.

CMHW1300 Health Promotion 5 5/0/NA

This course focuses on the role of the Community Health Worker (CHW) in health promotion and disease prevention/management including cultural navigation, social determinants of health, connections to resources and supporting clients and families.

Prerequisite(s): CMHW1000, 1100, 1200

Corequisite(s): CMHW1400

CMHW1400 Community Health Worker Internship 2 0/0/2

Students will complete three different practical experiences (field exploration, field experience, field application). Students will also discuss issues relevant to the career of Community Health Workers in the online classroom. The student is expected to complete a total of 80 hours at their approved internship site.

Prerequisite(s): CMHW1000, 1100, 1200

Corequisite(s): CMHW1300

COMM1102 Applied Communications 3 3/0/NA

This course is designed to teach the basics of style and substance in oral and written communications. Students will: 1)gain confidence in preparing, practicing, and evaluating written and oral work, 2)understand communication theory, 3)produce clear, creative, and logical speeches and application letters, and 4)understand the vital role communication has in the world of work.

Prerequisite(s): ENGL0100 or appropriate assessment score

COMM2250 Technical Communications 2 2/0/NA

This course is designed to help the student understand the importance of written and verbal communication in the workplace and to improve the student's ability to discuss employment-related concepts and write about them in an organized, clear, concise, and correct manner. The foundation of technical communication is audience analysis, careful observation, accurate summary, insightful analysis and evaluation, and fair use of material from other sources, will be applied to various technical formats and applied to the student's field of study.

Prerequisite(s): ENGL0100 or appropriate assessment score

CONE1102 Basic Electrical Circuit Theory 5 2/3/NA

This course covers fundamental electrical theory, providing students with a solid understanding of essential concepts of DC and AC circuit analyses. Practical application of theory using industry-standard test equipment is emphasized.

CONE1104 Intro to NEC 3 3/0/NA

This course provides an introduction to the National Electrical Code. The student develops basic skills and understanding of the National Electrical Code book and how it applies to electrical applications in the field.

CONE1106 Wiring I 5 2/3/NA

This course is an introductory course to the electrical construction industry. Students will be introduced to various hand and power tools used in the electrical field. Students will learn about basic electrical circuits and wiring methods through hands on lab projects. Residential service equipment and basic electrical circuits will be examined.This course emphasizes applying safe work practices and the National Electrical Code.

Co-requisite(s): CONE1104

CONE1114 National Electrical Code I 3 2/1/NA

Building on the foundational knowledge from CONE 1104 Intro to National Electrical Code (NEC), this course provides an comprehensive understanding of NEC articles in Chapters 1-4 and the State Electrical Act.

CONE1115 Electrical Blueprint/Estimating 2 1/1/NA

This course provides the student with a working knowledge of residential blueprints and specifications. The student gains an understanding of blueprints, then interprets and applies this knowledge to the electrical industry.

Prerequisite(s): CONE1104

CONE1119 Wiring II 6 2/4/NA

This course covers the practical applications of residential wiring including materials used, proper tool care and use. Topics include installation of wiring methods, branch circuits, service load calculations, sub panel and feeder sizing and installation, blueprint reading, and application of the National Electric Code.

Prerequisite(s): CONE1106

COURSE DESCRIPTIONS

CONE1130 Construction Safety & Tools 2 1/1/NA

Students are introduced to tools, equipment and processes common to the construction industry. The safe setup, operation, and care of hand and power tools and equipment is emphasized.

Co-requisite(s): CONE1106

CONE1300 Electrical Safety 2 2/0/NA

This course is designed to familiarize the student with the safety practices, procedures, and hazards in the installation and maintenance of electrical systems and equipment. Including identification of arc flash hazards, selection and use of test equipment, Lockout Tagout and Personal Protection Equipment. The course will use the National Fire Protection Agency 70E Standard for Electrical Safety in the Workplace and Occupational Safety Hazard Administration (OSHA) regulations.

CONE1400 AC Circuits and Transformers 3 2/1/NA

This course covers the concepts of Alternating Current (AC), transformer operation and related electrical calculations. Single-phase and three-phase transformer operation and installation methods are examined. National Electrical Code requirements for transformer installations are applied throughout the course. Practical application of theory is emphasized with hands on lab experiences.

CONE2000 Industry Career Skills 2 1/1/NA

This course will help individuals acquire a solid foundation in the basic skills for a success career in the electrical field. This course will help the student identify personal accountability, civic responsibility, organizational and management skills. This course will cover resume building and interviewing skills along with job searching techniques.

CONE2100 Instrumental Process Control 2 0/2/NA

Students are introduced to the concept of Instrumentation and Process Control. This course will focus on the understanding of those systems used in the process control industries including electrical devices, pneumatic devices, hydraulic devices, and mechanical devices. This course is a hands-on application through lab exercise.

CONE2102 Capstone I 1 0/1/NA

This course will provide students with a capstone project that will encompass advanced wiring methods in home automation. Capstone I is a culminating design project that allows students to apply their accumulated knowledge and skills from coursework to a real-world experience.

Prerequisite(s): CONE1114, CONE1119

CONE2106 Wiring III 5 2/3/NA

This course examines the material and design aspects of commercial wiring. Topics included are raceways, boxes, design requirements for conduit layouts, circuit overcurrent protection, branch circuit, receptacles, lighting control and lighting. The National Electric Code (NEC) will be used as a standard for the lab installations. Safety on the job will be emphasized in the course.

Prerequisite(s): CONE1119

CONE2107 Wiring IV 5 2/3/NA

This course covers the installation methods and materials used in commercial and industrial wiring. Topics included are transformers, busways, motor installation, distribution, special systems, and industrial hazardous locations, and the study of the National Electrical Code relating to these topics.

Prerequisite(s): CONE2106

CONE2114 National Electrical Code II 2 2/0/NA

This course covers the use of the current National Electrical Code. All chapters of the NEC will be examined with an emphasis on Grounding, Special Occupancies, Special Equipment, Special Conditions and Communication Systems.

Prerequisite(s): CONE1114

CONE2200 Building Automation 3 2/1/NA

This course will enable you to identify and describe the major components in a Building Automation System (BAS) along with the basic mechanical components and controls in a Heating Ventilation Air Conditioning (HVAC) control system. You will be able to describe and explain the basic functions of Direct Digital Control (DDC) systems and Human Machine Interface(HMI) basics, reference codes and standards applicable to BAS, and justify control components for project work.

COURSE DESCRIPTIONS

CONE2210 Electronic Motor Control 2 1/1/NA

This course provides application of basic theory and operation to electronic motor control including semi-conductor, rectifiers, regulators, and amplifiers.

Prerequisite(s): CONE1108, 2216

CONE2216 Motor Control 3 3/0/NA

This course covers materials and design aspects of commercial wiring, in particular, lighting and fuse applications. Topics included are lighting and lamp installation and selection, fuse selection, special outlets, load schedule, short circuit calculations and emergency illumination.

Prerequisite(s): CONE1104

Co-requisite(s): CONE2226

CONE2226 Motor Control Lab 4 0/4/NA

This course utilizes a hands-on approach to learning motor control circuit wiring Students will learn to construct and build ladder diagrams, install typical motor control circuits in conformance with the National Electrical Code and the use of standard diagrams and wiring plans. Troubleshooting of circuits will be emphasized to allow students to develop critical thinking skills.

Co-requisite(s): CONE2216

CONE2242 Alternative Energy Methods 2 0/2/NA

This course will cover basic principles and history of alternative energy sources. The utilization of renewable sources (solar, wind, geothermal, etc.) as well as alternatives in building operations (microturbines, fuel cells, combined heat and power) will be examined. Alternative and traditional energies will be defined and compared in terms of today's use. Emerging energy career areas will be discussed.

CONE2248 Code Applications 2 1/1/NA

This course applies the principles of the National Electrical Code to job specific situations.
Co-requisite(s): CONE2214

CONE2300 Programmable Logic Controllers 3 1/2/NA

This course covers the theory, operation, installation, hardware, software, and practical applications of the programmable logic controllers. Basic PLC programming techniques for counters, timers, and sequencers will be presented.
Prerequisite(s): CONE1102

CONE2400 Adv Programmable Logic Control 2 0/2/NA

This course provides the student additional applications of programmable logic controllers (PLC) as used in industrial environments including concepts of programming, industrial applications, troubleshooting ladder logic, and interfacing to equipment.
Preequisite(s): CONE2300

CONE2600 Grounding and Bonding 2 1/1/NA

This course combines lecture and laboratory practice to introduce students to the knowledge surrounding the grounding and bonding of electrical systems and how it is addressed in the National Electric Code. The course introduces students to the equipment, materials, testing processes, and provides instruction on the grounding and bonding techniques. Written and demonstration tests will be done in accordance with the industry standards and the current edition of the National Electric Code.

Prerequisite(s): CONE2114

CONE2800 Capstone 3 0/3/NA

This course will provide students with a significant Capstone Project in Electrical Technology and will generally include topics of current interest or topics not covered in courses currently offered by the department or in combinations not currently available.This aims to provide students with a significant experience that requires the application of disciplined expertise in a real-world context. Project advances the hands-on application of program learning with the assembly, testing, troubleshooting, and dismantling of individual and/or group capstone projects. Students will prepare and complete a project (with instructor's approval).
Prerequisite(s): CONE2226, CONE2300

CONE2802 Capstone II 1 0/1/NA

Capstone II is the culminating experience for students in the Construction Electrical program, designed to integrate and apply the knowledge and skills gained throughout the curriculum. Students will plan, design, and execute a comprehensive electrical construction project that mirrors real-world industry standards. Emphasis is placed on interpreting electrical blueprints, applying the National Electrical Code (NEC), performing advanced wiring installations, ensuring site safety, and managing project timelines and budgets.

COURSE DESCRIPTIONS

COS1100 Preclinical Fundamentals for Hair 1 1/0/NA

This course introduces foundational content essential to hair care. The course is designed to meet the theoretical and applications needs in preparing for licensure and employment in the broad field of cosmetology services.

COS1110 Preclinic Hair Care 2 1/1/NA

This course focuses on the study of trichology and covers fundamental hair theory, phases of hair growth, common hair and scalp disorders, and common causes and treatments of hair loss. Additional topics covered include hair care, draping, shampooing, scalp massage, thermal styling techniques and client consultations.

Prerequisite(s): COS1100

Co-requisite(s): COS1100

COS1120 Preclinic Hair Design 2 1/1/NA

This course covers the artistic and scientific principles of hair design theory, concept, and applications as they apply to design systems and design classics. Students will learn how to mold, scale and set hair with rollers, pincurls, fingerwaves, air forming, and curling iron techniques.

Prerequisite(s): COS1100

Co-requisite(s): COS1100

COS1125 Design Fundamentals 2 0/2/NA

This course covers the latest fashion trends and uses the Pivot Point's Design Forum Collections to integrate salon techniques and training. Also included in this course are topics focused on developing people skills which integrate salon communication, client consultations, and retailing.

Prerequisite(s): COS1100, 1200

Co-requisite(s): COS1100, 1200

COS1130 Preclinic Hair Cutting 4 1/3/NA

This course provides the basic elements and principles of hair cutting design to establish a foundation for seeing, thinking, creating, and adapting as a designer. In addition, students will demonstrate the theoretical and practical skills required to provide appropriate hair sculpture services to meet the needs of a variety of clients.

Prerequisite(s): COS1100

Co-requisite(s): COS1100

COS1140 Preclinic Chemical Control 3 1/2/NA

This course offers instruction on creating curl in straight hair and removing from existing curl patterns. Students will study the scientific principles of hair properties and the artistic principles of texture, form and design. In addition, the use of relaxers and reformation curls, product chemistry and safety, and client home care maintenance steps will be covered.

Prerequisite(s): COS1100

Co-requisite(s): COS1100

COS1145 Preclinic Hair Care 3 1/2/NA

This course covers products and techniques used for temporary, semi-permanent, demi-permanent, and permanent hair coloring agents. In addition, this course covers techniques for lightening hair, color correcting and design techniques, and the depositing and lifting abilities of color products.

Prerequisite(s): COS1100

Co-requisite(s): COS1100

COS1200 Preclinical Fundamental Nails 1 1/0/NA

This course covers salon fundamentals for nail technology. Students will study manicuring, pedicuring and the application of artificial enhancements using a variety of professional products. This course also covers massage as it relates to the services offered, product knowledge and a full client consultation.

Co-requisite(s): COS1210

COS1210 Preclinic Nail Care 3 1/2/NA

This course covers salon fundamentals for nail technology. Students will study manicuring, pedicuring, and applying artificial nails using a variety of professional products. This course also covers related massage techniques, product knowledge and client consultations.

Prerequisite(s): COS1200

Co-requisite(s): COS1200

COS1225 Fundamentals for Nail Tech 3 2/1/NA

This program will prepare individuals to perform manicures, pedicures and creative artificial enhancements using the latest products and techniques in the industry. Students will also acquire the knowledge and skills to care for nails, perfect the art of nail design, and be able to create long lasting artificial enhancements. The students will learn how to recognize nail disease and disorders and be able to determine what can be treated in the salon or what needs to be referred to a physician. Students will learn all aspects of the Nail industry giving them the ability to work successfully in the nail portion of the Cosmetology industry or in the nail tech industry as a stand alone Nail Tech.

Co-requisite(s): COS1200

COS1300 Preclinical Fundamentals Skin 1 1/0/NA

This course covers salon fundamentals for estheticians and cosmetologists in the area of skincare. Students will study skin types, skin conditions and skin treatment procedures. Additional topics covered include massage techniques as they relate to the services given, product knowledge, makeup applications, waxing techniques in the area of the head, face and body, and thorough client consultations.

Co-requisite(s): COS1310

COS1310 Preclinic Skin Care 3 1/2/NA

This course covers salon fundamentals for estheticians. Students will study skin types, skin conditions and skin treatment procedures. Additional topics covered include facial massage techniques, product knowledge, make-up applications and client consultations.

Prerequisite(s): COS1300

Co-requisite(s): COS1300

COS1325 Fundamentals for Esthetics 3 0/3/NA

This course covers esthetic procedures used in a salon and day spa environment. Students will perform acne and aging treatment procedures. Topics covered include advanced massage techniques, aroma therapy, photography make up, along with the application and removal of eyelash extensions.

Prerequisite(s): COS1300

Co-requisite(s): COS1300

COS1340 Clinical Esthetics 2 2/0/NA

This course provides hands-on clinical experience. Students apply skills learned in prior courses using the equipment, technology, products and services necessary to be successful and innovative in the salon and spa industries. This course will go in depth with the services offered and expand students' knowledge in the Esthetics field. Proper use of electrical equipment, offering advanced services and in depth learning will take place, utilizing prior knowledge in Esthetics.

Prerequisite(s): Esthetics certificate or Cosmetology Diploma

Co-requisite(s): COS1370 & COS1380

COS1360 Advanced Esthetics 1 3 3/0/NA

This course consists of treatments performed by estheticians in a medical environment or a full service salon or spa. Students will complete anin-depth study of light, medium and deep chemical peels, acne treatment procedures, microdermabrasion and dermaplaning. It will include advanced makeup techniques, body treatment procedures and manual lymphatic drainage to promote healing.

Prerequisite(s): Esthetics certificate or Cosmetology Diploma

Co-requisite(s): COS1340

COS1370 Advanced Esthetics 2 3 3/0/NA

This course covers salon fundamentals for nail technology. Students will study manicuring, pedicuring, and applying artificial nails using a variety of professional products. This course also covers related massage techniques, product knowledge and client consultations.

Prerequisite(s): Esthetics certificate or Cosmetology Diploma

Co-requisite(s): COS1340

COS1380 Advanced Esthetics 3 3 3/0/NA

This course will prepare students to be able to execute proper advanced techniques, a continuation or prior knowledge. Students will work on professional development in the clinic arena. Advanced product knowledge will be offered and executed in a clinical setting. The course will also prepare students for licensure in Advanced Esthetics.

Prerequisite(s): Esthetics certificate or Cosmetology Diploma

Co-requisite(s): COS1340

COS1400 Minnesota Laws and Rules 1 2 2/0/NA

This course introduces students to the qualifications necessary for Cosmetology licensure. Along with a review of essential theories, Minnesota state rules and regulations will be covered to prepare students for national written examinations and salon ownership.

COS1420 Minnesota Laws and Rules 2 2 2/0/NA

This course is an expanded exploration of the Minnesota laws and rule for cosmetology. Upon successful completion of this course, students will have the necessary qualifications for cosmetology licensure. Along with a review of essential theories, Minnesota state rules and regulations will be covered to prepare students for national written examinations and salon ownership.

COS1440 Salon Success and Readiness 1 1/0/NA

This course focuses on the foundational skills essential to obtaining employment and succeeding in the cosmetology industry.

COS1510 Clinic 1 3 0/3/NA

This course provides hands-on experiences on the salon clinic floor. Students apply skills learned in Preclinic courses using the equipment, technology, products and services necessary to be successful in the salon and spa industries. Students will be required to complete required quotas established by the MN Board of Cosmetology for licensure and will prepare for practical certification testing exams.

COS1520 Clinic 2 3 0/3/NA

This course provides hands-on experiences on the salon clinic floor. Students apply skills learned in Preclinic courses using the equipment, technology, products and services necessary to be successful in the salon and spa industries. Students will be required to complete required quotas established by the MN Board of Cosmetology for licensure, and will prepare for practical certification testing exams.

COS1530 Clinic 3 3 0/3/NA

This course provides hands-on experiences on the salon clinic floor. Students apply skills learned in Preclinic courses using the equipment, technology, products and services necessary to be successful in the salon and spa industries. Students will be required to complete required quotas established by the MN Board of Cosmetology for licensure, and will prepare for practical certification testing exams.

COS1540 Clinic 4 3 0/3/NA

This course provides hands-on experiences on the salon clinic floor. Students apply skills learned in Preclinic courses using the equipment, technology, products and services necessary to be successful in the salon and spa industries. Students will be required to complete required quotas established by the MN Board of Cosmetology for licensure, and will prepare for practical certification testing exams.

COS1550 Clinic 5 3 0/3/NA

This course provides hands-on experiences on the salon clinic floor. Students apply skills learned in Preclinic courses using the equipment, technology, products and services necessary to be successful in the salon and spa industries. Students will be required to complete required quotas established by the MN Board of Cosmetology for licensure, and will prepare for practical certification testing exams.

COURSE DESCRIPTIONS

COS1560 Clinic 6 3 0/3/NA

This course provides hands-on experiences on the salon clinic floor. Students apply skills learned in Preclinic courses using the equipment, technology, products and services necessary to be successful in the salon and spa industries. Students will be required to complete required quotas established by the MN Board of Cosmetology for licensure, and will prepare for practical certification testing exams.

COS1570 Clinic 7 2 0/2/NA

This course provides hands-on experiences on the salon clinic floor. Students apply skills learned in Preclinic courses using the equipment, technology, products and services necessary to be successful in the salon and spa industries. Students will be required to complete required quotas established by the MN Board of Cosmetology for licensure, and will prepare for practical certification testing exams.

COS1580 Clinic 8 2 0/2/NA

This course provides hands-on experiences on the salon clinic floor. Students apply skills learned in Preclinic courses using the equipment, technology, products and services necessary to be successful in the salon and spa industries. Students will be required to complete required quotas established by the MN Board of Cosmetology for licensure, and will prepare for practical certification testing exams.

COS1600 Clinic Capstone 4 0/4/NA

This course is designed to get the students to the outcome needed for graduation in all areas of clinical floor exercises. This course content will be adjusted accordingly for each student and will be based on skills learned in Pre-clinic courses using the equipment, technology, products and services necessary to be successful in the salon and spa industries. Students will be required to complete quotas established by the Minnesota Board of Cosmetology for licensure, and this will prepare them for practical certification exams.

COS1625 Esthetics Capstone 3 3/0/NA

This is the student's final course that will make sure they know the skills necessary for obtaining a license in the state of MN. This course capstone will allow each individual to work on the necessary skills needed to fulfill their quotas, hours and total educational experience.

CPTR1104 Computerized Business Applications 3 2/1/NA

This course will introduce students to concepts and skills they will need for a successful career in the business field. This course covers a literacy component including operating system, email, research, Internet, and D2L. This course will also cover Microsoft Office Word, Excel, Access, and PowerPoint.

CPTR1105 Intro to Computers - Medical Applications 3 2/1/NA

This course will introduce students to concepts and skills they will need for a successful career in the medical office field. Students will receive instruction on key tasks for studying medical assisting, health information management and health information technology. In addition, the course will cover word processing, excel, power-point, access, email, Internet and Desire to Learn.

CRLT1102 Contemporary Career Search 1 1/0/NA

This course covers such contemporary career topics as employer expectations, job market trends, networking, and various aspects of the employment search process, including legal and ethical issues. To apply their knowledge of the employment process, learners develop resumes, letters, and applications as well as identify and use effective interviewing techniques. This course emphasizes a comprehensive knowledge of career processes that will serve learners throughout their working lives.

DENT1010 Infection Control 1 .5/.5/NA

In this course students will learn about infection control practices relevant to the dental profession. Topics include the concepts of disease transmission and infection prevention, principles and techniques of disinfection, instrument processing and sterilization, regulatory and advisory agencies, and occupational health and safety.

DENT1100 Biomaterials 3 2/1/NA

This is a foundation course that provides in-depth instruction and practice in identifying the materials, their purposes and properties as they are used during chairside and laboratory procedures. Material manipulation is a critical requirement of the lab component of this course. Laboratory safety measures and infection control are emphasized.

DENT1106 Biodental Science 2 2/0/NA

This course will provide an introduction to general anatomy, physiology applicable to dental assisting. Topics also include the process of dental decay, a study of microbiology, a survey of oral pathology and the treatment and diagnosis of pathological conditions.

DENT1112 Dental Anatomy 3 2/1/NA

The lecture portion of the course introduces the learner to basic terminology for understanding the structures that form the foundation for tooth function, normal anatomy of the oral cavity, and tooth and root morphology. Lab sessions will provide opportunities for the learner to work with tooth identification and charting systems, intraoral imagery, and occlusion assessment. Special topics include survey of dental anomalies, cavity classifications, and forensic dentistry.

DENT1114 Dental Radiology 4 2/2/NA

The lecture component of this course includes an overview of the history of x-ray development, a review of basic mathematics and radiation physics as they apply to x-ray production and radiographic quality, darkroom chemistry, radiation hygiene and safety, interpretation of normal anatomy and dental film analysis, radiographic interpretation and evaluation, and quality assurance issues. Lab sessions will allow the learner to develop radiographic skills, and clinic sessions create an opportunity for learners to enhance their efficiency in radiographic technique.

DENT1122 Dental Ethics & Jurisprudence 1 1/0/NA

This course focuses on the ethical and legal implications of providing dental care and the parameters for dental assistants, dental hygienist, dental therapist, and dentist. The Dental Practice Act of Minnesota will be the focus of these studies.

Prerequisite(s): DENT1112 & DENT1124

DENT1124 Clinical Assisting I 4 2/2/NA

This is a pre-clinical course that teaches students the basic knowledge and skills for chairside assisting. Topics include an orientation to the history of dentistry, educational requirements, credentialing opportunities and professional associations for dental and allied dental careers. The student is provided with instruction in the use of dental equipment, instruments and supplies, principles of four handed dentistry, diagnostic data collection, and procedures related to oral diagnosis, management of medication and dental emergencies, and an introduction to restorative dentistry.

DENT1126 Clinical Assisting II 4 2/2/NA

This course introduces the student to the dental specialties of Pediatric dentistry, Periodontics, Oral and Maxillofacial Surgery, Endodontics, Prosthodontics (fixed and removable), Orthodontics and also special needs patients. The student will be introduced to the lab and clinical procedures with each of the specialties listed. The lab portion will also build on material learned in Clinical Assisting I (DENT 1124). Student will repeat certain hands-on skills with an expectation of greater proficiency.

Prerequisite(s): DENT1010, DENT1112 & DENT1124

DENT1130 Dental Practice Management 1 1/0/NA

This course provides the student with instruction in the principles and applications that are related to the management a dental office. Emphasis is placed on managing patient records, financial records, third party payments, appointment scheduling, inventory and recall systems.

Prerequisite(s): DENT1112 & DENT1124

DENT1132 Credentialing Exam Preparation 1 1/0/NA

This course will provide information to prepare the individual for taking the dental assisting credentialing examinations. The topics included are those that are tested by the national certification and state board registration exams. This course is appropriate for those individuals who are in need of becoming re-credentialed or for those seeking initial credentialing.

Prerequisite(s): Instructor approval

DENT1134 Clinical Affiliation 7 0/0/7

This is a faculty-supervised course at extramural sites with dentists and dental auxiliaries providing ancillary supervision. The learner will be provided with clinical experiences by affiliations in general dentistry and/or specialized practices. Emphasis is on professionalism in performing general chairside and advanced intraoral procedures.

Prerequisite(s): Instructor approval

DENT1136 Advanced Functions 7 2/5/NA

This course is designed to provide the learner with instruction and practice to perform the clinical competence in the following intraoral functions approved by the Minnesota Board of Dentistry: taking radiographic exposures, performing mechanical polishing, taking preliminary impressions and bite registrations, applying topical fluoride, whitening agents, placing and removing dental dam, placing and removing periodontal dressing, removing excess cement, and applying pit and fissure sealants, inducing patients to nitrous-oxide/oxygen sedation and removing excess bonding material from orthodontic appliances with a rotary handpiece, In addition the following intraoral functions are taught and practiced to laboratory competency: applying non-fluoride topical medications, removing sutures, preliminary adaptation of temporary (provisional) crowns, performing selected orthodontic functions.

Prerequisite(s): DENT1106, DENT1100, DENT1112, DENT1114, DENT1124, HLTH1410

DENT1500 Dental Health 3 3/0/NA

This course covers the basic principles of nutrition, pharmacology, ergonomics, and citizenship skills as they apply to the dental field. Students will be introduced to basic nutritional concepts and its effects on the human body from the standpoint of general health and the relationship to oral disease. Students will also learn about medications that are commonly seen in the dental setting and the diseases, indications for which these drugs are prescribed and adverse reactions that can result in medical emergencies in the dental office. In addition, students will learn how ergonomic principles apply to dental assisting. Students will also participate in service-learning projects to gain a sense of community contribution and experience.

Prerequisite(s): ENGL0050, MATH0080 or appropriate score on assessment

DENT1910 Directed Independent Study 1-3 variable

Independent Study

ECED1101 Health, Wellness, and Nutrition 3 3/0/NA

This 3-credit course equips students with the knowledge and skills necessary to ensure a safe and healthy environment for young children. Students will analyze the requirements for maintaining a healthy facility, implement preventive health and safety strategies, and develop protocols to manage various safety concerns. The course also covers recognizing and addressing child abuse and neglect, evaluating nutritional needs, and promoting healthy eating habits. Additionally, students will learn about legal requirements, reporting procedures, and the role of community resources in child protection. Emphasis is placed on professional and ethical conduct, preparing students to uphold high standards in health, wellness, and nutrition practices within early childhood settings.

ECED1104 Child Growth and Development 3 2/1/NA

This 3-credit course provides an in-depth exploration of child development from prenatal stages through age eight, integrating 32 hours of field experience to enhance practical understanding. Students will analyze developmental principles, evaluate physical growth and health, assess socio-emotional development, examine cognitive and creative development, understand language development, practice relationship and interaction skills, implement developmentally appropriate practices, and identify and mitigate adverse childhood experiences. Students will engage in 32 hours of field experience, observing and interacting with children in various settings to apply theoretical knowledge in real-world contexts to deepen understanding of child development and enhance practical skills in supporting children's growth and well-being.

ECED1107 Intro to Early Childhood Education 3 3/0/NA

This 3-credit course provides an in-depth exploration of the principles, strategies, and practices essential for supporting young children with special needs in early childhood education settings. Students will learn to access current learning environments, create inclusive environments, develop specialized teaching strategies, understand legal requirements, and utilize community resources. The course emphasizes the importance of professional and ethical conduct, effective caregiver and family support, and the comparison of various childhood disabilities and disorders. Through practical applications and theoretical knowledge, students will be equipped to create inclusive and supportive educational experiences for all children.

ECED1111 Practicum I: Field Experience in ECED 3 0/3/NA

This 3-credit course provides students with an immersive field experience in early childhood education settings, totaling 96 hours of hands-on practice. Students will engage in comprehensive analysis and application of early childhood program environments, creative and sensorimotor learning experiences, socio-emotional development, and family relationship strategies. Through direct observation, assessment, and implementation, students will develop and refine their skills in planning, designing, and evaluating developmentally appropriate learning experiences. This course aims to prepare students for successful careers in early childhood education by providing them with the practical experience and theoretical knowledge necessary to support the holistic development of young children.

ECED1114 Culturally Responsive Teaching Practices in ECED 3 3/0/NA

This 3-credit course provides an in-depth exploration of the family strengths approach and the significance of belonging and family connectedness in child development. Students will develop culturally responsive strategies to address prejudice, bias, and various forms of discrimination, fostering an asset-based mindset that values diverse backgrounds and identities. Through self-reflection, students will enhance their cultural competence and mitigate biases, creating inclusive learning environments. The course emphasizes building collaborative relationships with families and community agencies, understanding historical trauma, and employing trauma-informed practices. Additionally, students will explore identity formation theories and critically examine privilege, oppression, and systemic issues, developing strategies to promote equity and social justice in educational settings.

ECED1116 Behavior Guidance 3 2/1/NA

This 3-credit course provides an in-depth exploration of developmentally and culturally appropriate practices (DCAP) in guiding children's behavior and fostering positive self-esteem, integrating 32 hours of field experience to enhance practical understanding. Students will learn to analyze developmental stages and cultural practices, implement effective guidance strategies, and develop meaningful relationships with children, families, and the community. The course addresses challenging behaviors, designing interventions, and promoting healthy peer relationships through observation and assessment techniques. Students will engage in 32 hours of field experience, observing and interacting with children in various settings to apply theoretical knowledge in real-world contexts through the observation and implementation of DCAP behavior guidance strategies

ECED1135 Creative Activities and Environments 3 2/1/NA

This 3- credit course provides an in-depth exploration of Developmentally and Culturally Appropriate Practices (DCAP) in early childhood education. Students will gain comprehensive knowledge and practical skills to create, evaluate, and modify learning environments that cater to the diverse developmental and cultural needs of young children. Through a combination of theoretical study and hands-on activities, students will learn to design effective learning centers, plan integrated curricula, assess developmental needs, implement instructional design principles, promote positive interactions, and foster creativity and individuality. Students will engage in collaborative projects and individual assignments to apply their learning in real-world settings. Ideal for aspiring early childhood educators, this course prepares students to create inclusive and supportive learning environments

ECED1138 Observing & Assessing 3 2/1/NA

This 3-credit course provides an in-depth exploration of observation and assessment techniques essential for early childhood education professionals. Students will engage in both theoretical and practical learning experiences to develop comprehensive skills in observing, recording, and assessing young children's development and learning. Students will complete 32 hours of field experience in an early childhood education setting, applying observation and assessment techniques in real-world contexts. This hands-on experience is designed to reinforce theoretical knowledge and develop practical skills essential for professional practice. Students will be equipped with the knowledge and skills necessary to effectively observe, assess, and support the developmental needs of young children, ensuring a high-quality educational experience.

ECED2208 Infant and Toddler Learning Experience 3 2/1/NA

This 3-credit course provides an in-depth exploration of infant and toddler development, focusing on socio-emotional, cognitive, physical, and creative growth from birth through age three. Students will analyze developmental theories, design developmentally appropriate environments, and implement positive guidance strategies. The course emphasizes effective communication skills, professional and ethical conduct, and the creation of personal care routines. Through 32 hours of field experience, students will observe and interact with infants and toddlers in various settings, applying theoretical knowledge to real-world scenarios. This hands-on experience will enable students to assess developmental milestones, plan and evaluate learning experiences, and foster positive relationships with children and their families.

ECED2220 Early Childhood Education Program Planning and Development 3 2/1/NA

This course provides an in-depth exploration of early childhood education, focusing on developmentally and culturally appropriate practices (DCAP) for children from birth through age eight. Students will analyze the role of the child in DCAP classrooms, evaluate contemporary issues, and design comprehensive early childhood education programs. Emphasis will be placed on professional and ethical conduct, instructional planning using DCAP strategies, and the integration of parent involvement. Additionally, students will examine the history and development of early childhood education, evaluate content areas, and assess various educational programs. Through a combination of theoretical knowledge and practical application, students will develop the skills necessary to create inclusive, effective, and engaging early childhood education programs and environments for young children.

ECED2222 Foundations of School Age Care 2 2/0/NA

This 2-credit course provides an in-depth exploration of child development from early childhood through pre-adolescence. Students will examine the stages of growth and development, including physical, cognitive, socio-emotional, and creative aspects. The course emphasizes the importance of creating developmentally appropriate learning environments that foster play, active engagement, and decision-making. Key topics include the analysis of individual developmental patterns, the impact of trauma on children's play, and the role of adult-child interactions in diverse family structures. Students will also learn to design learning experiences that support children's holistic development and address their unique needs, implement effective teaching strategies, and maintain professional and ethical conduct in educational settings.

ECED2224 Introduction to Language and Literacy 3 2/1/NA

This 3-credit course provides an in-depth exploration of early literacy development and effective instructional strategies for young children. Students will analyze key milestones in children's language and literacy development, identifying developmental needs and appropriate interventions. The course also addresses the importance of cultural appropriateness and diversity in children's literature, guiding students to apply anti-bias principles in their evaluations. Additionally, students will compile and utilize community and professional resources to enrich children's literacy experiences. Emphasis is placed on professional and ethical conduct, ensuring students demonstrate confidentiality, dependability, and integrity in their teaching practices The course also emphasizes practical application, preparing students to implement diverse teaching strategies that enhance children's speaking, listening, reading, and writing skills through engaging activities such as storytelling, fingerplay, and drama.

ECED2230 Introduction to Early Childhood Special Education 3 2/1/NA

This 3-credit course provides an in-depth exploration of the principles, strategies, and practices essential for supporting young children with special needs in early childhood education settings. Students will learn to access current learning environments, create inclusive environments, develop specialized teaching strategies, understand legal requirements, and utilize community resources. The course emphasizes the importance of professional and ethical conduct, effective caregiver and family support, and the comparison of various childhood disabilities and disorders. Through practical applications and theoretical knowledge, students will be equipped to create inclusive and supportive educational experiences for all children.

ECED2237 Professional Practices in Early Childhood Education 2 2/0/NA

This 2-credit course provides an in-depth exploration of professional practices essential for effective early childhood education. Students will evaluate organizational climates, examine staff policies, and learn team teaching strategies. Students will identify strategies for professional growth, such as continuing education opportunities and professional involvement in relevant organizations. The course will analyze societal conditions affecting children and families, including current issues, trends, legal issues, and public policies impacting early childhood programs. Emphasis is placed on professional growth, ethical conduct, and developing instructional strategies for diverse student needs, encouraging students to articulate their personal and professional philosophy, display professionalism and confidentiality, and demonstrate dependability and punctuality.

ECED2240 Practicum II: Early Childhood Education Advanced Field Experience 3 0/0/3

Practicum II: Advanced Early Childhood Education is a comprehensive, hands-on course designed for students pursuing a career in early childhood education. This 3-credit course includes 144 hours of internship experience, providing students with the opportunity to apply theoretical knowledge in real-world settings. This course aims to equip students with practical experience, critical thinking skills, and professional conduct necessary for success in early childhood education settings. By the end of the course, students will be prepared to create and implement effective learning environments and curricula that support the diverse needs of young children. This course is not designed to transfer to a four year university.

ECON2204 Markets & Resource Allocation 3 3/0/NA

Meets MnTC Goal Area(s):5 This course covers the various terminology and microeconomics principles. The course will explain and evaluate markets as mechanisms to signal consumer preferences and induce seller's responses to changes in the market. Students will be exposed to how the free enterprise market works, money and prices, supply and demand, the costs and factors of production, monopoly, oligopoly, and the role of buyers and sellers in the competitive market.

ECON2404 Macroeconomics and the Business Cycle 3 3/0/NA

Meets MnTC Goal Area(s):5 Prerequisite(s):None Students will learn macroeconomic concepts to explore the determination of aggregate output, employment, and the price level in modern mixed economies. The interaction between the financial sector and commodity markets and the potential of monetary and fiscal policy to guide the course of the macro economy are also explored.

EMTS1000 Emergency Medical Responder 3 2/1/NA

This course follows state, and national guidelines and educational standards (MN EMSRB, NHTSA/EMS.gov.) This broad content includes, but is not limited to; Introduction to EMS, Scene safety, scene management, anatomy & physiology, psychophysiology, communication, documentation, disaster response, treating patients with various medical or traumatic problems. BLS CPR for Healthcare providers is also included.

EMTS1050 Emergency Medical Technician 9 7/2/NA

This course follows state, and national guidelines and educational standards (MN EMSRB, NHTSA/EMS.gov.) This broad content includes, but is not limited to; Introduction to EMS, Scene safety, scene management, anatomy & physiology, psychophysiology, communication, documentation, disaster response, treating patients with various medical or traumatic problems. BLS CPR for Healthcare providers is also included.

ENER1000 Introduction to Renewable Energy 2 2/0/NA

This course will provide an introduction to the principles of renewable energies, including solar energy, wind power, hydropower, biomass, hydrogen, and fuel cells. Students will learn about the history of energy production and costs, the dynamics of worldwide energy consumption and growth, the principal methods by which energy is used, and the environmental and financial impacts and consequences. Students will also learn about the impact of government regulations on the use of renewable energies.

ENER1500 PV System Design & Install 2 1/1/NA

This course introduces the student to the fundamentals of photovoltaic (PV) system design and installation procedures. Indoor classroom activities supplement outdoor fieldwork that will involve the installation of a residential scale PV system. Students completing this course will have the basic knowledge of photovoltaic systems suitable for a supervised, entry level position with a dealer/installer or other PV industry company.

ENGL0100 Read, Reason & Write 4 4/0/NA

The purpose of this course is to enhance students' skills in critical thinking, reading and writing. Students will: Read actively and critically, and effectively use textual annotation; Identify and deconstruct abstract ideas found in complex academic texts; Formulate and explain valid inferences based on information from texts; Write and evaluate arguments for validity and credibility; Locate, evaluate and synthesize ideas and information from multiple sources and varying points of view; Support ideas with adequate and varied evidence; Summarize, paraphrase and quote information from source materials; Create citations using information from source materials; Tailor language to address a specific audience; Employ syntax and usage appropriate to academic disciplines and the professional world; and Use strategies to effectively address the non-cognitive issues that could affect students' academic success.

ENGL1111 College Writing I 3 3/0/NA

Meets MnTC Goal Area(s):1, 2 This course is an introduction to college-level writing, focusing on descriptive, narrative, persuasive and expository essays that are written clearly, concisely and correctly. This course seeks to develop writers who 1) understand the importance of using the writing process (invention, organization, drafting, revision, proofreading, and editing) to produce interesting, thoughtful and thought-provoking essays; 2)understand the role the active reading of professional and peer review plays writing well. Learners in this course will share their writing and actively participate in discussion and peer review groups.

ENGL1113 College Writing II 3 3/0/NA

Meets MnTC Goal Area(s):1, 2

GERO1100 Intro to Gerontology 3 3/0/NA

This course offers an introduction to the field of gerontology. Students will explore the changing demographics of aging populations and the resulting impact on society over time, cultural and societal attitudes toward older adults, and the issues of ageism and its consequences. The course also examines the economic implications of aging populations, the role of public policy in supporting older adults, and career opportunities within the gerontology field.

GERO1200 Biology of Aging 3 3/0/NA

This course will explore biological changes that occur with aging, including descriptions of population aging and theories on how and why we age. It will focus on the process of aging in the various body systems, and the clinical implications of age-related diseases.

GERO1230 Healthy Aging 3 3/0/NA

Provides an overview of practices to promote healthy aging. Addresses nutrition, physical activity, and prevention practices as well as other health maintenance/management strategies. Emphasis is on practices to address current aging trends.

GERO1250 Dementia and Alzheimer's 3 3/0/NA

This course will focus on dementia care, communication, and treatment issues for individuals with Alzheimer's, memory loss, and other dementias. We will examine the important issue of co-morbidities with an emphasis on strategies to assist caregivers in dealing with the challenges of daily living with dementia. Students are expected to participate in a four-hour in-person aging simulation (Second Wind Dreams Virtual Dementia Tour®)

GERO1300 Death and Dying 3 3/0/NA

This course provides students with the biological, sociological, and psychological perspectives of death, dying, and bereavement in our society and around the world as well as Advanced Care Planning.

GERO1305 Psychosocial Aspects of Aging 3 3/0/NA

Students will become familiar with societal views of aging and the elderly. Students will understand the psychological, sociological, economic, political, and diversity aspects of aging. Students will also learn of the psychosocial challenges of caregivers as well as availability of resources for end of life issues. Students will learn various communication strategies.

HART1100 Electrical Theory for HVAC/R 4 2/2/NA

This course covers foundational knowledge and experience in the design and installation of HVAC control systems in accordance with the International/Minnesota Mechanical Code. Instruction begins with heating, ventilation, air conditioning and refrigeration electrical safety and basics of electricity in heating, ventilation, air conditioning and refrigeration systems. Both low voltage and high voltage circuits are addressed.

HART1101 Electrical Theory for HVAC/R Lab 0 0/0/NA

This course covers foundational knowledge and experience in the design and installation of HVAC control systems in accordance with the International/Minnesota Mechanical Code. Instruction begins with heating, ventilation, air conditioning and refrigeration electrical safety and basics of electricity in heating, ventilation, air conditioning and refrigeration systems. Both low voltage and high voltage circuits are addressed.

HART1110 Career Planning & Job Safety 3 2/0/1

The purpose of the heating, air, and refrigeration technology introduction internship is to enable students to gain valuable career knowledge within the industry as they embark on their educational program. The experience is designed to combine course work and field experience to enhance and broaden the technical education experience and develop knowledge of the many ways this program can apply to work in the field.

COURSE DESCRIPTIONS

HART1111 Career Planning & Job Safety Lab 0 0/0/NA

The purpose of the heating, air, and refrigeration technology introduction internship is to enable students to gain valuable career knowledge within the industry as they embark on their educational program. The experience is designed to combine course work and field experience to enhance and broaden the technical education experience and develop knowledge of the many ways this program can apply to work in the field.

HART1120 Forced Air Systems Theory 4 3/1/NA

This introductory course covers residential heating, ventilation, air conditioning, and refrigeration equipment, primarily forced air systems. Emphasis is placed on understanding the theory of operation and design of residential heating, ventilation, air conditioning and refrigeration systems in accordance with the International/Minnesota Mechanical Code and American Society of Heating, Refrigerating and Air-conditioning Engineers (ASHRAE) standards. Diagnosing symptoms and solutions to poor indoor air quality in residential heating, ventilation, air conditioning and refrigeration systems.

HART1121 Forced Air Systems Theory Lab 0 0/0/NA

This introductory course covers residential heating, ventilation, air conditioning, and refrigeration equipment, primarily forced air systems. Emphasis is placed on understanding the theory of operation and design of residential heating, ventilation, air conditioning and refrigeration systems in accordance with the International/Minnesota Mechanical Code and American Society of Heating, Refrigerating and Air-conditioning Engineers (ASHRAE) standards. Diagnosing symptoms and solutions to poor indoor air quality in residential heating, ventilation, air conditioning and refrigeration systems.

HART1200 Introduction to Refrigeration Systems 4 2/2/NA

This is an introductory course in the use of refrigerant systems as they apply to air conditioning and cold storage refrigeration. This course covers the theory and practical application related to air conditioning & refrigeration systems. The student will gain knowledge of multiple types of controls, components, and tools used in these applications.

HART1201 Introduction to Refrigeration Systems Lab 0 0/0/NA

This is an introductory course in the use of refrigerant systems as they apply to air conditioning and cold storage refrigeration. This course covers the theory and practical application related to air conditioning & refrigeration systems. The student will gain knowledge of multiple types of controls, components, and tools used in these applications.

HART1210 Refrigerant Recovery and Certification 4 2/2/NA

This course is designed to give the student a basic understanding of air conditioning principles. The course begins with the history of refrigeration and progresses to the theory of heat, cooling and heat transfer. The course will also explore the many uses of refrigeration (including heating and cooling) from residential to commercial/industrial applications.

HART1211 Refrigerant Recovery and Certification Lab 0 0/0/NA

This course is designed to give the student a basic understanding of air conditioning principles. The course begins with the history of refrigeration and progresses to the theory of heat, cooling and heat transfer. The course will also explore the many uses of refrigeration (including heating and cooling) from residential to commercial/industrial applications.

HART1220 HVAC/R Design and Installation I 4 2/2/NA

This is an introductory course covering basic skills relating to the heating, ventilation, and air conditioning industry. The course covers practical experience in the design and installation of residential heating, ventilation, and air conditioning systems and equipment in accordance with the International/Minnesota Mechanical and Gas Fuel Code.

HART1221 HVAC/R Design and Installation I Lab 0 0/0/NA

This is an introductory course covering basic skills relating to the heating, ventilation, and air conditioning industry. The course covers practical experience in the design and installation of residential heating, ventilation, and air conditioning systems and equipment in accordance with the International/Minnesota Mechanical and Gas Fuel Code.

HART2100 Heating, Air, & Refrigeration Control Systems 4 2/2/NA

This course is designed to give the student a thorough understanding of Heating, Air, & Refrigeration principals and controls. The course begins with a refresher on the processes and then will progress to controls systems and troubleshooting. The student will develop new skills from the controlled lab environment with system trainers and progress to operational residential and light commercial equipment.

HART2101 Heating, Air, & Refrigeration Control Systems Lab 0 0/0/NA

This course is designed to give the student a thorough understanding of Heating, Air, & Refrigeration principals and controls. The course begins with a refresher on the processes and then will progress to controls systems and troubleshooting. The student will develop new skills from the controlled lab environment with system trainers and progress to operational residential and light commercial equipment.

HART2110 HVAC/R Code Interpretation 3 3/0/NA

This course provides the student with an introduction to the International Mechanical Code, the National Fuel Gas Code; Minnesota Mechanical and Fuel Gas Code as it relates to basic heating, ventilation, air conditioning and refrigeration (HVAC/R) principles, materials, installation limitations, and licensing laws.

HART2120 HVACR Design and Installation II 4 2/2/NA

This course advances on HVAC Design I, building proficiency in sizing, installation, and servicing of residential and commercial heating, ventilation, air conditioning and refrigeration equipment and ductwork in accordance with the International/Minnesota Mechanical and Fuel Gas Code. Expanding skills in use of Vulcan 2000 plasma table in design and operational techniques for use in duct design and layout.

HART2121 HVACR Design and Installation II Lab 0 0/0/NA

This course advances on HVAC Design I, building proficiency in sizing, installation, and servicing of residential and commercial heating, ventilation, air conditioning and refrigeration equipment and ductwork in accordance with the International/Minnesota Mechanical and Fuel Gas Code. Expanding skills in use of Vulcan 2000 plasma table in design and operational techniques for use in duct design and layout.

HART2130 Commercial Refrigeration Racks & Chillers Theory 4 1/3/NA

This is an advanced level course covering both large and small commercial applications including high- and low-pressure systems and applications; identification of components and controls related to cooling and cold storage applications. Strengthening basic refrigerant handling and recovery skills.

HART2131 Commercial Refrigeration Racks & Chillers Theory Lab 0 0/0/NA

This is an advanced level course covering both large and small commercial applications including high- and low-pressure systems and applications; identification of components and controls related to cooling and cold storage applications. Strengthening basic refrigerant handling and recovery skills.

HART2200 HVAC/R Design and Installation III 4 2/2/NA

This course provides the student with advanced experience in the operation of the Vulcan 2000 Plasma Table for fabrication of sheet metal for heating, ventilation, and air conditioning applications. In addition, students will gain experience in psychometrics and heat load calculations used in heating, ventilation and air conditioning system designs. Incorporating blueprint reading to guide design in computer generated sheet metal fabrication.

HART2201 HVAC/R Design and Installation III Lab 0 0/0/NA

This course provides the student with advanced experience in the operation of the Vulcan 2000 Plasma Table for fabrication of sheet metal for heating, ventilation, and air conditioning applications. In addition, students will gain experience in psychometrics and heat load calculations used in heating, ventilation and air conditioning system designs. Incorporating blueprint reading to guide design in computer generated sheet metal fabrication.

HART2210 Heating, Air, & Refrigeration Technology Internship 4 2/2/NA

The Heating, Air, & Refrigeration Capstone Internship provides advanced work experience. As the capstone course for the program, the internship practices and integrates the knowledge, concepts and skills associated with the program of study. Lecture time reviews resume building, interview skills, professional customer service, tool and equipment use, including industry safety, application of analytical planning and diagnostic service skills at "real world" job sites.

HART2220 Commercial Controls and Electronics 4 2/2/NA

This course will address the theory, application, installation, and servicing of controls and programmable logic controllers specific to the heating, ventilation, air conditioning and refrigeration industry.

HART2221 Commercial Controls and Electronics Lab 0 0/0/NA

This course will address the theory, application, installation, and servicing of controls and programmable logic controllers specific to the heating, ventilation, air conditioning and refrigeration industry.

HLTH1000 Introduction to Health Careers 3 3/0/NA

Students will explore career options within the fields of allied health. Course content is designed to provide information regarding health careers such as required education, working conditions, and typical salary. Content aims to promote discussion, encourage critical reflection and self-exploration. This course will familiarize students with the historical, philosophical, and social foundations of the health care system and various health careers.

HLTH1100 Pharmacology 2 2/0/NA

This course presents foundational pharmacological principles, including pharmacokinetics, pharmacodynamics, dosage calculation, routes of administration, adverse effects, interactions, and contraindications to drug use along with individual considerations of medication administration. Ethical and legal considerations related to medications will also be considered. Medication classifications are reviewed according to body system. Emphasis is placed on drug classifications and nursing care related to the safe administration of medications to patients across the life span.

Prerequisite(s): BIOL1004 or BIOL2260

HLTH1106 Medical Terminology 2 2/0/NA

This course covers prefixes, suffixes, and roots used to compose medical terms. The student learns to spell, pronounce, define, analyze, and formulate terminology related to body structure, disease, diagnosis, and treatment. Medical abbreviations are also included.

HLTH1110 Nursing Assistant 3 1/2/NA

This course is intended to prepare the student to practice as Nursing Assistants and serve as an introduction to nursing for students who continue in nursing education. The integrated curriculum meets state and federal requirements. Students are introduced to the concepts of basic human need and learn to assist individuals in activities of daily living. Principles of body mechanics are emphasized. Selected common technical nursing skills are introduced. Successful completion of this course prepares the participant to take the state approved competency evaluation and seek employment in long-term care settings.

HLTH1200 Personal Health & Lifetime Wellness 2 1/1/NA

This course focuses on the latest trends in health, nutrition, physical activity, and wellness. Students will be introduced to topics such as health risk behaviors, concepts of physical fitness, mental health & wellness, and stress management.

HLTH1410 First Aid / CPR 1 .5/.5/NA

This course provides training in American Heart Association BLS (Basic Life Support) CPR with AED training used in the healthcare setting and American Red Cross basic first aid procedures. Students who successfully complete the course will receive the AHA Basic Life Support certification.

HLTH2002 Pharmacology 2 2/0/NA

This course introduces the learner to basic pharmacological concepts, drug legislation, and drug categories. Emphasis is placed on commonly used drugs and their effects on body systems. Drug reference utilization is included.

Prerequisite(s): BIOL1004

HLTH2208 Pathophysiology 3 3/0/NA

This course presents information related to pathophysiology of various body systems. The nature, cause, diagnosis, and treatment of common disease conditions will be emphasized.

INDT1300 Math for Trades 3 3/0/NA

This course will enable the student to directly apply mathematics to their field of study. The course includes a review of basic mathematical operations and continues with the development of algebraic and trigonometric skills in a technical setting. Most concepts will be applied through course-specific problems.

ITEC1000 Introduction to IT Helpdesk 3 2/1/NA

Students will be introduced to all aspects of the helpdesk including the roles, responsibilities, and skills needed for the role of a helpdesk support professional. This course emphasis is on customer service skills, techniques to develop the necessary skills and application of the skills to handle customer situations.

COURSE DESCRIPTIONS

ITEC1010 Operating Systems 3 1/2/NA

This course explores several operating systems including various versions of Microsoft Windows and Linux. Specific concepts will include installing, configuring, troubleshooting, and maintaining efficiency of the operating system to meet end-user needs in a production environment.

ITEC1230 TECH+ 3 2/1/NA

Students will attain knowledge and skills to identify and explain the basics of computing, IT infrastructure, applications, software development, database use, and security concepts. This course will also provide knowledge in the areas of troubleshooting theory and identification of basic security risks. After an appropriate review of course material, students should consider sitting for the CompTIA Tech+ Certification exam.

ITEC1240 A+ 4 3/1/NA

Students will attain an introduction to the core principles and skills of information technology. This course will provide practical knowledge of the Windows Operating System (OS) configuration, software installation and utility management; along with the practical knowledge of hardware and printers needed to provide technical support to computer users. This course prepares students to enter the workforce with essential computing skills. After an appropriate review of course material, students should consider sitting for the 2 CompTIA IT A+ Certification exams.

ITEC1250 Network Essentials 3 2/1/NA

This course serves as a general introduction to network technologies for local area networks (LANs), wide area networks (WANs), and the Internet. It provides an introduction to the hardware, software, terminology, components, design, and connections of a computer network, as well as the topologies and protocols for LANs.

ITEC1260 Security Essentials 3 2/1/NA

This course provides students with a broad foundational understanding of security. Coverage begins with an overview of information and business security, security laws, and includes access control, cryptography and security architecture and design. It is suitable for anyone interested in a career in Information Technology (IT).

ITEC2100 Intro to Python 3 2/1/NA

This course covers foundational concepts in Python, including variables, data types, conditionals, loops, functions, and basic data structures like lists and dictionaries. Students will learn to write, debug, and execute Python code. The course emphasizes practical applications and hands-on exercises. By the end of the course, students will have the confidence and skills to tackle basic programming tasks and pursue further learning in Python or other programming languages.

ITEC2210 Window Server Administration 3 2/1/NA

This course provides students with the skills to plan, install, configure, and administer Windows network servers and Windows desktop clients. Students will become familiar with the concepts and basic administration of local and cloud networks. Students will understand how various components work together to build a functioning network system.

ITEC2220 Windows & Linux Scripting 3 2/1/NA

This course equips IT professionals with the essential skills needed to manage and automate system administration tasks in both Windows and Linux environments. Through virtual lab experience with PowerShell and Bash, students will learn to manage processes, monitor system performance, and handle file operations. The course covers critical areas such as secure remote system management using SSH, automating Active Directory tasks, and utilizing command-line tools for log analysis and text manipulation. Students will also gain proficiency in writing scripts to automate system administration tasks, perform health checks, monitor system resources, implement security measures, and troubleshoot common issues. By the end of the course, students will be prepared to manage cross-platform IT environments, automate key workflows, and ensure system security and performance.

ITEC2250 Network+ 4 3/1/NA

Students will come away with a strong grasp of networking principles; including both wired and wireless networks. The skills learned in this course will set students up for more advanced concepts if you're looking to further your IT education. Before taking this course, individuals should have the knowledge and skills to troubleshoot, configure, and manage company networks. After an appropriate review of course material, students should consider sitting for the CompTIA Network+ Certification exam.

ITEC2260 Security+ 4 3/1/NA

This course covers foundational network security skills in risk assessment and management, forensics, security controls, and more. The student's goal will be to learn core knowledge and skills required to assess the state of security in an enterprise environment and recommend and implement security solutions. Security+ is recognized as the introduction to network security industry standard, and the first step into a cybersecurity career. After an appropriate review of course material, students should consider sitting for the CompTIA Security+ Certification exam.

ITEC2310 Remote/ Mobile Device Support & Troubleshooting 3 2/1/NA

This course focuses on the essential skills and tools required to provide effective IT support to remote users in today's increasingly mobile and distributed work environments. Students will explore techniques for troubleshooting and resolving issues on mobile operating systems and will gain hands-on experience with Virtual Private Network (VPN) configuration and management to ensure secure remote connectivity. The course also examines the use of remote support software for business environments and addresses challenges of supporting smartphones, tablets, and other mobile devices. By the end of the course, students will be equipped to deliver remote support, enhance user productivity, and address technical issues in a secure and efficient manner.

ITEC2320 Virtualization/Server Technologies 3 2/1/NA

This course provides IT professionals with a comprehensive understanding of virtualization principles and equips them with the skills to design, deploy, and manage virtualized environments using leading technologies. Through practical, hands-on experience, students will explore core concepts such as hypervisors, virtual machine management, and virtual networking. The curriculum emphasizes advanced topics, including high availability, load balancing, disaster recovery, and security in virtualized systems.

MATH0081 Math Foundations (QR-Ready) 3 3/0/NA

This developmental course provides an alternative pathway to a college level liberal arts mathematics course. All college students, regardless of their college major, need to be able to make reasonable decisions about fiscal, environmental, and health issues that require quantitative reasoning skills. An activity based approach is used to explore numerical relationships, graphs, proportional relationships, algebraic reasoning, and problem solving using linear, exponential and other mathematical models. Students will develop conceptual and procedural tools that support the use of key mathematical concepts in a variety of contexts. This course is the first in a two part sequence and is not suited for Science, Technology, Engineering, or Math(STEM) students.

MATH0092 Intermediate Algebra 3 3/0/NA

This developmental course provides an alternative pathway to a college level liberal arts mathematics course. All college students, regardless of their college major, need to be able to make reasonable decisions about fiscal, environmental, and health issues that require quantitative reasoning skills. An activity based approach is used to explore numerical relationships, graphs, proportional relationships, algebraic reasoning, and problem solving using linear, exponential and other mathematical models. Students will develop conceptual and procedural tools that support the use of key mathematical concepts in a variety of contexts. This course is the first in a two part sequence and is not suited for Science, Technology, Engineering, or Math(STEM) students.

MATH1110 College Algebra 3 3/0/NA

Meets MnTC Goal Area(s):4 and NTC Core Ability 6 Problem solving with linear, quadratic, rational and absolute value equations and inequalities; function notation and inverses; graphs of relations and functions; polynomial, rational, exponential, and logarithmic functions and applications; systems of equations and inequalities, matrices.

Prerequisite(s): MATH0092 or ACT Math score of 22 or Accuplacer score of 76 or Next Generation Accuplacer Advanced Algebra & Functions score of 250

MATH1200 Mathematics of Business and Industry 3 3/0/NA

Meets MnTC Goal Area: 4 A Survey of mathematics consists of the area and volume of geometric figures, right triangle trigonometry with applications, set theory, logical reasoning methods, linear equations/ linear regression, and bank financing.ith linear, quadratic, rational and absolute value equations and inequalities; function notation and inverses; graphs of relations and functions; polynomial, rational, exponential, and logarithmic functions and applications; systems of equations and inequalities, matrices.

Prerequisite(s): MATH0081 or appropriate assessment score

MATH1930 Introduction to Mathematical Sciences 3 2/1/NA

Meets MnTransfer Goal Area 4: This course integrates the study of algebra and statistics. Topics include functions, graphical and tabular analysis, rate of change, syntax and semantics, the process of computing, data manipulation, sampling, statistical measures, basic probability, correlation. Examples are drawn from a wide range of disciplines and content will be taught within the framework of discipline-specific examples. This course will be taught in a lab environment, the sessions will be a mix of lecture, individual work, and group work. Student participation and activity learning will be stressed.

Prerequisite(s): MATH0081 or MATH0091 or appropriate assessment score

MATH1950 Consortium Credits 4 4/0/NA

A course intended to act as a place holder for consortium credits taken at a non- MinnState school.

MATH2200 Statistics 4 4/0/NA

Meets MnTransfer Goal Area 4: A non-theoretical introduction to statistics with an emphasis on applications in a variety of disciplines. Topics include measures of central tendency, position and dispersion; basic probability; hypothesis testing; estimation; analysis of variance; linear correlation and regression; nonparametric statistics.

Prerequisite(s): Three years of high school mathematics (including two years of algebra) or completion of MATH1110 or higher.

MKTG1106 Professional Selling 3 3/0/NA

This course covers a fundamental sales approach that can be used as a foundation for future sales courses. The content covers steps used to plan a sales presentation and methods of determining and filling prospect needs or wants.

MKTG1108 Customer Relations Management 3 3/0/NA

Customer service can determine a company's success or failure. Customer service skills can determine an employee's success or failure. This course covers the skills necessary for an individual to build and maintain good relationships with internal and external customers and the role the customer service team plays in developing, evaluating, and improving customer service systems.

MKTG1112 Retailing Management 3 3/0/NA

This course provides an overview of the concepts and skills needed to operate a successful retail operation. Topics include retailing terminology, current practices in merchandising, types of retail institutions, site election, inventory control, and pricing.

MKTG1116 Advertising & Promotion 3 3/0/NA

This course is intended to acquaint learners with advertising media, budgets, selection, ad copy, and layout. Also, learners gain an understanding of advertising campaigns, promotional events, and techniques.

MKTG2100 Principles of Marketing 3 3/0/NA

This course introduces learners to the dynamic field of marketing. This course is a comprehensive study of the marketing principles and concepts and their application to a changing business world.

MKTG2200 Principles of Management 3 3/0/NA

This course is designed to expose the learner to a variety of concepts presented within the framework of the traditional functions of management. The various approaches to planning, decision making, organizing, motivation, leadership, communications, and controlling are explored.

MKTG2204 Advanced Professional Selling 3 2/1/NA

This course provides opportunity for the learner to apply the steps of a sales presentation by planning and performing sales presentations in role-playing situations. The learner applies strategies in sales communications, customer oriented selling, and sales management.

Prerequisite(s): MKTG1106

MKTG2214 E-Marketing 3 3/0/NA

This course examines emerging electronic technologies and their impact on a firm's marketing strategy. Emphasis is placed on trends in e-marketing as well as unique opportunities and challenges faced in the electronic environment. Learners apply components of the marketing mix to an electronic marketing strategy.

MKTG2220 Human Resource Management 3 3/0/NA

The purpose of this course is to acquaint the learner with the importance of human resource management in contributing to the achievement of an organization's objectives. The content addresses techniques and legal aspects of recruiting, hiring, firing, promotion, documentation, evaluation, and other areas essential to the personnel function.

MKTG2232 Marketing Management 3 2/1/NA

This course focuses on the development of strategic marketing skills needed in marketing and management in business. Training covers the cycle of marketing for customer acquisition, care and relationship building integrated with strategic business operation processes. Marketing strategies include: target marketing, market research, product/service mix, promotional methods, distribution systems, and pricing methods.

MKTG2236 Small Business Management 3 3/0/NA

Small Business Management is a course on how to start and operate a small business. Topics include methods in starting a small business, essential management skills, how to prepare a business plan, financial needs, marketing strategies, and legal issues.

NSCI2203 Environmental Science 4 3/1/NA

Meets MnTC goal areas 3 &10. This introductory course addresses the dynamic equilibrium of our environment. The design of the course it to teach the science behind the environmental issues on our planet. This will allow for discussion and analysis of current topic related to those issues. Lecture and lab.

PHIL1201 Ethics 3 3/0/NA

Meets MnTC Goal Area(s):6 & 9 This course presents and examines moral theories, and applies these theories in contemporary moral issues such as articulate reproduction, abortion, sexual equality, racism, privacy, euthanasia, the environment, etc. The course develops one's sense of ethical and civic responsibility by developing the capacity to identify, discuss, and reflect upon the ethical dimensions of political, social, and personal life and to understand the ways in which they can exercise responsible and productive citizenship. This course also assists in developing critical thinking skills by developing thinkers who are able to unify factual, creative, rational, and value-sensitive modes of thought.

PHIL2210 Bioethical Issues in Contemporary Society 3 3/0/NA

Meets MnTC Goal Area(s):2,6 & 9 This course is an introduction to bioethical issues that arise in the contemporary practice of healthcare, and which are central to understanding healthcare in contemporary society. In additional to developing a basic understanding of standard moral theories, issues that rise with American culture for patients, providers, and planners of health care are examined. Examples of such issues include, but are not limited to, abortion, euthanasia, patient rights, informed consent, health care distribution and reform, genetic testing and research, and cloning.

PLBG1000 Introduction to Plumbing Technology 3 2/1/NA

This course provides the student with an introduction to the Plumbing industry. Practical applications with common tools and fittings, blueprint reading, introduction to Plumbing equipment, fixtures, qualities of piping, for building a foundation in the Plumbing industry. Safety protocols and personal protective equipment (PPE) are emphasized.

PLBG1001 Introduction to Plumbing Technology Lab 0 0/0/NA

This course provides the student with an introduction to the Plumbing industry. Practical applications with common tools and fittings, blueprint reading, introduction to Plumbing equipment, fixtures, qualities of piping, for building a foundation in the Plumbing industry. Safety protocols and personal protective equipment (PPE) are emphasized.

PLBG1055 Plumbing Code Interpretation 4 4/0/NA

This course provides the student with an introduction to the Minnesota State Plumbing Code as it relates to basic plumbing principles, materials, installation limitations, and licensing laws.

PLBG1085 Piping System Fabrication I 4 2/2/NA

This course provides practical experience in the design and installation of residential plumbing systems, fixtures, and equipment in accordance with the Minnesota Plumbing Code.

PLBG1086 Piping System Fabrication I Lab 0 0/0/NA

This course provides practical experience in the design and installation of residential plumbing systems, fixtures, and equipment in accordance with the Minnesota Plumbing Code.

PLBG1091 Plumbing Design and Installation I 4 2/2/NA

This course introduces and reinforces important concepts in the design and installation of residential plumbing systems, and provides additional experience in installing plumbing fixtures, and equipment in accordance with the Minnesota Plumbing Code.

PLBG1092 Plumbing Design and Installation I Lab 0 0/0/NA

This course introduces and reinforces important concepts in the design and installation of residential plumbing systems, and provides additional experience in installing plumbing fixtures, and equipment in accordance with the Minnesota Plumbing Code.

PLBG1145 Piping Systems Fabrication II 4 2/2/NA

This course provides the student with advanced experience in the design and installation of residential plumbing systems, fixtures, and equipment in accordance with the Minnesota Plumbing Code.

PLBG1146 Piping Systems Fabrication II Lab 0 0/0/NA

This course provides the student with advanced experience in the design and installation of residential plumbing systems, fixtures, and equipment in accordance with the Minnesota Plumbing Code.

PLBG1147 Plumbing Design and Installation II 4 2/2/NA

This course covers practical experience in the installation of sewers and drain piping by laying out piping, trenches, excavating trenches, using a builder's level to establish grade and elevations of the piping, and backfilling trenches in a safe and efficient manner in accordance with the Minnesota Plumbing Code.

PLBG1148 Plumbing Design and Installation II Lab 0 0/0/NA

This course covers practical experience in the installation of sewers and drain piping by laying out piping, trenches, excavating trenches, using a builder's level to establish grade and elevations of the piping, and backfilling trenches in a safe and efficient manner in accordance with the Minnesota Plumbing Code.

PLBG1155 Plumbing Repair and Service Technology 4 2/2/NA

This course provides the student with experience in repair, maintenance, and servicing of plumbing systems; including well and city water supply systems, pumps, water heaters, water conditioning, sewer lines, and associated equipment and fixtures.

PLBG1156 Plumbing Repair and Service Technology Lab 0 0/0/NA

This course provides the student with experience in repair, maintenance, and servicing of plumbing systems; including well and city water supply systems, pumps, water heaters, water conditioning, sewer lines, and associated equipment and fixtures.

PLBG2151 Hydronic Design and Controls 4 2/2/NA

This course provides the student with advanced experience in the design and installation of residential hydronic heating systems, controls, and equipment in accordance with the Minnesota Plumbing Code and Minnesota Fuel Gas Code.

Prerequisite(s): PLBG1085

PLBG2152 Hydronic Design and Controls Lab 0 0/0/NA

This course provides the student with advanced experience in the design and installation of residential hydronic heating systems, controls, and equipment in accordance with the Minnesota Plumbing Code and Minnesota Fuel Gas Code.

PNSG1110 Adult Nursing I 4 4/0/NA

This course introduces fundamental nursing concepts as they relate to acute and chronic medical conditions across the lifespan. Nursing concepts, nursing process and clinical decision-making skills are applied to patient care exemplars to facilitate learning. Principles of evidence-based practice, pathophysiology, pharmacology, and nutrition are introduced into each topic area.

Prerequisite(s): Admission to the program

PNSG1112 Technical Skills I 3 1/2/NA

This course starts by assisting the student in developing life management skills to support success in nursing school. Learning style, study skills, and time management practices are emphasized. NCLEX-PN test taking strategy development is highlighted. The course introduces fundamental nursing concepts and theory which underlie basic assessment and nursing skills. The nursing process is introduced as a framework for competent clinical decision-making. Fundamentals of safety are taught as it applies to evidence-based, client- centered care. The student will demonstrate critical thinking, decision making, and priority setting, essential to successful assessment and application of nursing skills in the laboratory setting. The student will learn personal and professional behaviors that support a caring relationship with clients and colleagues.

Prerequisite(s): Admission to the program

PNSG1125 Clinical I 4 0/4/NA

Provides the student an opportunity for introduction to patient care, apply nursing judgment using the nursing process to implement safe, patient-centered care. This includes client interaction, ADLs, client safety, assessing, collecting data, implementing skills, documenting finding, and reinforcing teaching plans for patients. Developing communication and customer service skills; working with individual patients, families, and team members.

Prerequisite(s): Admission to the program

PNSG1150 Adult Nursing II 4 4/0/NA

This course expands the application of nursing concepts as they inter-relate to the safe, holistic nursing care management of acute and chronic medical conditions across the lifespan. Integrated nursing concept exemplars for complex clients with comorbidities will be covered. Principles of evidence-based practice, pathophysiology, pharmacology, and nutrition are integrated into each topic area.

Prerequisite(s): Admission to the program

PNSG1155 Technical Skills II 3 2/1/NA

The course introduces additional evidence-based skills critical to the practice of the Practical Nurse. The students transition to the professional role of the Practical Nurse by examining personal and professional integrity, standards of nursing practice, state nurse practice acts, and the nursing code of ethics. Students will explore leadership styles, methods of team building, and the benefits of being part of a team. Students will demonstrate behaviors that support a professional caring relationship with clients and colleagues.

Prerequisite(s): Admission to the program

PNSG1160 Maternal/Child Nursing 2 2/0/NA

This course explores human reproduction, pregnancy, and fetal development. Prenatal assessment and care during pregnancy including complications of pregnancy. Nursing care during labor and delivery including complications. Post-partum care of mother, infant, and family. Growth, development, and health promotion of infant through adolescence. Pediatric concerns, considerations, and deviations in pediatric health.

Prerequisite(s): Admission to the program

PNSG1180 Psychosocial Nursing 2 2/0/NA

Psychosocial nursing care focuses on the care of patients with psychiatric and behavioral disorders. Emphasis is placed on common psychiatric and behavioral disorders as well as promoting and maintaining the mental health of individuals.

Prerequisite(s): Admission to the program

PNSG1185 Clinical II 4 0/4/NA

This course will expand on the concepts of client-centered care, safety, teamwork, collaboration, informatics, and professionalism for the care of individual clients. Applying fundamental nursing concepts, nursing process and nursing skills while promoting wellness. Caring for clients with acute and chronic conditions in various settings.

Prerequisite(s): Admission to the program

PSYC1105 General Psychology 3 3/0/NA

Meets MnTC Goal Area(s):5 This course is an introduction to basic principles and theories of human behavior and mental processes. It will cover the history and contemporary research in the field. The course will also examine the biological, psychological, and social aspects of human interaction with self and environment.

Prerequisite(s): ENGL0100

PSYC2201 Lifespan Psychology 3 3/0/NA

Meets MnTC Goal Area(s):5 Prerequisite(s): None This course is an introduction to the psychological development of the individual using a lifespan approach from conception through death. The learner will explore the influences of biological, cognitive, and psychosocial factors that influence the development of a pattern of change throughout a person's life.

Prerequisite(s): ENGL0100

PSYC2220 Psychological Disorders 3 3/0/NA

Meets MnTC Goal Area(s):5 This course provides an examination of major personality maladjustment and disorganization with primary emphasis on causes, diagnostic criteria, and treatment approaches. It includes historical and theoretical approaches, as well as an examination of related contemporary issues. This is a general education course that is appropriate for all learners interested in examining and having a better understanding of psychological abnormalities such as personality disorders, disorders related to stress and substance abuse, and other brain-related and/or cognitive impairments.

Prerequisite(s): ENGL0100

SGNL1100 American Sign Language (ASL) I 4 4/0/NA

Meets MnTC Goal Area(s): 8 This course is an introduction to American Sign Language (ASL), a visual/gestural language used by individuals in Canada and the United States who are Hearing, Hard of Hearing, Deaf, or Culturally Deaf. Students will develop practical skills and fundamental grammar knowledge required for successful interactions within the Deaf Community. Students will learn the ability to use sign language appropriately within a deaf cultural context. Examination of traditions and values unique to the Deaf Community will allow students to apply a comparative perspective to cross-cultural experiences.

SGNL2100 American Sign Language (ASL) II 4 4/0/NA

Meets MnTC Goal Area(s): 8 This course is a continuation of American Sign Language I (ASL I). This course emphasizes development and refinement of comprehension, production, and interpersonal skills covered in ASL I. Additional information about the Deaf community and Deaf education will be included.

COURSE DESCRIPTIONS

SOCI1110 Intro to Sociology 3 3/0/NA

Meets MnTC Goal Area(s):5,8 Prerequisite(s): None This course is intended to introduce learners to the sociological perspective as a part of understanding the larger society and themselves. Topics reviewed include basic concepts of sociology, the process of socialization and social change, deviant behavior, social inequalities of various groups, sociological theories, and major social institutions.

SPCH1110 Intro to Public Speaking 3 3/0/NA

Meets MnTC Goal Area(s):1 This course focuses on three areas: providing an overview of the process of communication and public speaking, developing and understanding of the principles needed for speech preparation, and application of these principles in preparing and delivering various types of speeches.

Prerequisite(s): ENGL0100

SPCH1120 Interpersonal Communications 2 2/0/NA

Meets MnTC Goal Area(s):1 Prerequisite(s): None This course will focus on helping the learner improve their ability to communicate effectively in one-on-one and small group encounters. This course examines small group communication through the aspects of small group theory, interpersonal behavior, group dynamics, listening skills, conflict, leadership, decision-making, and stress, problem solving, and crisis management. Role playing experience, reflection, and analysis of interactions are the key components to growth and learning. This course will provide learners with tools to navigate through limit setting/inappropriate behavior and crisis situations.

SSCI1104 Human Relations 3 3/0/NA

This course is designed to help the learner gain an awareness of and improve upon human relationships especially appropriate to the workplace. This course is a study of human relations as it relates to an employee's relationship with him/herself, co-workers, supervisors, and customers. Emphasis will be placed on team building, sexual harassment, and cultural diversity in the workplace.

Prerequisite(s): ENGL0100

SUPL1104 Intro to Business 3 3/0/NA

This course provides learners with an "insider's" view of the concepts and processes involved in business and business operation. The course provides a comprehensive view of the contemporary business environment from the internal functions of a business to the challenges of business on an international scale.

SUPL1108 Lead & Facilitate Teams 3 3/0/NA

The course will address the role of supervisor, manager, and leader as a leader and facilitator of work teams. Topics will include planning work teams, creating effective team interaction, identifying characteristics of successful teams, and demonstrating skills and behaviors of both team leader and team member.

SUPL1120 Supervisory Leadership 3 3/0/NA

The methods and techniques of leadership and supervision and their applications are emphasized in this course. The content covers such topics as delegation, motivation, training, orienting, evaluating, and effectively increasing productivity.