

# NORMANDALE COMMUNITY COLLEGE

## Academic Programs Course Descriptions

2023 - 2024

Normandale Community College  
9700 France Avenue South  
Bloomington, MN 55431-4399  
952-358-8200  
[www.normandale.edu](http://www.normandale.edu)



**NORMANDALE**  
COMMUNITY COLLEGE

Normandale is a member of the Minnesota State Colleges and Universities system.

This system is governed by a 15-member Board of Trustees appointed by the governor.

Requirements of this catalog are subject to change as a result of state and federal legislation, policies of the Minnesota State Colleges and Universities Board of Trustees, and other reasons deemed necessary by the faculty and administration of Normandale Community College.

The provisions of this catalog are effective from the beginning of Fall Semester 2023 through Summer Session 2024 but are not to be regarded as an irrevocable contract between the student and the college.

This and previous catalogs can be found online at [www.normandale.edu/catalog](http://www.normandale.edu/catalog)

The college reserves the right to change any provision or requirement at any time within the student's term of enrollment.



Programs of Study.....	3	German - Associate of Arts Emphasis (AA) .....	54
Minnesota Transfer Curriculum.....	5	Global Studies Certificate .....	55
Associate of Arts (AA) in Liberal Education .....	12	Health Science Broad Field (AS) .....	56
Accounting Transfer Pathway (AS) .....	13	Healthcare Systems Technology (AAS) .....	57
Accounting Certificate.....	14	History Transfer Pathway (AA) .....	58
Anthropology - Associate of Arts Emphasis (AA) .....	15	Hospitality Management (AAS).....	60
Field Archaeology Certificate .....	16	Hotel Marketing and Sales Certificate .....	61
Archaeology - Associate of Arts Emphasis (AA).....	17	Hotel Operations Certificate .....	62
Art Transfer Pathway (AFA) .....	18	Human Resource Management Certificate .....	63
Art - Associate of Arts Emphasis (AA) .....	19	Individualized Studies (AS).....	64
Biology Transfer Pathway (AS).....	20	International Experience Certificate.....	65
Business: Marketing and Management (AAS) .....	21	Management Certificate.....	66
Business Transfer Pathway (AS).....	22	Marketing Certificate .....	67
Casino Operations and Management Certificate .....	23	Mathematics Transfer Pathway (AA).....	68
Chemistry Transfer Pathway (AS) .....	24	Music (AFA) .....	69
Communication Studies Transfer Pathway (AA) .....	25	Nursing Assistant Certificate .....	70
Community Health Worker Navigator Certificate.....	26	Peace Officer/Public Safety Transfer Pathway (AS) .....	71
Computers/Information Management (AAS) .....	27	Peace Officer Certificate.....	73
Computers/Information Certificate .....	28	Philosophy - Associate of Arts Emphasis (AA).....	74
Computer Science Transfer Pathway (AS) .....	29	Physics - Associate of Arts Emphasis (AA) .....	75
Computer Technology (AAS) .....	30	Political Science Transfer Pathway (AA).....	76
Computer Technology Certificate .....	31	Professional Nursing (AS).....	78
Creative Writing (AFA) .....	32	Psychology Transfer Pathway (AA).....	80
Creative Writing Certificate .....	33	Public Health (AS) .....	81
Criminal Justice Transfer Pathway (AS).....	34	Religious Studies Certificate .....	82
Data Analytics (AS).....	35	Small Business Management Certificate .....	83
Dental Hygiene (AS) .....	36	Sociology Transfer Pathway (AA).....	84
Economics Transfer Pathway (AA).....	40	Spanish Transfer Pathway (AA) .....	85
Elementary Education Foundations Transfer Pathway (AS .....	42	Spanish Certificate .....	86
Engineering Broad Field (AS).....	43	Special Education Foundations Transfer Pathway (AS) .....	87
English Transfer Pathway (AA).....	45	Theatre Performance Transfer Pathway (AFA).....	89
Exercise Science Transfer Pathway (AS).....	47	Theatre Production and Design Transfer Pathway (AFA) .....	91
Exercise Specialist Certificate .....	48	Tourism Operations and Management Certificate .....	93
Family Studies Certificate .....	49	Vacuum and Thin Film Technology (AAS).....	94
Food and Beverage Management Certificate .....	50	Vacuum Maintenance Technician Certificate.....	95
Food Science (AS) .....	51	Vacuum Technology Certificate.....	96
French - Associate of Arts Emphasis (AA) .....	52	Women's Studies - Associate of Arts Emphasis (AA).....	97
Geography - Associate of Arts Emphasis (AA) .....	53	Course Descriptions.....	98

## Degrees & Certificates Awarded

Normandale's academic awards include certificates (4-30 credits), Minnesota Transfer Curriculum (MnTC) certification (40 credits), and degrees (60 or more credits).

Except for a few of the technical certificates, all awards require some general education. Minnesota State colleges define general education in terms of Minnesota Transfer Curriculum (MnTC) goals. All degrees require that some number of MnTC goals be completed. Three MnTC goals must be completed for an Associate of Applied Science (AAS) degree, 6 goals for the Associate of Science (AS), and all 10 goals for the Associate of Arts (AA). General Education credits for the Associate of Fine Arts (AFA) programs vary.

Certificates will always require the completion of a specific set of specialized coursework. Except for the AA, all degrees also have specialized course requirements in the form of a major and/or emphasis.

The AA degree major is always Liberal Education. It allows up to 20 elective credits. However, students are encouraged to complete one of several available emphases consisting of up to 20 credits of specialized coursework.

The AFA, AS, and AAS degrees each have a major that corresponds to the program of study. The number of credits required in the majors is 30 credits for the AS, 40 credits for the AAS and varies for the AFA.

It is often possible to earn one or more certificates on the way to completing degree requirements. It is also common for those who already have earned degrees to continue to earn specialized certificates throughout their careers.

### Associate of Arts (AA)

The Associate of Arts degree (AA) is intended primarily for students who plan to transfer to another college to complete a bachelor's degree. The AA degree is a generalist liberal arts degree. Many students choose to concentrate in a particular field of study as preparation for a planned major at a four-year college or university. Students may choose to follow one of the emphases or develop an individual plan within the general AA degree. Both options are designed to identify the appropriate core of courses for transfer in a student's major to their chosen four-year college or university. At least 40 of the 60 credits must be taken within the Minnesota Transfer Curriculum (MnTC). Students are strongly encouraged to develop an educational plan in consultation with a Normandale counselor or academic advisor to assure that degree requirements are fulfilled.

### Associate of Arts with Emphasis

Each of the emphasis areas of the AA degree is designed to provide students with a listing of the core courses needed in preparation for transfer within that major. Earning an AA degree with an emphasis allows students to deepen their breadth of knowledge in a particular subject area while more thoroughly preparing them for the major at corresponding baccalaureate programs at several public and private four-year colleges and universities. To earn the AA with Emphasis, students need to complete all requirements for a general AA degree, including the specific requirements of their chosen emphasis. Courses within specific emphases may satisfy either elective or MnTC requirements. Students satisfying graduation requirements for the degree will have the AA degree and the appropriate emphasis documented on their academic transcript. Careful planning with a counselor or academic advisor is strongly advised to tailor any of the emphasis areas to meet the requirements of the student's chosen four-year college or university.

### Associate of Science (AS)

The Associate of Science degree (AS) is intended for those students who wish to balance liberal arts education with career-oriented classes. The primary purpose of the degree is to provide the credentials for a specific career and to prepare graduates for admission to a four-year college or university. Credit and course requirements are unique for each program. Refer to the curriculum requirements listed in the Programs and Majors section of this catalog for specific requirements of each AS degree program. Approximately one-half of the course work consists of liberal arts or general education credits, and one-half include career-oriented courses. The extent to which credits transfer to a four-year college varies with the specific program completed and the subsequent major selected. Specific transfer agreements exist with selected four-year colleges for each AS program; check with a counselor or academic advisor.

### Associate of Applied Science (AAS)

The Associate of Applied Science degree (AAS) is intended for those students who plan to use the competence gained through their degree for immediate employment. The AAS degree is granted in a specific major, and typically at least one-half of the course work is in the program area, approximately one-third is in general education and liberal arts, and the balance of credits are either in the program area or general education depending on the specific major chosen. The AAS degree is not designed to transfer to a four-year college. However, the general education and liberal arts courses typically do transfer and some of the career-oriented courses also may transfer to specific majors at selected schools. Students are encouraged to consult with a Normandale counselor or academic advisor for information about transferring credits to other colleges and universities.

**Associate of Fine Arts (AFA)**

The Associate of Fine Arts degree (AFA) is a two-year degree for students who will eventually transfer and pursue a Bachelor of Fine Arts degree and also for students interested in entering the job market. Students take 30 credits in general requirements and 30 credits in fine art. Courses in music, art or theatre may transfer in part or in entirety to baccalaureate institutions. In order to plan a program, students should consult with a counselor or academic advisor.

**Minnesota State Transfer Pathway Degrees**

Through Transfer Pathways, students enrolled at a Minnesota State College will be able to select from more than 30 fields that will prepare them to complete related bachelor's degrees at any Minnesota State university offering a degree in that field. Students who complete the transfer degree will be guaranteed junior status upon admission to the university. The student will still need to meet any special admission requirement for the major. The bachelor's degree will be completed in 60 additional credits.

**Certificates**

Concentrated programs of study are available in certain areas as certificates. Certificates are awarded to students upon completion of a specific career program with a GPA of at least 2.00. The programs are designed for those students who wish to develop vocational skills for entry-level employment in specific career areas.

**Articulation Agreements**

Articulation agreements are formal agreements between two or more colleges and/or universities to accept credits

The Minnesota Transfer Curriculum (MnTC) is the result of a collaborative effort by all of the two- and four-year public colleges and universities in Minnesota to define a common philosophy toward general education. The goal of this effort is to help students transfer their work in general education. Completion of a defined transfer curriculum at one institution enables a student to receive credit for all lower-division general education upon admission to any other Minnesota State institution.

To complete the MnTC, students must satisfy the requirements of each of the 10 Goal Areas with a minimum of 40 credits. (Note that some courses satisfy more than one goal, but the number of credits for those courses will only be counted once.) Students must earn a minimum of a cumulative 2.0 GPA on the MnTC courses.

Visit [http://www.mntransfer.org/students/plan/s\\_mntc.php](http://www.mntransfer.org/students/plan/s_mntc.php) for details about the goal competencies of the Minnesota Transfer Curriculum.

### Goal 1: COMMUNICATION- 2 courses

Course #	Course Title	Credits	Goal Area
ENGC 1101	College Writing	4	1
<b>Communication</b>			
COMM 1100	Introduction to Communication	3	1
COMM 1101	Fundamentals of Public Speaking	3	1
COMM 1111	Interpersonal Communication	3	1
COMM 1121	Small Group Communication	3	1

### Goal 2: CRITICAL THINKING

Met by completing all 40 credits of the Minnesota Transfer Curriculum.

### Goal 3: NATURAL SCIENCES - 2 courses

Select 2 courses from a minimum of 2 departments: 1 must include a laboratory experience (lab courses identified with an \*)

Course #	Course Title	Credits	Goal Area
BIOL 1100*	Survey of Biology	4	3
BIOL 1101*	Introduction to Human Genetics	4	3
BIOL 1102*	Human Biology	4	3
BIOL 1103*	Introduction to Emerging Diseases	4	3, 8
BIOL 1104*	MN Natural History and Field Biology	4	3,10
BIOL 1110	Environmental Biology	3	3,10
BIOL 1120	Introduction to Evolutionary Biology	3	3
BIOL 1125	Sex and Human Diversity	3	3, 7
BIOL 1501*	Principles of Biology 1	5	3
BIOL 1502*	Principles of Biology 2	4	3
BIOL 2041*	Human Anatomy	4	3
BIOL 2042*	Human Physiology	4	3
BIOL 2043*	Microbiology	4	3
BIOL 2044*	Introductory Microbiology	3	3
BIOL 2202*	Animal Diversity	4	3
BIOL 2203*	Botany	4	3
BIOL 2205*	Genetics	4	3

Course #	Course Title	Credits	Goal Area
BIOL 2206*	Ecology	4	3,10
BIOL 2207*	Cell Biology	4	3
BIOL 2208*	Biology of Microorganisms	4	3
CHEM 1000	Real World Chemistry	3	3
CHEM 1001*	Real World Chemistry and Lab	4	3
CHEM 1010*	Environmental Chemistry	4	3,10
CHEM 1020*	Introductory Chemistry	4	3
CHEM 1050*	Foundations of Organic and Biochemistry	3	3
CHEM 1061*	Principles of Chemistry 1	5	3
CHEM 1062*	Principles of Chemistry 2	5	3
CHEM 2061*	Organic Chemistry 1	5	3
CHEM 2062*	Organic Chemistry 2	5	3
GEOG 1101*	Earth's Natural Environments	4	3,10
GEOG 1130	Climate Change: Science, Human Impacts and Adaptations	3	3, 8
GEOG 1172*	Introductory Meteorology	4	3,10
GEOL 1050*	Earth History	4	3, 9
GEOL 1101*	The Dynamic Earth	4	3,10
GEOL 1110	Environmental Geology	3	3,10
GEOL 1110+1111*	Environmental Geology + Environmental Geology Lab	4	3,10
GEOL 1120	Oceanography	3	3,10
GEOL 1130	Climate Change: Science, Human Impacts and Adaptations	3	3, 8
PHYS 1001	Energy, Climate & Physics in Society	3	3, 9
PHYS 1001+1002*	Energy, Climate & Physics in Society + Energy, Climate & Physics in Society Lab	4	3, 9
PHYS 1104	Survey of Astronomy	3	3
PHYS 1110*	College Physics 1	4	3
PHYS 1111*	College Physics 2	4	3
PHYS 1114*	Introductory Astronomy	4	3

Course #	Course Title	Credits	Goal Area
PHYS 1121*	Physics 1 for Scientists and Engineers	5	3
PHYS 1122*	Physics 2 for Scientists and Engineers	5	3
PHYS 1201*	Physics 1 with Biomedical Applications	4	3
PHYS 1202*	Physics 2 with Biomedical Applications	4	3
PHYS 2250	Modern Physics	4	3

**Goal 4: MATHEMATICAL/LOGICAL REASONING**  
**- 1 course**

Course #	Course Title	Credits	Goal Area
CSCI 2011	Discrete Structures of Computer Science	4	4
MATH 1020	Math Trek: Math for Liberal Arts	3	4
MATH 1055	Elements of Mathematics 1	4	4
MATH 1065	Elements of Mathematics 2	4	4
MATH 1080	Introduction to Statistics	4	4
MATH 1090	STATWAY Statistics 2	4	4
MATH 1095	STATWAY Statistics: Accelerated	4	4
MATH 1100	College Algebra	4	4
MATH 1150	Trigonometry	4	4
MATH 1400	Survey of Calculus	4	4
MATH 1500	Pre-Calculus	5	4
MATH 1510	Calculus 1	5	4
MATH 1520	Calculus 2	5	4
MATH 2011	Discrete Structures of Computer Science	4	4
MATH 2080	Statistical Modeling	3	4
MATH 2400	Probability and Statistics with Calculus	4	4
MATH 2510	Calculus 3: Multivariable Calculus	5	4
MATH 2520	Calculus 4: Differential Equations with Linear Algebra	5	4
MATH 2700	Foundations of Mathematics and Logic: Writing Intensive	4	4
PHIL 1102	Logic	3	4

**Goal 5: HISTORY AND SOCIAL/BEHAVIORAL SCIENCES - 2 courses**

Select 2 courses from a minimum of 2 departments

Course #	Course Title	Credits	Goal Area
ANTH 1100	Introduction to Anthropology-What it Means to be Human	3	5, 8
ANTH 1101	Cultural Diversity	3	5, 8
ANTH 1120	Introduction to Women's and Gender Studies	3	5, 9
ANTH 1121	Women Across Cultures	3	5, 8
ANTH 1127	Cultural Anthropology-The Global Human Experience	3	5, 8
ANTH 1145	Introduction to Forensic Anthropology	3	5, 7
ANTH 1148	Seeing Culture Through Film and Fieldwork	3	5, 8
ANTH 1150	Native American Voices	3	5, 7
ANTH 1188	Magic, Witchcraft and Religion: The Anthropology of Religion	3	5, 8
ANTH 1210	Human Evolution-An Introduction to Bio-Anthropology	4	5, 10
ANTH 1230	Archaeology-Prehistory and Humanity's Cultural Origins	4	5, 10
ANTH 1235	Field Archaeology-Methods of Exploring the Past	3	5, 9
ANTH 1236	Archaeology of Minnesota- Prehistoric Native Cultures	3	5, 10
ANTH 1899	Medical Anthropology: Health, Illness and Healing Across Cultures	3	5, 8
COMM 1106	Mass Media	3	5, 9
COMM 1450	Social Media and Digital Communication	3	5
COMM 2111	Family Communication	3	5
ECON 1200	Consumer Economics	3	5, 9
ECON 1400	Survey of Economics	3	5, 9
ECON 2201	Principles of Microeconomics	3	5, 9
ECON 2202	Principles of Macroeconomics	3	5, 8



Course #	Course Title	Credits	Goal Area
GEOG 1050	Maps and Mapping	3	5
GEOG 1102	Human Geography	3	5, 8
GEOG 1104	Resources, Society and Environment	3	5, 10
GEOG 1121	World Regional Geography	3	5, 8
GEOG 1123	Geography of Minnesota	3	5, 10
GEOG 1124	Geography of Latin America	3	5, 8
HIST 1101	History of World Civilizations 1	4	5, 8
HIST 1102	History of World Civilizations 2	4	5, 8
HIST 1111	United States History 1	4	5, 7
HIST 1112	United States History 2	4	5, 7
HIST 1131	Family: Sex/Gender/Power: A Cross-Cultural, Historical Perspective	3	5, 8
HIST 1133	Minnesota History	3	5, 10
HIST 2100	Black History and Civil Rights in the United States	3	5, 7
HIST 2111	Lesbian, Gay, Bisexual, and Transgender U.S. History	3	5, 7
POLS 1130	Introduction to U.S. Politics	3	5, 9
POLS 1132	Introduction to Comparative Politics	3	5, 8
POLS 1133	Middle East Politics	3	5, 8
POLS 1135	Introduction to Political Ideas	3	5, 9
POLS 1150	Introduction to World Politics and Globalization	3	5, 8
POLS 1152	Model United Nations	3	5, 9
POLS 1195	Conflict and Negotiation	3	5, 7
POLS 2250	Constitutional Law	3	5, 9
PSYC 1050	Introduction to Human Development	3	5
PSYC 1100	Psychology in Modern Life	3	5
PSYC 1109	Child and Adolescent Development	3	5
PSYC 1110	Introduction to Psychology	4	5
PSYC 1140	Psychology of Gender	3	5, 7
PSYC 1220	Psychology of Adulthood and Aging	3	5, 7
PSYC 2100	Statistics for the Behavioral Sciences	4	5
PSYC 2200	Abnormal Psychology	3	5, 7
PSYC 2210	Developmental Psychology: Life Span	4	5, 7
PSYC 2300	Psychology of Personality	3	5

Course #	Course title	Credits	Goal Area
PSYC 2400	Psychology of Religion and Spirituality	3	5, 7
PSYC 2500	Biopsychology	3	5
PSYC 2600	Introduction to Social Psychology	3	5, 7
SOC 1100	Modern US Society: Everyday Life in the United States of America	3	5, 7
SOC 1101	Cultural Diversity	3	5, 8
SOC 1102	Love, Sex and Family	3	5, 7
SOC 1104	Introduction to Sociology	3	5, 9
SOC 1106	Social Problems in a Changing World	3	5, 8
SOC 1109	Wealth and Poverty	3	5, 7
SOC 1115	Sociology of Sex and Gender Roles	3	5, 7
SOC 1116	Popular Culture and Media Sociology	3	5, 9
SOC 1120	Introduction to Women's and Gender Studies	3	5, 9
SOC 1121	Women Across Cultures	3	5, 8
SOC 2108	Social Psychology	3	5, 7
SOC 2110	American Minority Relations	3	5, 7
SOC 2112	Criminology	3	5
SOC 2114	Families in Crisis	3	5, 7
SOC 2125	Social Deviance	3	5, 9
WMST 1120	Introduction to Women's and Gender Studies	3	5, 9
WMST 1121	Women Across Cultures	3	5, 8

**Goal 6: HUMANITIES AND FINE ARTS - 2 courses**  
Select 2 courses from a minimum of 2 departments

Course #	Course Title	Credits	Goal Area
ART 1101	The Visual Arts	3	6, 8
ART 1102	Foundation Art History 1	3	6, 8
ART 1103	Foundation Art History 2	3	6, 8
ART 1104	Contemporary Art Survey	3	6, 8
ART 1105	Non-Western Art Survey	3	6, 8
ART 1110	Introduction to Black and White Photography	3	6
ART 1113	Video Art	3	6
ART 1114	Introduction to Digital Photography	3	6
ART 1115	2D Animation and Interactivity	3	6
ART 1116	Introduction to Graphic Design	3	6

Course #	Course Title	Credits	Goal Area
ART 1118	Foundation Two-Dimensional Design	3	6
ART 1120	Foundation Three-Dimensional Design	3	6
ART 1121	Foundation Drawing 1	3	6
ART 1122	Foundation Digital Imaging	3	6
ART 1123	Introduction to Sculpture	3	6
ART 1124	Introduction to Ceramics: Handbuilding	3	6
ART 1125	Glass Fusing 1	3	6
ART 1127	Introduction to Painting	3	6
ART 1128	Watercolor Painting	3	6
ART 1130	Introduction to Ceramics: Wheel Throwing	3	6
ART 1131	Introduction to Printmaking	3	6
ART 1132	Mixed Media	3	6
ART 2201	Figure Drawing	3	6
ART 2203	Advanced Ceramics: Handbuilding	3	6
ART 2204	Foundation Drawing 2	3	6
ART 2206	Glass Fusing 2	3	6
ART 2207	Advanced Photography	3	6
ART 2208	Advanced Painting	3	6
CHIN 1111	Chinese Culture and Civilization	3	6, 8
CHIN 2100	Intermediate Chinese 1	5	6, 8
CHIN 2200	Intermediate Chinese 2	5	6, 8
COMM 1151	Storytelling	3	6
ENGL 1000	Introduction to Literature	3	6
ENGL 1120	Graphic Novels	3	6
ENGL 1130	Literature of Diversity	3	6, 7
ENGL 1140	Gender and Literature	3	6
ENGL 1170	Modern World Literature	3	6, 8
ENGL 1175	Myths and Legends	3	6, 8
ENGL 1186	Introduction to Poetry	3	6
ENGL 1188	Introduction to Short Stories	3	6
ENGL 1189	Introduction to the Novel	3	6
ENGL 2060	Children's and Young Adult Literature	3	6
ENGL 2120	Shakespeare	3	6
ENGL 2125	The Novels of Jane Austen	3	6
ENGL 2127	Sherlock Holmes and the Victorian Age	3	6
ENGL 2130	African-American Literature	3	6, 7

Course #	Course Title	Credits	Goal Area
ENGL 2133	Native American Literature	3	6, 7
ENGL 2150	American Literature 1	4	6, 9
ENGL 2151	American Literature 2	4	6, 9
ENGL 2160	British Writers 1	4	6
ENGL 2161	British Writers 2	4	6
ENGL 2174	African Literature	3	6, 8
ENGW 1111	Introduction to Creative Writing	3	6
ENGW 2112	Poetry Writing	3	6
ENGW 2113	Fiction Writing	3	6
ENGW 2114	Play and Screen Writing	3	6
ENGW 2115	Memoir/Non-Fiction Writing	3	6
FREN 1111	French Culture and Civilization	3	6, 8
FREN 2100	Intermediate French 1	5	6, 8
FREN 2200	Intermediate French 2	5	6, 8
GERM 1111	German Culture and Civilization	3	6, 8
GERM 2100	Intermediate German 1	5	6, 8
GERM 2200	Intermediate German 2	5	6, 8
JAPN 1111	Japanese Culture and Civilization	3	6, 8
JAPN 2100	Intermediate Japanese 1	5	6, 8
JAPN 2200	Intermediate Japanese 2	5	6, 8
MUSC 1120	Fundamentals of Music	3	6
MUSC 1121	Introduction to World Music	3	6, 8
MUSC 1122	Introduction to Music	3	6
MUSC 1123	Jazz History	3	6, 7
MUSC 1124	Rock and Roll History	3	6, 7
MUSC 1131	Music Theory 1	3	6
MUSC 1132	Music Theory 2	3	6
MUSC 2231	Music Theory 3	3	6
MUSC 2232	Music Theory 4	3	6
MUSC 2245	Music History 1	3	6, 8
MUSC 2246	Music History 2	3	6, 8
PHIL 1101	Introduction to Philosophy	3	6
PHIL 1103	Ethics	3	6, 9
PHIL 1105	Philosophy of Religion	3	6, 8
PHIL 1150	Introduction to World Religions	3	6, 8
PHIL 1160	Philosophy of Art	3	6
PHIL 1170	Business Ethics	3	6, 9
PHIL 1180	Biomedical Ethics	3	6, 9
PHIL 1190	Ethics for the Digital Age	3	6, 9
SMLI 1111	Somali Culture and Civilization	3	6, 8
SMLI 2100	Intermediate Somali 1	5	6, 8
SMLI 2200	Intermediate Somali 2	5	6, 8

Course #	Course Title	Credits	Goal Area
SPAN 1111	Spanish Culture and Civilization	3	6, 8
SPAN 2100	Intermediate Spanish 1	5	6, 8
SPAN 2200	Intermediate Spanish 2	5	6, 8
THTR 1111	Introduction to Cinema	3	6, 7
THTR 1116	Introduction to Theatre	3	6
THTR 1117	Introduction to Television and Digital Media	3	6, 7
THTR 1118	Theatre in the Twin Cities	3	6, 7
THTR 1125	Drawing and Rendering	3	6
THTR 1130	Introduction to Stage Costumes	3	6
THTR 1140	Introduction to Stagecraft	3	6
THTR 1145	Introduction to Lighting and Sound	3	6
THTR 1151	Acting 1	3	6
THTR 2020	Basic Design for the Stage	3	6
THTR 2111	World Cinema	3	6, 8
THTR 2150	Script Analysis	3	6
THTR 2151	Acting 2	3	6
THTR 2160	Audition Techniques	3	6
THTR 2520	Stage Management	3	6
THTR 2550	Directing 1	3	6

**Goal 7: HUMAN DIVERSITY - 1 course**

Course #	Course Title	Credits	Goal Area
ANTH 1145	Introduction to Forensic Anthropology	3	5, 7
ANTH 1150	Native American Voices	3	5, 7
BIOL 1125	Sex and Human Diversity	3	3, 7
COMM 1131	Intercultural Communication	3	7, 8
COMM 1141	Nonverbal Communication	3	7
ENGL 1130	Literature of Diversity	3	6, 7
ENGL 2130	African American Literature	3	6, 7
ENGL 2133	Native American Literature	3	6, 7
GEOG 1125	Geography of the US and Canada	3	7, 10
GEOG 1170	Cities	3	7, 9
HIST 1111	United States History 1	4	5, 7
HIST 1112	United States History 2	4	5, 7
HIST 2100	Black History and Civil Rights in the United States	3	5, 7
HIST 2111	Lesbian, Gay, Bisexual, and Transgender U.S. History	3	5, 7

Course #	Course Title	Credits	Goal Area
MUSC 1123	Jazz History	3	6, 7
MUSC 1124	Rock and Roll History	3	6, 7
POLS 1195	Conflict and Negotiation	3	5, 7
PSYC 1108	Psychology of Death and Dying	3	7, 9
PSYC 1140	Psychology of Gender	3	5, 7
PSYC 1220	Psychology of Adulthood and Aging	3	5, 7
PSYC 2200	Abnormal Psychology	3	5, 7
PSYC 2210	Developmental Psychology: Life Span	4	5, 7
PSYC 2400	Psychology of Religion and Spirituality	3	5, 7
PSYC 2600	Introduction to Social Psychology	3	5, 7
SOC 1100	Modern US Society: Everyday Life in the United States of America	3	5, 7
SOC 1102	Love, Sex and Family	3	5, 7
SOC 1103	Social Change in Action and Service Learning	3	7, 9
SOC 1109	Wealth and Poverty	3	5, 7
SOC 1115	Sociology of Sex and Gender Roles	3	5, 7
SOC 2108	Social Psychology	3	5, 7
SOC 2110	American Minority Relations	3	5, 7
SOC 2114	Families in Crisis	3	5, 7
THTR 1111	Introduction to Cinema	3	6, 7
THTR 1117	Introduction to Television and Digital Media	3	6, 7
THTR 1118	Theatre in the Twin Cities	3	6, 7

**Goal 8: HUMAN DIVERSITY - 1 course**

Course #	Course Title	Credits	Goal Area
ANTH 1100	Introduction to Anthropology- What it Means to be Human	3	5, 8
ANTH 1101	Cultural Diversity	3	5, 8
ANTH 1121	Women Across Cultures	3	5, 8
ANTH 1127	Cultural Anthropology-The Global Human Experience	3	5, 8
ANTH 1148	Seeing Culture Through Film and Fieldwork	3	5, 8
ANTH 1188	Magic, Witchcraft and Religion: The Anthropology of Religion	3	5, 8

Course #	Course Title	Credits	Goal Area
ANTH 1899	Medical Anthropology: Health, Illness and Healing Across Cultures	3	5, 8
ART 1101	The Visual Arts	3	6, 8
ART 1102	Foundation Art History 1	3	6, 8
ART 1103	Foundation Art History 2	3	6, 8
ART 1104	Contemporary Art Survey	3	6, 8
ART 1105	Non-Western Art Survey	3	6, 8
BIOL 1103*	Introduction to Emerging Diseases	4	3, 8
CHIN 1100	Beginning Chinese 1	5	8
CHIN 1111	Chinese Culture and Civilization	3	6, 8
CHIN 1200	Beginning Chinese 2	5	8
CHIN 2100	Intermediate Chinese 1	5	6, 8
CHIN 2200	Intermediate Chinese 2	5	6, 8
COMM 1131	Intercultural Communication	3	7, 8
ECON 2202	Principles of Macroeconomics	3	5, 8
ENGL 1170	Modern World Literature	3	6, 8
ENGL 1175	Myths and Legends	3	6, 8
ENGL 2174	African Literature	3	6, 8
FREN 1100	Beginning French 1	5	8
FREN 1111	French Culture and Civilization	3	6, 8
FREN 1200	Beginning French 2	5	8
FREN 2100	Intermediate French 1	5	6, 8
FREN 2200	Intermediate French 2	5	6, 8
GEOG 1102	Human Geography	3	5, 8
GEOG 1121	World Regional Geography	3	5, 8
GEOG 1124	Geography of Latin America	3	5, 8
GEOG 1130	Climate Change: Science, Human Impacts and Adaptations	3	3,8
GEOL 1130	Climate Change: Science, Human Impacts and Adaptations	3	3,8
GERM 1100	Beginning German 1	5	8
GERM 1111	German Culture and Civilization	3	6, 8
GERM 1200	Beginning German 2	5	8
GERM 2100	Intermediate German 1	5	6, 8
GERM 2200	Intermediate German 2	5	6, 8
HIST 1101	History of World Civilizations 1	4	5, 8
HIST 1102	History of World Civilizations 2	4	5, 8

Course #	Course Title	Credits	Goal Area
HIST 1131	Family: Sex/Gender/Power: A Cross-Cultural, Historical Perspective	3	5, 8
JAPN 1100	Beginning Japanese 1	5	8
JAPN 1111	Japanese Culture and Civilization	3	6, 8
JAPN 1200	Beginning Japanese 2	5	8
JAPN 2100	Intermediate Japanese 1	5	6, 8
JAPN 2200	Intermediate Japanese 2	5	6, 8
MUSC 1121	Introduction to World Music	3	6, 8
MUSC 2245	Music History 1	3	6, 8
MUSC 2246	Music History 2	3	6, 8
PHIL 1105	Philosophy of Religion	3	6, 8
PHIL 1150	Introduction to World Religions	3	6, 8
POLS 1132	Introduction to Comparative Politics	3	5, 8
POLS 1133	Middle East Politics	3	5, 8
POLS 1150	Introduction to World Politics and Globalization	3	5, 8
SMLI 1100	Beginning Somali 1	5	8
SMLI 1111	Somali Culture and Civilization	3	6, 8
SMLI 1200	Beginning Somali 2	5	8
SMLI 2100	Intermediate Somali 1	5	6,8
SMLI 2200	Intermediate Somali 2	5	6,8
SOC 1101	Cultural Diversity	3	5, 8
SOC 1106	Social Problems in a Changing World	3	5, 8
SOC 1121	Women Across Cultures	3	5, 8
SPAN 1100	Beginning Spanish 1	5	8
SPAN 1111	Spanish Culture and Civilization	3	6, 8
SPAN 1200	Beginning Spanish 2	5	8
SPAN 2100	Intermediate Spanish 1	5	6, 8
SPAN 2200	Intermediate Spanish 2	5	6, 8
THTR 2111	World Cinema	3	6, 8
WMST 1121	Women Across Cultures	3	5, 8

**Goal 9 ETHICAL AND CIVIC RESPONSIBILITY**  
**- 1 course**

Course #	Course Title	Credits	Goal Area
ANTH 1120	Introduction to Women's and Gender Studies	3	5, 9
ANTH 1235	Field Archaeology-Methods of Exploring the Past	3	5, 9
COMM 1106	Mass Media	3	5, 9
COMM 1113	Strategic Communication: Advertising and Public Relations	3	9

Course #	Course Title	Credits	Goal Area
ECON 1100	Personal Finance	3	9
ECON 1200	Consumer Economics	3	5, 9
ECON 1400	Survey of Economics	3	5, 9
ECON 2201	Principles of Microeconomics	3	5, 9
ENGC 2102	Business and Technical Writing	3	9
ENGL 2150	American Literature 1	4	6, 9
ENGL 2151	American Literature 2	4	6, 9
GEOG 1170	Cities	3	7, 9
GEOL 1050*	Earth History	4	3, 9
INDS 1600	Leadership Development Studies	3	9
PHIL 1103	Ethics	3	6, 9
PHIL 1140	Environmental Ethics	3	9, 10
PHIL 1170	Business Ethics	3	6, 9
PHIL 1180	Biomedical Ethics	3	6, 9
PHIL 1190	Ethics for the Digital Age	3	6, 9
PHYS 1001	Energy, Climate & Physics in Society	3	3, 9
PHYS 1001+1002*	Energy, Climate & Physics in Society + Energy, Climate & Physics in Society Lab	4	3, 9
POLS 1130	Introduction to U.S. Politics	3	5, 9
POLS 1135	Introduction to Political Ideas	3	5, 9
POLS 1152	Model United Nations	3	5, 9
POLS 2250	Constitutional Law	3	5, 9
PSYC 1108	Psychology of Death and Dying	3	7, 9
SOC 1103	Social Change in Action and Service Learning	3	7, 9
SOC 1104	Introduction to Sociology	3	5, 9
SOC 1116	Popular Culture and Media Sociology	3	5, 9
SOC 1120	Introduction to Women's and Gender Studies	3	5, 9
SOC 2125	Social Deviance	3	5, 9
SOC 2130	Introduction to Criminal Justice	3	9
WMST 1120	Introduction to Women's and Gender Studies	3	5, 9

**Goal 10 PEOPLE AND THE ENVIRONMENT**  
**- 1 course**

Course #	Course Title	Credits	Goal Area
ANTH 1210	Human Evolution-An Introduction to Bio-Anthropology	4	5, 10
ANTH 1230	Archaeology-Prehistory and Humanity's Cultural Origins	4	5, 10
ANTH 1236	Archaeology of Minnesota-Prehistoric Native Cultures	3	5, 10
BIOL 1104*	MN Natural History and Field Biology	4	3, 10
BIOL 1110	Environmental Biology	3	3, 10
BIOL 2206*	Ecology	4	3, 10
CHEM 1010*	Environmental Chemistry	4	3, 10
GEOG 1101*	Earth's Natural Environments	4	3, 10
GEOG 1104	Resources, Society and Environment	3	5, 10
GEOG 1123	Geography of Minnesota	3	5, 10
GEOG 1125	Geography of the US and Canada	3	7, 10
GEOG 1172*	Introductory Meteorology	4	3, 10
GEOL 1101*	The Dynamic Earth	4	3, 10
GEOL 1110	Environmental Geology	3	3, 10
GEOL 1110+1111*	Environmental Geology + Environmental Geology Lab	4	3, 10
GEOL 1120	Oceanography	3	3, 10
HIST 1133	Minnesota History	3	5, 10
PHIL 1140	Environmental Ethics	3	9, 10

This degree is intended to satisfy the first two years of a baccalaureate degree program. Transferability of courses from Normandale Community College to other higher education systems in Minnesota is enhanced by transfer agreements that are in place. For assistance in program planning, or to explore additional transfer options, students should schedule a time to meet with an academic advisor or counselor.

### General Education/Minnesota Transfer Curriculum (MnTC) – 40 Credits

- GOAL 1: COMMUNICATION – 2 COURSES**
- ENGC 1101
  - COMM 1100 or 1101 or 1111 or 1121
- GOAL 2: CRITICAL THINKING**  
(Met by completion of all 40 credits of the MnTC)
- GOAL 3: NATURAL SCIENCES – 2 COURSES**  
**Select from two different departments; one must have a lab**
- Course #1 \_\_\_\_\_
  - Course #2 \_\_\_\_\_
- GOAL 4: MATHEMATICAL/LOGICAL REASONING – 1 COURSE**
- Course \_\_\_\_\_
- GOAL 5: HISTORY AND SOCIAL/BEHAVIORAL SCIENCES – 2 COURSES**  
**Select from two different departments**
- Course #1 \_\_\_\_\_
  - Course #2 \_\_\_\_\_
- GOAL 6: HUMANITIES AND FINE ARTS – 2 COURSES**  
**Select from two different departments**
- Course #1 \_\_\_\_\_
  - Course #2 \_\_\_\_\_
- GOAL 7: HUMAN DIVERSITY – 1 COURSE**
- Course \_\_\_\_\_
- GOAL 8: GLOBAL PERSPECTIVE – 1 COURSE**
- Course \_\_\_\_\_
- GOAL 9: ETHICAL AND CIVIC RESPONSIBILITY – 1 COURSE**
- Course \_\_\_\_\_
- GOAL 10: PEOPLE AND THE ENVIRONMENT – 1 COURSE**
- Course \_\_\_\_\_

### Additional Course Requirements – 20 Credits

- One Health (HLTH) course.
- One Exercise Science (EXSC) course.
- Elective credits – additional course(s) numbered 1000 and above, if needed to complete the 60-credit requirement.

### Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum cumulative grade point average (GPA) of 2.0 in the MnTC.
- Earn a minimum of 15 college-level credits at Normandale.

Associate of Arts in Liberal Education (AA)		
needs placement into college level for ENGC 1101		
<i>Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.</i>		
1st year	Fall Semester	Spring Semester
	ENGC 1101 .....4cr	MNTC Goal 4 .....3cr
	MNTC Goal 1 COMM .....3cr	*MNTC Goal 5 .....3cr
	*MNTC Goal 3 with lab .....4cr	*MNTC Goal 6 .....3cr
	*MNTC Goal 5 .....3cr	HLTH elective .....3cr
	EXSC elective .....1cr	Elective .....3cr
<b>TOTAL .....15cr</b>	<b>TOTAL .....15cr</b>	
2nd year	Fall Semester	Spring Semester
	*MNTC Goal 3 .....3cr	MNTC Goal 8 .....3cr
	*MNTC Goal 6 .....3cr	MNTC Goal 10 .....3cr
	MNTC Goal 7 .....3cr	Elective .....3cr
	MNTC Goal 9 .....3cr	Elective .....3cr
	Elective .....3cr	Elective .....3cr
<b>TOTAL .....15cr</b>	<b>TOTAL .....15cr</b>	
<i>*For MNTC Goal areas that require 2 courses, they must come from 2 different departments</i>		

The Accounting Transfer Pathway AS 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.

Students transferring to non-system universities are advised to consult with their intended transfer institution to determine transferability of the courses in this curriculum.

### Core Courses – 30 Credits

<input type="checkbox"/>	ACCT 1052	Computerized Accounting	2 cr
<input type="checkbox"/>	ACCT 2251	Financial Accounting	4 cr
<input type="checkbox"/>	ACCT 2252	Managerial Accounting	4 cr
<input type="checkbox"/>	ACCT 2254	Introduction to Management Information Systems	4 cr
<input type="checkbox"/>	ACCT 2853	Federal Individual Income Tax	4 cr
<input type="checkbox"/>	BUSN 1201	Information Technology Concepts and Business Software 1	3 cr
<input type="checkbox"/>	BUSN 2155	Legal Environment of Business	3 cr
<input type="checkbox"/>	BUSN 2300	Principles of Management	3 cr
<input type="checkbox"/>	BUSN 2400	Principles of Marketing	3 cr

### Additional Required Courses – 30 Credits

<input type="checkbox"/>	ENGC 1101	College Writing	4 cr
<input type="checkbox"/>	MATH 1100	College Algebra <i>or any higher numbered MATH course for which MATH 1100 is a prerequisite</i>	4 cr
<input type="checkbox"/>	ECON 2201	Principles of Microeconomics	3 cr
<input type="checkbox"/>	ECON 2202	Principles of Macroeconomics	3 cr

Complete **one** of the following three courses:

<input type="checkbox"/>	COMM 1101	Fundamentals of Public Speaking	3 cr
<input type="checkbox"/>	COMM 1111	Interpersonal Communication	3 cr
<input type="checkbox"/>	COMM 1121	Small Group Communication	3 cr

Complete **one** of the following three courses:

<input type="checkbox"/>	MATH 1080	Introduction to Statistics	4 cr
<input type="checkbox"/>	MATH 1090	STATWAY Statistics 2	4 cr
<input type="checkbox"/>	MATH 1095	STATWAY Statistics: Accelerated	4 cr

One course from MnTC Goal 3 (with traditional lab) 4 cr

Complete additional MnTC courses to reach 30 credits 5 cr

### Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum of 15 college-level credits at Normandale.

*Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report.*

*Following degree completion, successful transfer to Minnesota State universities includes meeting the admission requirements for those individual universities and their related academic program.*

Accounting Transfer Pathway (AS)			
needs placement into college level for ENGC 1101 and MATH 1100 <i>Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.</i>			
1st year	Fall Semester	Spring Semester	
	ACCT 2251 .....4cr	ACCT 2252 .....4cr	
	MATH 1100 .....4cr	BUSN 1201 .....3cr	
	ENGC 1101 .....4cr	ECON 2202 .....3cr	
	ECON 2201 .....3cr	MnTC electives .....5cr	
<b>TOTAL .....15 cr</b>	<b>TOTAL .....15 cr</b>		
2nd year	Fall Semester	Spring Semester	
	ACCT 2254 .....4cr	ACCT 1052 .....2cr	
	MnTC Goal 3 with lab .....4cr	ACCT 2853 .....4cr	
	MATH 1080 .....4cr	BUSN 2155 .....3cr	
	BUSN 2300 .....3cr	BUSN 2400 .....3cr	
	<b>TOTAL .....15 cr</b>	COMM 1101, 1111, or 1121 .....3cr	
	<b>TOTAL .....15 cr</b>		

The Accounting Certificate is designed for working adults who need to acquire additional technical accounting skills. The Accounting Certificate offers core accounting courses that prepare students for entry-level accounting jobs.

The Financial Accounting course emphasizes recording business transactions and providing reports to users. The Managerial Accounting course deals with gathering vital information for managers to use in operating the business. Federal Individual Income Tax trains students to prepare a basic tax return. The Computerized Accounting and Information Technology Concepts/Business Software I courses provide experience with industry software that streamlines the accounting process.

**Required Courses – 17 Credits**

<input type="checkbox"/> ACCT 1052	Computerized Accounting	2 cr
<input type="checkbox"/> ACCT 2251	Financial Accounting	4 cr
<input type="checkbox"/> ACCT 2252	Managerial Accounting	4 cr
<input type="checkbox"/> ACCT 2853	Federal Individual Income Tax	4 cr
<input type="checkbox"/> BUSN/CIM 1201	Information Technology Concepts and Business Software 1	3 cr

**Other Certificate Requirements**

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn at least one third of the required certificate credits from Normandale.

The Anthropology Department explores human nature and culture very broadly and comparatively. Our courses foster a bio-cultural understanding of humans from materially simple to complex cultures from the distant past to the present. The Associate of Arts degree with Emphasis in Anthropology provides a solid foundation for an undergraduate major or for study in related disciplines as well as powerful tools for making one's way in a changing world.

### Required Courses

Incorporate the following Required Courses into the General Education/Minnesota Transfer Curriculum or Additional Course Requirements sections below.

- ANTH 1127 Cultural Anthropology - The Global Human Experience 3 cr
- ANTH 1210 Human Evolution - An Introduction to Bio-Anthropology 4 cr
- ANTH 1230 Archaeology - Prehistory and Humanity's Cultural Origins 4 cr
  
- Complete at least **one** of the following nine courses:
- ANTH/SOC 1101 Cultural Diversity 3 cr
- ANTH/SOC/WMST 1121 Women Across Cultures 3 cr
- ANTH 1145 Introduction to Forensic Anthropology 3 cr
- ANTH 1148 Seeing Culture Through Film and Fieldwork 3 cr
- ANTH 1150 Native American Voices 3 cr
- ANTH 1188 Magic, Witchcraft and Religion: The Anthropology of Religion 3 cr
- ANTH 1235 Field Archeology - Methods of Exploring the Past 3 cr
- ANTH 1236 Archaeology of Minnesota - Prehistoric Native Cultures 3 cr
- ANTH 1899 Medical Anthropology: Health, Illness and Healing Across Cultures 3 cr

### General Education/Minnesota Transfer Curriculum (MnTC) – 40 Credits

\*See MnTC Curriculum for specific course options

- GOAL 1: COMMUNICATION – 2 COURSES
  - ENGC 1101
  - COMM 1100 or 1101 or 1111 or 1121
  
- GOAL 2: CRITICAL THINKING  
(met by completion of all 40 credits of the MnTC)
  
- GOAL 3: NATURAL SCIENCES – 2 COURSES  
**Select from two different departments; one must include a lab**
  - Course #1 \_\_\_\_\_
  - Course #2 \_\_\_\_\_
  
- GOAL 4: MATHEMATICAL/LOGICAL REASONING – 1 COURSE
  - Course \_\_\_\_\_
  
- GOAL 5: HISTORY AND SOCIAL/BEHAVIORAL SCIENCES – 2 COURSES  
**Select from two different departments**
  - Course #1 met by required ANTH courses
  - Course #2 \_\_\_\_\_

GOAL 6: HUMANITIES AND FINE ARTS- 2 COURSES

**Select from two different departments**

- Course #1 \_\_\_\_\_
- Course #2 \_\_\_\_\_

GOAL 7: HUMAN DIVERSITY – 1 COURSE

- Course \_\_\_\_\_  
(can be met by taking ANTH 1145 or 1150)

GOAL 8: GLOBAL PERSPECTIVE – 1 COURSE

- Course met by taking required ANTH courses

GOAL 9: ETHICAL AND CIVIC RESPONSIBILITY – 1 COURSE

- Course \_\_\_\_\_  
(can be met by taking ANTH 1235)

GOAL 10: PEOPLE AND THE ENVIRONMENT – 1 COURSE

- Course met by taking required ANTH courses

### Additional Course Requirements – 20 Credits

- One Health (HLTH) course.
- One Exercise Science (EXSC) course.
- Elective credits – additional course(s) numbered 1000 and above, if needed to complete the 60 credit requirement.

### Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum cumulative grade point average (GPA) of 2.0 in the MnTC.
- Earn a minimum of 15 college-level credits at Normandale.

Anthropology Emphasis (AA)		
needs placement into college level for ENGC 1101 <i>Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.</i>		
	Fall Semester	Spring Semester
1st year	ENGC 1101 .....4cr ANTH 1127 (G5+8) .....3cr MNTC Goal 1 COMM .....3cr *MNTC Goal 3 with lab .....4cr EXSC elective .....1cr <b>TOTAL ..... 15cr</b>	ANTH 1210 (G5+10) .....3cr MNTC Goal 4 .....3cr *MNTC Goal 6 .....3cr MNTC Goal 5 (non ANTH).....3cr HLTH elective.....3cr <b>TOTAL ..... 15cr</b>
	Fall Semester	Spring Semester
2nd year	ANTH 1230 (G5+10) .....3cr *MNTC Goal 3 .....3cr *MNTC Goal 6 .....3cr MNTC Goal 7 .....3cr MNTC Goal 9 .....3cr <b>TOTAL ..... 15cr</b>	ANTH (see catalog, "Required Courses" for choices) .....3cr Electives .....3cr Electives .....3cr Electives .....3cr Electives .....3cr <b>TOTAL ..... 15cr</b>
<i>*For MNTC Goal areas that require 2 courses, they must come from 2 different departments</i>		

Archaeology explores the vanished cultures of the past through recovery and scientific analysis of physical evidence found at ancient sites. Our courses foster a bio-cultural understanding of societies, from materially simple to complex cultures and from the distant past to historical times. The Certificate in Field Archaeology provides a solid foundation in archaeology and it introduces the tools and hands-on skills for participation in field research and cultural resource management.

**Required Courses – 18 Credits**

<input type="checkbox"/>	ANTH 1100	Introduction to Anthropology - What it Means to be Human	4 cr
<input type="checkbox"/>	ANTH 1230	Archaeology - Prehistory and Humanity's Cultural Origins	4 cr
<input type="checkbox"/>	ANTH 1235	Field Archeology - Methods of Exploring the Past	3 cr
<input type="checkbox"/>	ANTH 1236	Archaeology of Minnesota - Prehistoric Native Cultures	3 cr

**Other Certificate Requirements**

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn at least one third of the required certificate credits from Normandale.

Complete **one** of the following three courses:

<input type="checkbox"/>	GEOL 1110/ 1111	Environmental Geology And Laboratory	3 cr 1 cr
<input type="checkbox"/>	GEOL 1101	The Dynamic Earth	4 cr
<input type="checkbox"/>	GEOG 1101	Earth's Natural Environments	4 cr

*Note: GEOL 1110 must be taken with its lab GEOL 1111 for a total of 4 credits.*

Archaeology explores the vanished cultures of the past through recovery and scientific analysis of physical evidence found at ancient sites. Our courses foster a bio-cultural understanding of societies; from the materially simple to complex cultures, and from the distant past to historic times.

The Associate of Arts with Emphasis in Archaeology provides a solid foundation for an undergraduate major or for study in related disciplines, and it introduces tools and hands-on skills for participating in field research and cultural resource management.

### Required Courses

*Incorporate the following Required Courses into the General Education/Minnesota Transfer Curriculum or Additional*

Course Requirements sections below.

- ANTH 1100 Introduction to Anthropology -What it Means to be Human 4 cr
- ANTH 1230 Archaeology - Prehistory and Humanity's Cultural Origins 4 cr
- ANTH 1235 Field Archeology - Methods of Exploring the Past 3 cr
- ANTH 1236 Archaeology of Minnesota - Prehistoric Native Cultures 3 cr

Complete **one** of the following three courses:

- GEOL 1110/ Environmental Geology 3 cr
- 1111 And Laboratory 1 cr
- GEOL 1101 The Dynamic Earth 4 cr
- GEOG 1101 Earth's Natural Environments 4 cr

*Note: GEOL 1110 must be taken with its lab GEOL 1111 for a total of 4 credits.*

### General Education/Minnesota Transfer Curriculum (MnTC) – 40 Credits

\*See MnTC Curriculum for specific course options

- GOAL 1: COMMUNICATION – 2 COURSES
  - ENGC 1101
  - COMM 1100 or 1101 or 1111 or 1121
- GOAL 2: CRITICAL THINKING  
(met by completion of all 40 credits of the MnTC)
- GOAL 3: NATURAL SCIENCES – 2 COURSES  
**Select from two different departments; one must include a lab**
  - Course #1 met by taking required GEOL or GEOG course
  - Course #2 \_\_\_\_\_
- GOAL 4: MATHEMATICAL/LOGICAL REASONING - 1 COURSE
  - Course \_\_\_\_\_
- GOAL 5: HISTORY AND SOCIAL/BEHAVIORAL SCIENCES - 2 COURSES  
**Select from two different departments**
  - Course #1 met by taking required ANTH courses
  - Course #2 \_\_\_\_\_
- GOAL 6: HUMANITIES AND FINE ARTS - 2 COURSES  
**Select from two different departments**
  - Course #1 \_\_\_\_\_
  - Course #2 \_\_\_\_\_

- GOAL 7: HUMAN DIVERSITY – 1 COURSE  
Course met by taking required ANTH courses
- GOAL 8: GLOBAL PERSPECTIVE – 1 COURSE
  - Course \_\_\_\_\_
  - (can be met by taking ANTH 1127)
- GOAL 9: ETHICAL AND CIVIC RESPONSIBILITY – 1 COURSE
  - Course met by taking required ANTH courses
- GOAL 10: PEOPLE AND THE ENVIRONMENT – 1 COURSE
  - Course met by taking required ANTH courses

### Additional Course Requirements – 20 Credits

- One Health (HLTH) course.
- One Exercise Science (EXSC) course.
- Elective credits – additional course(s) numbered 1000 and above, if needed to complete the 60-credit requirement.

### Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum cumulative grade point average (GPA) of 2.0 in the MnTC.
- Earn a minimum of 15 college-level credits at Normandale.

Archaeology Emphasis (AA)		
needs placement into college level for ENGC 1101 <i>Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.</i>		
1st year	Fall Semester	Spring Semester
	ENGC 1101 .....4cr ANTH 1100 .....4cr MNTC Goal 1 COMM .....3cr GEOL 1110+1111, GEOL 1101, or GEOG 1101 .....4cr EXSC elective .....1cr <b>TOTAL ..... 16cr</b>	ANTH 1230 .....3cr MNTC Goal 4 .....3cr *MNTC Goal 6 .....3cr MNTC Goal 5 (non ANTH).....3cr HLTH elective.....3cr <b>TOTAL ..... 15cr</b>
2nd year	Fall Semester	Spring Semester
	ANTH 1235 .....3cr *MNTC Goal 3 .....3cr *MNTC Goal 6 .....3cr MNTC Goal 7 .....3cr MNTC elective .....3cr <b>TOTAL ..... 15cr</b>	ANTH 1236 .....3cr Elective .....3cr Elective .....3cr Elective .....3cr Elective .....2cr <b>TOTAL ..... 14cr</b>
<i>*For MNTC Goal areas that require 2 courses, they must come from 2 different departments</i>		

The Art Transfer Pathway AFA (Associate of Fine Arts in Art) is a pre-professional degree intended for students transferring to a four-year program or those with a strong interest in visual art. The AFA in Art is designed to encourage students to focus their coursework to achieve an associate degree that distinguishes their accomplishments in art.

The Art Transfer Pathway AFA offers students a powerful option: the opportunity to complete an Associate of Fine Arts degree with course credits that directly transfer to designated art 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.

### Core Courses – 40 Credits

<input type="checkbox"/>	ART 1102	Foundation Art History 1	3 cr
<input type="checkbox"/>	ART 1103	Foundation Art History 2	3 cr
<input type="checkbox"/>	ART 1121	Foundation Drawing 1	3 cr
<input type="checkbox"/>	ART 1118	Foundation Two-Dimensional Design	3 cr
<input type="checkbox"/>	ART 1120	Foundation Three-Dimensional Design	3 cr
<input type="checkbox"/>	ART 1122	Foundation Digital Imaging	3 cr
<input type="checkbox"/>	ART 2200	AFA in Art Capstone: Portfolio and Professional Practices	3 cr
<input type="checkbox"/>	ART 2210	AFA in Art Capstone: Exhibition	1 cr

*ART 2200: Complete ART 2200 Portfolio and Professional Practices (grade C or higher) after completing ART 1121, ART 1118, ART 1122.*

*ART 2210: Complete ART 2210 AFA in Art Capstone: Exhibition (grade C or higher) after completing ART 2200 and 10 or fewer ART credits remaining to complete degree.*

Complete **four** courses, including a minimum of one course from each of the following categories:

#### Two-dimensional courses:

<input type="checkbox"/>	ART 1110	Introduction to Film Photography	3 cr
<input type="checkbox"/>	ART 1114	Introduction to Digital Photography	3 cr
<input type="checkbox"/>	ART 1116	Introduction to Graphic Design	3 cr
<input type="checkbox"/>	ART 1127	Introduction to Painting	3 cr
<input type="checkbox"/>	ART 2204	Foundation Drawing 2	3 cr

#### Three-dimensional courses:

<input type="checkbox"/>	ART 1123	Introduction to Sculpture	3 cr
<input type="checkbox"/>	ART 1124	Introduction to Ceramics: Handbuilding	3 cr
<input type="checkbox"/>	ART 1130	Introduction to Ceramics: Wheel Throwing	3 cr

Complete remaining required electives (**6 credits**) from above (two-dimensional or three-dimensional) or from the following:

<input type="checkbox"/>	ART 1113	Video Art	3 cr
<input type="checkbox"/>	ART 1115	2D Animation and Interactivity	3 cr
<input type="checkbox"/>	ART 1125	Glass Fusing 1	3 cr
<input type="checkbox"/>	ART 1128	Watercolor Painting	3 cr
<input type="checkbox"/>	ART 1132	Mixed Media	3 cr
<input type="checkbox"/>	ART 2201	Figure Drawing	3 cr
<input type="checkbox"/>	ART 2206	Glass Fusing 2	3 cr
<input type="checkbox"/>	ART 2207	Advanced Photography	3 cr
<input type="checkbox"/>	ART 2208	Advanced Painting	3 cr

### Additional Course Requirements – 20 Credits

<input type="checkbox"/>	ENGC 1101	College Writing	4 cr
--------------------------	-----------	-----------------	------

Complete **one** of the following courses:

<input type="checkbox"/>	COMM 1100	Introduction to Communication	3 cr
<input type="checkbox"/>	COMM 1101	Fundamentals of Public Speaking	3 cr
<input type="checkbox"/>	COMM 1111	Interpersonal Communication	3 cr
<input type="checkbox"/>	COMM 1121	Small Group Communication	3 cr

Complete a minimum of 13 credits from three of the following MnTC Goal Areas: 3, 5, 7, 9, or 10.

### Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum cumulative grade point average (GPA) of 3.0 in ART courses.
- Earn a minimum of 15 college-level credits at Normandale.

*Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report.*

Art Transfer Pathway (AFA)				
needs placement into college level for ENGC 1101				
<i>Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.</i>				
	Fall Semester		Spring Semester	
1st year	ART 1102	3cr	ART 1103	3cr
	*ART 1118	3cr	ART 1120	3cr
	ART 1121	3cr	ART 1122	3cr
	ENGC 1101	4cr	*ART (2D)	3cr
	MnTC Goal 1 COMM	3cr	MnTC Goal 3, 5, 7, 9 or 10	4cr
	<b>TOTAL</b>	<b>16cr</b>	<b>TOTAL</b>	<b>16cr</b>
		Fall Semester		Spring Semester
2nd year	ART 2200	3cr	ART 2210	1cr
	*ART (3D)	3cr	*ART (2D or 3D)	3cr
	*ART (2D or 3D)	3cr	*ART elective	3cr
	MnTC Goal 3, 5, 7, 9 or 10	3cr	*ART elective	3cr
	MnTC Goal 3, 5, 7, 9 or 10	3cr	MnTC Goal 3, 5, 7, 9 or 10	3cr
	<b>TOTAL</b>	<b>15cr</b>	<b>TOTAL</b>	<b>13cr</b>
	<i>*See catalog for course choices</i>			

The Associate of Arts (AA) with Emphasis in Art is a liberal education degree with a concentration in visual art courses. It is intended for transfer to a BA four-year program. Students seeking an Associate of Arts (AA) degree with Emphasis in Art must successfully complete the AA requirements and the specific Art Emphasis requirements. This degree is designed for students who seek a general liberal arts degree with an art emphasis. The degree provides a sound art history and art studio foundation and satisfies the complete MnTC.

### Required Courses

Incorporate the following Required Courses into the General Education/Minnesota Transfer Curriculum or Additional Course Requirements sections below.

- ART 1102 Foundation Art History 1 3 cr
- ART 1103 Foundation Art History 2 3 cr
- ART 1118 Foundation Two-Dimensional Design 3 cr
- ART 1120 Foundation Three-Dimensional Design 3 cr
- ART 1121 Foundation Drawing 1 3 cr

Complete at least 2 additional art courses for 6 credits total, excluding ART 1101 The Visual Arts:

- Course #1 \_\_\_\_\_
- Course #1 \_\_\_\_\_

### General Education/Minnesota Transfer Curriculum (MnTC) – 40 Credits

\*See MnTC course listings.

GOAL 1: COMMUNICATION – 2 COURSES

- ENGC 1101
- COMM 1100 or 1101 or 1111 or 1121

GOAL 2: CRITICAL THINKING

(met by completion of all 40 credits of the MnTC)

GOAL 3: NATURAL SCIENCES – 2 COURSES

**Select from two different departments; one must include a lab**

- Course #1 \_\_\_\_\_
- Course #2 \_\_\_\_\_

GOAL 4: MATHEMATICAL/LOGICAL REASONING - 1 COURSE

- Course \_\_\_\_\_

GOAL 5: HISTORY AND SOCIAL/BEHAVIORAL SCIENCES - 2 COURSES

**Select from two different departments**

- Course #1 \_\_\_\_\_
- Course #2 \_\_\_\_\_

GOAL 6: HUMANITIES AND FINE ARTS- 2 COURSES

**Select from two different departments**

- Course #1 met by taking required ART courses
- Course #2 \_\_\_\_\_

GOAL 7: HUMAN DIVERSITY – 1 COURSE

- Course \_\_\_\_\_

GOAL 8: GLOBAL PERSPECTIVE – 1 COURSE

- Course met by taking required ART courses

GOAL 9: ETHICAL AND CIVIC RESPONSIBILITY – 1 COURSE

- Course \_\_\_\_\_

GOAL 10: PEOPLE AND THE ENVIRONMENT – 1 COURSE

- Course \_\_\_\_\_

### Additional Course Requirements – 20 Credits

- One Health (HLTH) course.
- One Exercise Science (EXSC) course.
- Elective credits – additional course(s) numbered 1000 and above, if needed to complete the 60-credit requirement.

### Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum cumulative grade point average (GPA) of 2.0 in the MnTC.

Art Emphasis (AA)		
needs placement into college level for ENGC 1101		
<i>Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.</i>		
	Fall Semester	Spring Semester
1st year	ENGC 1101 .....4cr	ART 1103 .....3cr
	ART 1102 (G6+8) .....3cr	ART 1120 .....3cr
	ART 1118 .....3cr	ART 1121 .....3cr
	MnTC Goal 1 COMM .....3cr	*MnTC Goal 5 .....3cr
	*MnTC Goal 3 .....3cr	HLTH elective .....3cr
	<b>TOTAL .....16cr</b>	<b>TOTAL .....15cr</b>
	Fall Semester	Spring Semester
2nd year	ART elective (not ART 1101) .3cr	ART elective (not ART 1101)....3cr
	MnTC Goal 4 .....3cr	*MnTC Goal 3 with lab .....4cr
	*MnTC Goal 5 .....3cr	MnTC Goal 9 .....3cr
	*MnTC Goal 6 (non ART) .....3cr	MnTC Goal 10 .....3cr
	MnTC Goal 7 .....3cr	EXSC elective .....1cr
	<b>TOTAL .....15cr</b>	<b>TOTAL .....14cr</b>
<i>*For MnTC Goal areas that require 2 courses, they must come from 2 different departments</i>		

The Biology Transfer Pathway AS offers students a powerful option: the opportunity to complete an Associate of Science degree with course credits that directly transfer to designated biology 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

### Core Courses – 17 Credits

Each of the following courses must be completed with a grade of C or higher:

- BIOL 1501 Principles of Biology 1 5 cr
- BIOL 1502 Principles of Biology 2 4 cr
- BIOL 2205 Genetics 4 cr

Complete **one** of the following three courses:

- BIOL 2206 Ecology 4 cr
- BIOL 2207 Cell Biology 4 cr
- BIOL 2208 Biology of Microorganisms 4 cr

### Additional Required Courses – 43 Credits

- ENGC 1101 College Writing 4 cr
- CHEM 1061 Principles of Chemistry 1 5 cr
- CHEM 1062 Principles of Chemistry 2 5 cr

Complete **one** of the following two courses:

- COMM 1101 Fundamentals of Public Speaking 3 cr
- COMM 1111 Interpersonal Communication 3 cr

Complete **two** of the following four (or higher level) courses depending on specific major track and transfer university:

- MATH 1100 College Algebra 4 cr
- MATH 1150 Trigonometry 4 cr
- MATH 1500 Pre-Calculus 5 cr
- MATH 1510 Calculus 1 5 cr

Complete one course from MnTC Goal 5 3-4 cr

Complete one course from MnTC Goal 6 3-5 cr

Complete one course from MnTC Goal 7, 8, 9 or 10 3-5 cr

*With careful planning, courses used to satisfy Goals 5 and 6 may also be counted for Goals 7, 8, 9 or 10.*

Complete additional courses to reach 60 credits total.

### Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum of 15 college-level credits at Normandale.

*Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report.*

Biology Transfer Pathway (AS)		
needs placement into college level for ENGC 1101 and MATH 1100		
<i>Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.</i>		
1st year	Fall Semester	Spring Semester
	ENGC 1101 .....4cr	BIOL 1502 .....4cr
	BIOL 1501 .....5cr	MATH 1150, 1500 or 1510 ..4-5cr
	MATH 1100, 1150 or 1500 (depending on placement) ...4-5cr	CHEM 1061 .....5cr
	TOTAL .....13-14cr	COMM 1101 or 1111 .....3cr
	TOTAL .....16-17cr	
2nd year	Fall Semester	Spring Semester
	*BIOL 2206 or 2208 (or 2207-Spring only course) .....4cr	BIOL 2205 .....4cr
	CHEM 1062 .....5cr	MnTC GOAL 7, 8, 9 or 10 .....3cr
	MnTC GOAL 5 .....3cr	Elective .....3cr
	MnTC GOAL 6 .....3cr	Elective .....3cr
TOTAL .....15cr	Elective .....1-3cr	
	TOTAL .....14-16cr	
<i>*Pick one from BIOL 2206, 2207 or 2208. If needed complete additional courses to reach 60 credits.</i>		

The Business: Marketing and Management AAS Degree is designed for individuals who wish to seek employment after graduation or who want to enhance their advancement opportunities with their current employers. The program offers a combination of general education and business classes that provide students with critical thinking and technical business skills. These skills are appropriate for positions in management, supervision, marketing, sales or small business management.

Normandale business programs are nationally accredited by the Accreditation Council for Business Schools and Programs (ACBSP). The Higher Learning Commission has extended Normandale's accreditation to include the online delivery of the Associate of Applied Science in Business: Marketing and Management.

### Core Courses – 40 Credits

Complete **one** of the following two courses:

- ACCT 2251 Financial Accounting 4 cr
- ACCT 2252 Managerial Accounting 4 cr

Complete the following **five** courses:

- BUSN 1201/ CIM 1201 Information Technology Concepts and Business Software 1 3 cr
- BUSN 2096 Internship in Business 2-4 cr
- BUSN 2155 Legal Environment of Business 3 cr
- BUSN 2300 Principles of Management 3 cr
- BUSN 2400 Principles of Marketing 3 cr

Complete 20-22 credits of additional BUSN courses to reach 40 credits of required coursework.

- BUSN \_\_\_\_\_

*Note: The department recommends that students complete courses which, when combined with the required courses above, lead to the achievement of a marketable business certificate.*

### Additional Required Courses – 20 Credits

- ENGC 1101 College Writing 4 cr
- ENGC 2102 Business and Technical Writing 3 cr

Complete **one** of the following three courses:

- COMM 1101 Fundamentals of Public Speaking 3 cr
- COMM 1111 Interpersonal Communication 3 cr
- COMM 1121 Small Group Communication 3 cr

Complete **one** of the following two courses:

- ECON 2201 Principles of Microeconomics 3 cr
- ECON 2202 Principles of Macroeconomics 3 cr

- Complete 7 credits of additional MNTC courses to reach 20 credits 7 cr

### Other Degree Requirements

- If needed, complete additional courses to reach 60 credits total.
- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum of 15 college-level credits at Normandale.

*Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report.*

Business: Marketing & Management (AAS)		
needs placement into college level for ENGC 1101		
<i>Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.</i>		
1st year	Fall Semester	Spring Semester
	ENGC 1101 .....4cr MNTC Goal 1 COMM.....3cr BUSN 2400..... 3cr BUSN 1201.....3cr BUSN elective ..... 3cr <b>TOTAL ..... 16cr</b>	ACCT 2251.....4cr ECON 2201 or 2202.....3cr BUSN 2300.....3cr MNTC elective.....4cr <b>TOTAL ..... 14cr</b>
2nd year	Fall Semester	Spring Semester
	BUSN 2155 .....3cr ENGC 2102.....3cr BUSN elective.....3cr BUSN elective .....3cr MNTC elective.....3cr <b>TOTAL ..... 15cr</b>	BUSN 2096.....3cr BUSN elective .....3cr BUSN elective .....3cr BUSN elective .....3cr BUSN elective .....3cr <b>TOTAL ..... 15cr</b>

The Business Transfer Pathway AS 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.

The Higher Learning Commission has extended Normandale's accreditation to include online delivery of the Associate of Science in Business. Normandale's Business programs are nationally accredited by the Accreditation Council for Business Schools and Programs (ACBSP).

### Core Courses – 28-30 Credits

<input type="checkbox"/> ACCT 2251	Financial Accounting	4 cr
<input type="checkbox"/> ACCT 2252	Managerial Accounting	4 cr
<input type="checkbox"/> BUSN 1201	Information Technology Concepts and Business Software 1	3 cr
<input type="checkbox"/> BUSN 2155	Legal Environment of Business	3 cr
<input type="checkbox"/> BUSN 2300	Principles of Management	3 cr
<input type="checkbox"/> BUSN 2400	Principles of Marketing	3 cr

Complete any **three** additional BUSN courses for 8-10 credits.

- BUSN \_\_\_\_\_
- BUSN \_\_\_\_\_
- BUSN \_\_\_\_\_

*The department recommends that students complete courses which, when combined with the required courses above, lead to the achievement of a marketable business certificate. Students may choose from the following certificates:*

#### Human Resources Management

<input type="checkbox"/> BUSN 1145	Supervision	3 cr
<input type="checkbox"/> BUSN 2100	Human Relations and Effective Teams	3 cr
<input type="checkbox"/> BUSN 2200	Human Resource Management	3 cr

#### Management

<input type="checkbox"/> BUSN 1145	Supervision	3 cr
<input type="checkbox"/> BUSN 1210	Exceptional Customer Service	3 cr
<input type="checkbox"/> BUSN 2100	Human Relations and Effective Teams	3 cr

#### Marketing

<input type="checkbox"/> BUSN 1102	Social Media Marketing	3 cr
<input type="checkbox"/> BUSN 1210	Exceptional Customer Service	3 cr
<input type="checkbox"/> BUSN 2252	Professional Selling	3 cr

#### Small Business Management:

<input type="checkbox"/> BUSN 1125	Entrepreneurship	3 cr
<input type="checkbox"/> BUSN 1220/	Business Problem Solving	3 cr
CIM 1220	Analyzing - Excel	
<input type="checkbox"/> BUSN 2310	Small Business Management	3 cr

### Additional Required Courses – 30-32 Credits

<input type="checkbox"/> ENGC 1101	College Writing	4 cr
<input type="checkbox"/> ECON 2201	Principles of Microeconomics	3 cr
<input type="checkbox"/> ECON 2202	Principles of Macroeconomics	3 cr

Complete **one** of the following three courses:

<input type="checkbox"/> COMM 1101	Fundamentals of Public Speaking	3 cr
<input type="checkbox"/> COMM 1111	Interpersonal Communication	3 cr
<input type="checkbox"/> COMM 1121	Small Group Communication	3 cr

<input type="checkbox"/> MATH 1100	College Algebra	4 cr
<i>Or any higher numbered MATH course for which MATH 1100 is a prerequisite</i>		

Complete **one** of the following three courses:

<input type="checkbox"/> MATH 1080	Introduction to Statistics	4 cr
<input type="checkbox"/> MATH 1090	STATWAY Statistics 2	4 cr
<input type="checkbox"/> MATH 1095	STATWAY Statistics: Accelerated	4 cr

- Complete one course from MnTC Goal 3
- Complete one course from MnTC Goal 6 (*PHIL 1170 recommended*)
- Complete any additional MnTC courses needed to reach 30 credits.

### Other Degree Requirements

- If needed, complete additional courses to reach 60 credits total.
- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum of 15 college-level credits at Normandale.

*Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report.*

Business Transfer Pathway (AS)				
needs placement into college level for ENGC 1101 and MATH 1100				
<i>Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.</i>				
	Fall Semester	Spring Semester		
1st year	ENGC 1101 .....	4cr	BUSN 2300.....	3cr
	COMM 1101, 1111 or 1121 .....	3cr	BUSN elective .....	3cr
	BUSN 1201.....	3cr	ECON 2201 .....	3cr
	MATH 1100 .....	4cr	MATH 1080 .....	4cr
	<b>TOTAL .....</b>	<b>14cr</b>	PHIL 1170 (or MnTC Goal 6).....	3cr
		<b>TOTAL .....</b>	<b>16cr</b>	
2nd year	ACCT 2251 .....	4cr	ACCT 2252 .....	4cr
	BUSN 2400.....	3cr	BUSN 2155.....	3cr
	ECON 2202 .....	3cr	BUSN elective .....	3cr
	MnTC Goal 3 .....	3cr	MnTC elective .....	4cr
	BUSN elective .....	3cr	<b>TOTAL .....</b>	<b>14cr</b>
	<b>TOTAL .....</b>	<b>16cr</b>		

Certificates in Hospitality and Tourism may be completed by students working towards an AAS in Hospitality Management. The certificates are also appropriate for students looking to gain knowledge in the hospitality and tourism industry, to either change careers or obtain leadership skills towards a promotion within the industry

**Required Courses – 18-20 Credits**

- |                                    |  |      |
|------------------------------------|--|------|
| <input type="checkbox"/> HSMA 1103 | Introduction to Hospitality and Tourism Management | 4 cr |
| <input type="checkbox"/> HSMA 2100 | Casino Management and Operations                   | 4 cr |
| <input type="checkbox"/> HSMA 2144 | Food/Beverage Management and Cost Control          | 4 cr |
| <input type="checkbox"/> HSMA 2172 | Hospitality Sales and Marketing Management         | 4 cr |

Complete **one** of the following three courses:

- |                                    |                                   |        |
|------------------------------------|-----------------------------------|--------|
| <input type="checkbox"/> HSMA 2096 | Hospitality Management Internship | 2-4 cr |
| <input type="checkbox"/> HSMA 2097 | Senior Hospitality Internship     | 4 cr   |
| <input type="checkbox"/> HSMA 2098 | International Internship          | 4 cr   |

**Other Certificate Requirements**

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn at least one third of the required certificate credits from Normandale.

The Chemistry Transfer Pathway AS offers students a powerful option: the opportunity to complete an Associate of Science degree with course credits that directly transfer to designated chemistry 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.

### Core Courses – 40 Credits

<input type="checkbox"/>	CHEM 1061	Principles of Chemistry 1	5 cr
<input type="checkbox"/>	CHEM 1062	Principles of Chemistry 2	5 cr
<input type="checkbox"/>	CHEM 2061	Organic Chemistry 1	5 cr
<input type="checkbox"/>	CHEM 2062	Organic Chemistry 2	5 cr
<input type="checkbox"/>	MATH 1510	Calculus 1	5 cr
<input type="checkbox"/>	MATH 1520	Calculus 2	5 cr
<input type="checkbox"/>	PHYS 1121	Physics 1 for Scientists and Engineers	5 cr
<input type="checkbox"/>	PHYS 1122	Physics 2 for Scientists and Engineers	5 cr

### Additional Required Courses – 20 Credits

<input type="checkbox"/>	ENGC 1101	College Writing	4 cr
--------------------------	-----------	-----------------	------

Complete **one** of the following two courses:

<input type="checkbox"/>	COMM 1101	Fundamentals of Public Speaking	3 cr
<input type="checkbox"/>	COMM 1111	Interpersonal Communication	3 cr

<input type="checkbox"/>	Complete one course from MnTC Goal 5	3 cr
--------------------------	--------------------------------------	------

<input type="checkbox"/>	Complete one course from MnTC Goal 6	3 cr
--------------------------	--------------------------------------	------

<input type="checkbox"/>	Complete two courses from MnTC Goal 7, 8, 9 or 10	7 cr
--------------------------	---	------

*Note: It is recommended students select one course from MnTC Goal 5 or 6 that also satisfies one of the MnTC Goals 7, 8, 9, or 10.*

### Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum of 15 college-level credits at Normandale.

*Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report*

Chemistry Transfer Pathway (AS)			
needs placement into college level for ENGC 1101 and MATH 1510 <i>Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.</i>			
1st year	Fall Semester	Spring Semester	
	ENGC 1101 ..... 4cr	CHEM 1062 ..... 5cr	
	CHEM 1061 ..... 5cr	MATH 1520 ..... 5cr	
	MATH 1510 ..... 5cr	MNTC GOAL 6 ..... 4cr	
	TOTAL ..... 14cr	TOTAL ..... 14cr	
2nd year	Fall Semester	Spring Semester	
	CHEM 2061 ..... 5cr	CHEM 2062 ..... 5cr	
	PHYS 1121 ..... 5cr	PHYS 1122 ..... 5cr	
	COMM 1101 or 1111 ..... 3cr	MNTC GOAL 7, 8, 9 or 10 ..... 3cr	
	MNTC GOAL 5 ..... 3cr	MNTC GOAL 7, 8, 9 or 10 ..... 3cr	
	TOTAL ..... 16cr	TOTAL ..... 16cr	

The Communication Studies Transfer Pathway AA offers students a powerful option: the opportunity to complete an Associate of Arts degree with course credits that directly transfer to designated Communication Studies 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.

Research indicates that communication skills are highly valued in today's society. Communication Studies explores how messages are sent and received in various contexts, cultures, and relationships. Students will foster skills in speaking, listening, presenting, and conflict management that will enhance their personal and professional relationships.

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.

### Required Courses

Incorporate the following Required Courses into the General Education/Minnesota Transfer Curriculum or Additional Course Requirements sections below.

- COMM 1101 Fundamentals of Public Speaking 3 cr
- COMM 1111 Interpersonal Communication 3 cr
- COMM 1121 Small Group Communication 3 cr
- COMM 1131 Intercultural Communication 3 cr

### General Education/Minnesota Transfer Curriculum (MnTC) – 40 Credits

\*See MnTC Curriculum for specific course options

- GOAL 1: COMMUNICATION – 2 COURSES
  - ENGC 1101
  - Course met by taking required COMM courses
- GOAL 2: CRITICAL THINKING  
(met by completion of all 40 credits of the MnTC)
- GOAL 3: NATURAL SCIENCES – 2 COURSES  
**Select from two different departments; one must include a lab**
  - Course #1 \_\_\_\_\_
  - Course #2 \_\_\_\_\_
- GOAL 4: MATHEMATICAL/LOGICAL REASONING - 1 COURSE
  - Course \_\_\_\_\_
- GOAL 5: HISTORY AND SOCIAL/BEHAVIORAL SCIENCES – 2 COURSES  
**Select from two different departments**  
*COMM 2111 and PSYC 1110 recommended*
  - Course #1 \_\_\_\_\_
  - Course #2 \_\_\_\_\_
- GOAL 6: HUMANITIES AND FINE ARTS- 2 COURSES  
**Select from two different departments**
  - Course #1 \_\_\_\_\_
  - Course #2 \_\_\_\_\_
- GOAL 7: HUMAN DIVERSITY – 1 COURSE
  - Course met by taking required COMM courses
- GOAL 8: GLOBAL PERSPECTIVE – 1 COURSE
  - Course met by taking required COMM courses

GOAL 9: ETHICAL AND CIVIC RESPONSIBILITY – 1 COURSE  
 Course \_\_\_\_\_

GOAL 10: PEOPLE AND THE ENVIRONMENT – 1 COURSE  
 Course \_\_\_\_\_

### Additional Course Requirements – 20 Credits

- One Health (HLTH) course.
- One Exercise Science (EXSC) course.
- Elective credits – additional course(s) numbered 1000 and above, if needed to complete the 60-credit requirement. *(The department highly recommends that students take COMM 1141)*

### Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum cumulative grade point average (GPA) of 2.0 in the MnTC.
- Earn a minimum of 15 college-level credits at Normandale.

Communication Studies Transfer Pathway (AA)		
needs placement into college level for ENGC 1101		
<i>Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.</i>		
	Fall Semester	Spring Semester
1st year	ENGC 1101 ..... 4cr	COMM 1101 ..... 3cr
	COMM 1111 ..... 3cr	COMM 1131 (G7+8) ..... 3cr
	PSYC 1110 (G5) ..... 4cr	MNTC Goal 4 ..... 3cr
	*MNTC Goal 6 ..... 3cr	*MNTC Goal 3 with lab ..... 4cr
	EXSC elective ..... 1cr	HLTH elective ..... 3cr
	TOTAL ..... 15cr	TOTAL ..... 16cr
	Fall Semester	Spring Semester
2nd year	COMM 1121 ..... 3cr	COMM 2111 (G5) ..... 3cr
	COMM 1141 (G7) ..... 3cr	MNTC Goal 9 ..... 3cr
	*MNTC Goal 6 ..... 3cr	MNTC Goal 10 ..... 3cr
	*MNTC Goal 3 ..... 3cr	Electives ..... 3cr
	MNTC elective ..... 3cr	Electives ..... 2cr
	TOTAL ..... 15cr	TOTAL ..... 14cr
<i>*For MNTC Goal areas that require 2 courses, they must come from 2 different departments</i>		

This certificate program will prepare students for a variety of entry-level healthcare employment opportunities. Community Health Worker-Navigators work to increase cultural competence, improve access to health care for underserved communities, coordinate care for chronically ill people, and map community resources to improve the overall health of communities. Community Health Worker-Navigators play a critical role in bridging the gap between community, health care, government, and social service systems.

### Required Courses – 16 Credits

<input type="checkbox"/> CHWN 1000	The Community Health Worker: Role, Advocacy, Outreach, and Resources	3 cr
<input type="checkbox"/> CHWN 1100	Cultural Health Communication, Teaching, and Capacity Building	3 cr
<input type="checkbox"/> CHWN 1200	Documentation, Legal, and Ethical Issues in Community Health Work	3 cr
<input type="checkbox"/> CHWN 1500	The Community Health Worker: Health Promotion Competencies	5 cr
<input type="checkbox"/> CHWN 2096	Community Health Worker Navigator Internship	2 cr

### Other Certificate Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn at least one third of the required certificate credits from Normandale.

Community Health Worker Navigator Certificate		
<i>Program Sequence: This program is a two-semester cohort model. Cohorts may begin in Fall or Spring semester.</i>		
	Semester 1	Semester 2
1st year	CHWN 1000.....3cr	CHWN 1500.....5cr
	CHWN 1100.....3cr	CHWN 2096.....2cr
	CHWN 1200.....3cr	
	<b>TOTAL.....9cr</b>	<b>TOTAL.....7cr</b>

The Business: Marketing and Management AAS Degree is designed for individuals who wish to seek employment after graduation or who want to enhance their advancement opportunities with their current employers. The program offers a combination of general education and business classes that provide students with critical thinking and technical business skills. These skills are appropriate for positions in management, supervision, marketing, sales or small business management.

Normandale business programs are nationally accredited by the Accreditation Council for Business Schools and Programs (ACBSP).

### Core Courses – 18 Credits

<input type="checkbox"/> CIM/BUSN 1201	Information Technology Concepts and Business Software 1	3 cr
<input type="checkbox"/> CIM/BUSN 1220	Business Problem Solving Analyzing - Excel	3 cr
<input type="checkbox"/> CIM 2000	Computer Applications Training Practicum	3 cr

Complete **three** of the following five courses:

<input type="checkbox"/> CIM 1000*	Keyboarding and Essential Computer Skills	3 cr
<input type="checkbox"/> CIM 1230	Business Information Management - Access	3 cr
<input type="checkbox"/> CIM 1240	Business Word Processing	3 cr
<input type="checkbox"/> CIM/BUSN 1250	Intro to Project Management Software	3 cr
<input type="checkbox"/> CIM 1260	Presentation Software	3 cr

\*CIM 1000 is **required** if speed is less than 30 wpm with accuracy; skill will be measured in CIM 2000

Students who complete CIM/BUSN 1201 and CIM/BUSN 1220, 1230, 1240, and 1250 have completed the Computer Information Management Certificate and may apply to have this credential awarded to their student record at any point in their degree progress using the graduation application.

### Additional Required Courses – 42 Credits

<input type="checkbox"/> ENGC 1101	College Writing	4 cr
<input type="checkbox"/> ENGC 2102	Business and Technical Writing	3 cr

Complete **one** of the following three courses:

<input type="checkbox"/> COMM 1101	Fundamentals of Public Speaking	3 cr
<input type="checkbox"/> COMM 1111	Interpersonal Communication	3 cr
<input type="checkbox"/> COMM 1121	Small Group Communication	3 cr

Complete **one** of the following two courses:

<input type="checkbox"/> ECON 2201	Principles of Microeconomics	3 cr
<input type="checkbox"/> ECON 2202	Principles of Macroeconomics	3 cr

Complete at least 11 credits from MnTC Goal areas 3, 4, 5, 6, 7, 8, 9 or 10 11 cr

Complete additional courses from any of the following areas to reach 42 credits for this section: Accounting (ACCT), Business (BUSN), Computer Science (CSCI), Computer Technology (COMT), Data Science (DSCI), or additional CIM (Computers/Information Management) electives.

We encourage students to complete a Business Enrichment Certificate when possible. Students should discuss options with their advisor.

### Other Degree Requirements

If needed, complete additional courses to reach 60-level credits total.

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum of 15 college-level credits at Normandale.

Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report.

Computers/Information Management (AAS)		
needs placement into college level for ENGC 1101		
<i>Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.</i>		
	Fall Semester	Spring Semester
1st year	ENGC 1101 .....4cr CIM 1000 .....3cr CIM 1201 .....3cr COMM 1101, 1111 or 1121 ....3cr MnTC electives from Goal 5, 6, 7, 8, 9 or 10 .....3cr <b>TOTAL ..... 16cr</b>	CIM 1220 .....3cr ENGC 2102 .....3cr MnTC electives from Goal 5, 6, 7, 8, 9 or 10 .....4cr ECON 2201 or 2202 .....3cr *Major elective.....4cr <b>TOTAL ..... 16cr</b>
	Fall Semester	Spring Semester
2nd year	CIM 2000 .....3cr CIM 1240 or 1260 .....3cr *Major elective.....3cr *Major elective.....3cr *Major elective.....3cr <b>TOTAL ..... 15cr</b>	CIM 1230 or 1250 .....3cr *Major elective.....3cr *Major elective.....3cr *Major elective.....3cr <b>TOTAL ..... 13cr</b>
*Major electives from Accounting (ACCT), Business (BUSN), Computer Science (CSCI), Computer Technology (COMT), Computer/Information Management (CIM), or Data Science (DSCI).		



The Computers/Information Management Certificate is for the student who wants to extend their skills to position themselves for a job upgrade or promotion. Completion of many of the courses in this program will prepare students with skills necessary to successfully complete industry testing for specialized certificates showing mastery of current business software. These industry credentials show that the student meets globally recognized performance standards. Students earning these credentials are valuable to organizations that want to reinforce their technology investments with accelerated productivity and improved organizational performance. Industry certifications are available from companies such as Microsoft and from globally recognized organizations.

**Required Courses – 15 Credits**

□ BUSN/CIM 1201	Information Technology Concepts and Business Software 1	3 cr
□ BUSN/CIM 1220	Business Problem Solving Analyzing - Excel	3 cr
□ CIM 1230	Business Information Management - Access	3 cr
□ CIM 1240	Business Word Processing	3 cr
□ BUSN/CIM 1250	Intro to Project Management Software	3 cr

**Other Certificate Requirements**

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn at least one third of the required certificate credits from Normandale.

The Computer Science Transfer Pathway AS offers students a powerful option: the opportunity to complete an Associate of Science degree with course credits that directly transfer to designated Computer Science 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.

### Core Courses – 28 Credits

<input type="checkbox"/> CSCI 1101	Introduction to Computing and Problem Solving	4 cr
<input type="checkbox"/> CSCI 1111	Introduction to Programming in C	4 cr
<input type="checkbox"/> CSCI 2001	Computer Programming Concepts	4 cr
<input type="checkbox"/> CSCI 2002	Algorithms and Data Structures	4 cr
<input type="checkbox"/> CSCI 2021	Machine Architecture and Organization	4 cr
<input type="checkbox"/> CSCI/MATH 2011	Discrete Structures of Computer Science	4 cr

Complete **one** of the following four courses:

<input type="checkbox"/> CSCI 1202	Introduction to Object-Oriented Programming in C++	4 cr
<input type="checkbox"/> CSCI 1203	Introduction to Computer Programming in Java	4 cr
<input type="checkbox"/> CSCI/MATH 2033	Elementary Computational Linear Algebra	4 cr

### Additional Required Courses – 32 Credits

<input type="checkbox"/> ENGC 1101	College Writing	4 cr
------------------------------------	-----------------	------

Complete **one** of the following three courses:

<input type="checkbox"/> COMM 1100	Introduction to Communication	3 cr
<input type="checkbox"/> COMM 1101	Fundamentals of Public Speaking	3 cr
<input type="checkbox"/> COMM 1111	Interpersonal Communication	3 cr

- Complete a minimum of 20 additional credits from at least 4 of the MnTC Goal Areas: 3, 5, 6, 7, 8, 9, or 10 in order to have completed courses from at least 6 of the 10 goal areas. (Check with your transfer institution for specific requirements)

### Other Degree Requirements

If needed, complete additional courses to reach 60 college-level credits total.

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum of 15 college-level credits at Normandale.

Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report.

Computer Science Transfer Pathway (AS)		
needs placement into college level for ENGC 1001 and MATH 1510 <i>Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.</i>		
	Fall Semester	Spring Semester
1st year	ENGC 1101 .....4cr CSCI 1101 .....4cr MATH 1510 .....5cr COMM 1100, 1101 or 1111 ....3cr <b>TOTAL .....16cr</b>	CSCI 1111 .....4cr CSCI 2001 .....4cr MNTC GOAL 3 .....5cr MNTC GOAL 6 .....3cr <b>TOTAL .....16cr</b>
	Fall Semester	Spring Semester
2nd year	CSCI 2002 .....4cr CSCI 2021 .....4cr MNTC GOAL 5 .....3cr MNTC GOAL 7, 8, 9 or 10 .....3cr <b>TOTAL .....14cr</b>	CSCI 2011 or MATH 2011 .....4cr CSCI 1202, 1203, 2033 or MATH 2033 .....4cr MNTC elective .....3cr MNTC elective .....3cr <b>TOTAL .....14cr</b>

Graduates who earn the AAS degree in Computer Technology will develop a broad range of skills to support computer-based applications in business and industry. These skills include problem-solving in computer architecture, database use and design, telecommunications, programming and system design. This degree positions individuals to seek employment in a variety of businesses that utilize Information Technology (IT) professionals.

### Core Courses – 32 Credits

<input type="checkbox"/>	ACCT 2251	Financial Accounting	4 cr
<input type="checkbox"/>	CIM/BUSN 1201	Information Technology Concepts and Business Software 1	3 cr
<input type="checkbox"/>	CIM/BUSN 1220	Business Problem Solving Analyzing - Excel	3 cr
<input type="checkbox"/>	COMT 1107	Introduction to Computer Technology	4 cr
<input type="checkbox"/>	COMT 1173*	PC Architecture Operation and Interface	3 cr
<input type="checkbox"/>	COMT 1181*	Database Management Systems	3 cr
<input type="checkbox"/>	COMT 1184*	Telecommunications	3 cr
<input type="checkbox"/>	COMT 2188*	Systems Analysis and Design	3 cr

Complete at least **6 credits** from the following eight courses:

<input type="checkbox"/>	COMT 1205*	Introduction to Visual Basic	3 cr
<input type="checkbox"/>	COMT 1182	Advanced Database Management Systems	3 cr
<input type="checkbox"/>	COMT 2096	Internship in Computer Technology	2-4 cr
<input type="checkbox"/>	COMT 2250	Object Oriented Programming with Java for HCST	4 cr
<input type="checkbox"/>	CSCI 1101	Introduction to Computing and Problem Solving	4 cr
<input type="checkbox"/>	CSCI 1111*	Introduction to Programming in C	4 cr
<input type="checkbox"/>	CSCI 1202*	Introduction to Object-Oriented Programming in C++	4 cr
<input type="checkbox"/>	CSCI 1203*	Introduction to Computer Programming in Java	4 cr

\* These courses must be completed within the last seven years prior to completing the Associate of Applied Science degree in Computer Technology, with or without Industry Certification.

### Additional Required Courses – 28 Credits

<input type="checkbox"/>	ENGC 1101	College Writing	4 cr
<input type="checkbox"/>	ENGC 2102	Business and Technical Writing	3 cr
<input type="checkbox"/>	MATH 1100	College Algebra	4 cr

Complete **one** of the following two courses:

<input type="checkbox"/>	COMM 1111	Interpersonal Communication	3 cr
<input type="checkbox"/>	COMM 1121	Small Group Communication	3 cr

Complete **one** of the following four courses:

<input type="checkbox"/>	BUSN 2220	Statistics for Business and Economics	4 cr
<input type="checkbox"/>	MATH 1080	Introduction to Statistics	4 cr
<input type="checkbox"/>	MATH 1090	STATWAY Statistics 2	4 cr
<input type="checkbox"/>	MATH 1095	STATWAY Statistics: Accelerated	4 cr

Complete one additional MnTC course from Goals 3-10 3-5 cr

Complete additional courses to reach 28 credits 8-10 cr

#### Recommended:

BUSN 1102	Social Media Marketing	3 cr
BUSN 1105	Introduction to Business	3 cr
BUSN 1125	Entrepreneurship	3 cr
CIM 1230	Business Information Management - Access	3 cr
CIM/BUSN1250	Intro to Project Management Software	3 cr
ENGT 2188	Electronics and Automation	4 cr
ART 1116	Introduction to Graphic Design	3 cr
ART 1122	Foundation Digital Imaging	3 cr

#### Other Degree Requirements

*If needed, complete additional courses to reach 60 college-level credits total.*

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum of 15 college-level credits at Normandale.

*Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report*

The Computer Technology Certificate is a “fast-track” path for acquiring computer technology skills. This curriculum will develop a student’s problem-solving skills in computer architecture, database use and design, telecommunications, and beginning programming. The certificate encompasses learning of foundation skills for Information Technology (IT) professionals.

**Required Courses – 16 Credits**

<input type="checkbox"/>	COMT 1107	Introduction to Computer Technology	4 cr
<input type="checkbox"/>	COMT 1173*	PC Architecture Operation and Interface	3 cr
<input type="checkbox"/>	COMT 1181*	Database Management Systems	3 cr
<input type="checkbox"/>	COMT 1184*	Telecommunications	3 cr

Complete **one** of the following two courses:

<input type="checkbox"/>	COMT 1205*	Introduction to Visual Basic	3 cr
<input type="checkbox"/>	COMT 1182	Advanced Database Management Systems	3 cr

*\* These courses must be completed within the last seven years prior to completing the Computer Technology Certificate with or without Industry Certification.*

**Other Certificate Requirements**

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn at least one third of the required certificate credits from Normandale.

The Associate of Fine Arts (AFA) degree in Creative Writing is designed for the student who has selected Creative Writing as a career option and intends to transfer to a fine arts baccalaureate program (BA or BFA) in Creative Writing at a four-year institution. The AFA degree combines creative writing coursework in several genres with the study of literature. Students who complete this course of study and meet the admission requirements to their selected institution may be eligible to apply for admission with junior standing.

### Admission to the Program

1. A student may indicate interest in admission to the AFA in Creative Writing major by declaring a "Pre-AFA in Creative Writing" major.
2. To be admitted into the program, students must:
  - a. Complete ENG 1101 with a grade of C or higher - Transferring into their Normandale transcript CLEP exams, or other proof of having met the Goal 1 English requirement.
  - b. Submit an application to the Director of the AFA in Creative Writing program, either hard copy or online at [submittable.com](http://submittable.com), with the following materials included:
    - Current contact information
    - A 10-page writing sample (either one document or a combination of documents) that shows evidence of college level writing skills in organization, revision, editing, and proofreading.

### Required Courses

Incorporate the following Required Courses into the General Education/MnTC or other degree requirement sections below.

Complete **12 credits** from the following six courses:

<input type="checkbox"/> ENG 1111	Introduction to Creative Writing	3 cr
<input type="checkbox"/> ENG 2112	Poetry Writing	3 cr
<input type="checkbox"/> ENG 2113	Fiction Writing	3 cr
<input type="checkbox"/> ENG 2114	Play and Screen Writing	3 cr
<input type="checkbox"/> ENG 2115	Memoir/Non-Fiction Writing	3 cr
<input type="checkbox"/> ENG 2900	Topics in Creative Writing	3 cr

Complete **one** of the following two courses:

<input type="checkbox"/> ENGL 2130	African American Literature	3 cr
<input type="checkbox"/> ENGL 2133	Native American Literature	3 cr

<input type="checkbox"/> ENGL 2151	American Literature 2	4 cr
------------------------------------	-----------------------	------

<input type="checkbox"/>	Complete additional ENGL course numbered over 2100	3 cr
--------------------------	--	------

<input type="checkbox"/> ENG 2800	AFA Capstone	3 cr
-----------------------------------	--------------	------

### General Education/Minnesota Transfer Curriculum (MnTC) – 40 Credits

\*See MnTC Curriculum for specific course options

- GOAL 1: COMMUNICATION – 2 COURSES  
 ENG 1101  
 COMM 1100, 1101, 1111, 1121
- GOAL 2: CRITICAL THINKING  
 (Met by completion of all 40 credits of the MnTC)
- GOAL 3: NATURAL SCIENCES – 2 COURSES  
**Select from two different departments; one must include a lab**  
 Course #1 \_\_\_\_\_  
 Course #2 \_\_\_\_\_
- GOAL 4: MATHEMATICAL/LOGICAL REASONING – 1 COURSE  
 Course \_\_\_\_\_

GOAL 5: HISTORY AND SOCIAL/BEHAVIORAL SCIENCES – 2 COURSES

**Select from two different departments**

- Course #1 \_\_\_\_\_  
 Course #2 \_\_\_\_\_

GOAL 6: HUMANITIES AND FINE ARTS- 2 COURSES

**Select from two different departments**

- Course #1 met by taking required ENGW course  
 Course #2 met by taking required ENGL course

GOAL 7: HUMAN DIVERSITY – 1 COURSE

- Course – met by taking required ENGL course

GOAL 8: GLOBAL PERSPECTIVE – 1 COURSE

- Course \_\_\_\_\_

GOAL 9: ETHICAL AND CIVIC RESPONSIBILITY – 1 COURSE

- Course met by taking ENGL 2151

GOAL 10: PEOPLE AND THE ENVIRONMENT – 1 COURSE

- Course \_\_\_\_\_

### Other Degree Requirements

*Elective credits – additional course(s) numbered 1000 and above, if needed to complete the 60 credit requirement*

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum cumulative grade point average (GPA) of 2.0 in the MnTC.
- Earn a minimum of 15 college-level credits at Normandale.

*Coursework in this degree program satisfies the Minnesota Transfer Curriculum (MnTC).*

Creative Writing (AFA)		
needs placement into college level for ENG 1101		
<i>Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.</i>		
	Fall Semester	Spring Semester
1st year	ENG 1101 .....4cr	ENGW 1111 (G6) .....3cr
	MNTC Goal 1 COMM.....3cr	ENGL 2151 (G6+9) .....4cr
	ENGL 2130 or 2133 (G6+7).....3cr	ENGW 2112,2113,2114 or 2115 or 2115 .....3cr
	*MNTC Goal 5 .....3cr	*MNTC Goal 3 .....3cr
	TOTAL .....13cr	MNTC electives .....3cr
		TOTAL .....16cr
	Fall Semester	Spring Semester
2nd year	ENGW 2112,2113,2114 or 2115 ... 3cr	ENGW 2800.....3cr
	ENGW 2112,2113,2114 or 2115 .....3cr	*MNTC Goal 5 .....3cr
	MNTC Goal 8 .....3cr	**ENGL elective .....3cr
	*MNTC Goal 3 with lab.....4cr	MNTC Goal 10 .....3cr
	MNTC Goal 4 .....3cr	MNTC electives .....3cr
	TOTAL .....16cr	TOTAL .....15cr
*For MNTC Goal areas that require 2 courses, they must come from 2 different departments		
** ENGL course numbered over 2100		

This certificate program is designed for the student pursuing creative writing in addition to another program or as a supplement to current credentials. It combines creative writing coursework in several genres with the study of diverse American literature.

**Required Courses – 26 Credits**

- ENGC 1101 College Writing 4 cr
- ENGL 2151 American Literature 2 4 cr

Complete **one** of the following three courses:

- ENGL 1130 Literature of Diversity 3 cr
- ENGL 2130 African American Literature 3 cr
- ENGL 2133 Native American Literature 3 cr

Complete **five** of the following six courses:

- ENGW 1111 Introduction to Creative Writing 3 cr
- ENGW 2112 Poetry Writing 3 cr
- ENGW 2113 Fiction Writing 3 cr
- ENGW 2114 Play and Screen Writing 3 cr
- ENGW 2115 Memoir/Non-Fiction Writing 3 cr
- ENGW 2900 Topics in Creative Writing 3 cr

**Other Certificate Requirements**

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn at least one third of the required certificate credits from Normandale.

The Criminal Justice Transfer Pathway AS offers students a powerful option: the opportunity to complete an Associate of Science degree that directly transfers to a designated Criminal Justice bachelor's degree program at Minnesota State universities. The curriculum has been carefully designed so that students completing this pathway degree and transferring to one of the seven Minnesota State universities enters 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.

**Core Courses – 27 Credits**

- POLS 2250 Constitutional Law 3 cr
- SOC 1104 Introduction to Sociology 3 cr
- SOC 2112 Criminology 3 cr
- SOC 2130 Introduction to Criminal Justice 3 cr
- SOC 2131 Juvenile Justice 3 cr
- SOC 2132 Police and Community 3 cr
- SOC 2134 Corrections 3 cr

Complete **one** of the following two courses:

- SOC 1106 Social Problems 3 cr
- SOC/ANTH/WMST 1121 Women Across Cultures 3 cr

Complete **one** of the following three courses:

- SOC 1109 Wealth and Poverty 3 cr
- SOC 1115 Sociology of Sex and Gender Roles 3 cr
- SOC 2110 American Minority Relations 3 cr

**Additional Required Courses – 33 Credits**

- ENGC 1101 College Writing 4 cr
- PHIL 1103 Ethics 3 cr

Complete **one** of the following two courses:

- COMM 1111 Interpersonal Communication 3 cr
- COMM 1131 Intercultural Communication 3 cr

Complete **two** courses from MnTC Goal 3

- Course #1 \_\_\_\_\_
- Course #2 \_\_\_\_\_

Complete **one** course from MnTC Goal 4 (MATH 1080 or 1090 or 1095 recommended)

- Course \_\_\_\_\_

Complete **one** course from MnTC Goal 5 in department other than SOC (PSYC 1110 strongly recommended)

- Course \_\_\_\_\_

Complete **one** course from MnTC Goal 6 in department other than PHIL

- Course \_\_\_\_\_

Complete **one** course from MnTC Goal 10; with careful planning, a course used to satisfy Goal 3 may also be used to satisfy Goal 10.

- Course \_\_\_\_\_

*If needed, complete additional courses to reach 60 credits total. The department recommends the following elective courses:*

- HLTH 1106 Drug Use and Abuse 3 cr
- HLTH 2209 Emergency Medical Responder 3 cr

**Other Degree Requirements**

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum of 15 college-level credits at Normandale.

*Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report.*

Criminal Justice Transfer Pathway (AS)		
needs placement into college level for ENGC 1101		
<i>Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.</i>		
1st year	Fall Semester	Spring Semester
	ENGC 1101 .....4cr	COMM 1111 or 1131 .....3cr
	SOC 1104 .....3cr	PSYC 1110 .....4cr
	SOC 2130 .....3cr	SOC 2112 .....3cr
	MATH 1080 .....4cr	SOC 2131 .....3cr
	TOTAL .....14cr	MnTC Goal 6 (non-PHIL).....3cr
		TOTAL .....16cr
2nd year	Fall Semester	Spring Semester
	SOC 2132 .....3cr	*MnTC Goal 3 w/lab .....4cr
	SOC 2134 .....3cr	MnTC Goal 10 .....3cr
	POLS 2250 .....3cr	SOC 1109 or 1115 or 2110 .....3cr
	SOC 1106 or 1121 .....3cr	HLTH 1106 or 2209 .....3cr
	*MnTC Goal 3 .....3cr	PHIL 1103 .....3cr
	TOTAL .....15cr	TOTAL .....16cr
<i>*For MnTC Goal areas that require 2 courses, they must come from 2 different departments</i>		

This degree provides an introduction to data science by combining the tools of basic statistics, computer programming, and mathematical analysis with foundational concepts from a specific domain area. It will give students sufficient knowledge to enter the job market and to transfer credits to a baccalaureate program at a four-year institution.

### Core Courses – 33-35 Credits

Completion of this degree is dependent upon a grade of C or higher in each of the following courses:

<input type="checkbox"/>	CSCI 1111	Introduction to Programming in C	4 cr
<input type="checkbox"/>	CSCI 2001	Computer Programming Concepts	4 cr
<input type="checkbox"/>	CSCI 2002	Algorithms and Data Structures	4 cr
<input type="checkbox"/>	COMT 1181	Database Management Systems	3 cr
<input type="checkbox"/>	DSCI 2000	Foundations of Data Science	3 cr
<input type="checkbox"/>	MATH 2080	Statistical Modeling	3 cr

Complete **one** of the following three courses:

<input type="checkbox"/>	MATH 1080	Introduction to Statistics	4 cr
<input type="checkbox"/>	MATH 1090	STATWAY Statistics 2	4 cr
<input type="checkbox"/>	MATH 1095	STATWAY Statistics: Accelerated	4 cr

Complete **two** of the following MATH courses grouped as follows:

<input type="checkbox"/>	MATH 1100	College Algebra	4 cr
	MATH 1400	Survey of Calculus	4 cr
	Or		
<input type="checkbox"/>	MATH 1500	Pre-Calculus	5 cr
<input type="checkbox"/>	MATH 1510	Calculus 1	5 cr

### Additional Required Courses – 25-27Credits

<input type="checkbox"/>	ENG 1101	College Writing	4 cr
--------------------------	----------	-----------------	------

Complete **one** of the following three courses:

<input type="checkbox"/>	COMM 1100	Introduction to Communication	3 cr
<input type="checkbox"/>	COMM 1101	Fundamentals of Public Speaking	3 cr
<input type="checkbox"/>	COMM 1111	Interpersonal Communication	3 cr

<input type="checkbox"/>	ECON 2201	Principles of Microeconomics	3 cr
--------------------------	-----------	------------------------------	------

Complete a minimum of **six additional credits** from at least two of the following MnTC Goals: 3, 6, 7, 8 or 10. 6 cr

Complete additional courses to reach 60 college-level credits total. Suggested Domain Specialization Areas under Sample Domain Specialization Areas for the AS in Data Analytics. 9-11 cr

### Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum of 15 college-level credits at Normandale.

Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report.

**Sample Domain Specialization Areas for the AS in Data Analytics -** The domain specialties below represent a few possible areas of interest. Students should consult with faculty and advisors, including those at possible transfer institutions, for further information.

<u>Bioinformatics:</u>			
	BIOL 1501	Principles of Biology 1	5 cr
	CHEM 1020	Introductory Chemistry	4 cr
	PHIL 1180	Biomedical Ethics	3 cr
	ENG 2102	Business and Technical Writing	3 cr
<u>Finance:</u>			
	ACCT 2251	Financial Accounting	4 cr
	ACCT 2254/ BUSN 2254	Introduction to Management Information Systems	4 cr
	ECON 2202	Principles of Macroeconomics	3 cr
	PHIL 1170	Business Ethics	3 cr
	ENG 2102	Business and Technical Writing	3 cr
<u>Law Enforcement/Government:</u>			
	PSYC 1110	Introduction to Psychology	4 cr
	SOC 1106	Social Problems	3 cr
	SOC 2130	Introduction to Criminal Justice	3 cr
	POLS 1195	Conflict and Negotiation	3 cr
	ENG 2102	Business and Technical Writing	3 cr
	CIM 1141	Presentation Graphics 1	1 cr
<u>Marketing:</u>			
	BUSN 2254/ ACCT 2254	Introduction to Management Information Systems	4 cr
	BUSN 2400	Principles of Marketing	3 cr
	ECON 2202	Principles of Macroeconomics	3 cr
	PHIL 1170	Business Ethics	3 cr
	ENG 2102	Business and Technical Writing	3 cr
	CIM 1141	Presentation Graphics 1	1 cr
<u>Mathematics:</u>			
	GEOG 1050	Maps and Mapping	3 cr
	PHIL 1140	Environmental Ethics	3 cr
	Or		
	GEOG 1104	Resources, Society and Environment	3 cr
	MATH 1520	Calculus 2	5 cr
	MATH 2400	Probability and Statistics with Calculus	4 cr

Others:

Students can also develop other domain specialization areas in consultation with their advisor and faculty.

Data Analytics (AS)		
needs placement into college level for ENG 1101 and MATH 1500		
<i>Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.</i>		
1st year	<b>Fall Semester</b>	<b>Spring Semester</b>
	ENG 1101 .....4cr	CSCI 1111 .....4cr
	CSCI 1101 .....4cr	MATH 1510 .....5cr
	MATH 1500 .....5cr	MATH 1080 .....4cr
	COMM 1100, 1101 or 1111 ....3cr	ECON 2201 .....3cr
	<b>TOTAL ..... 16cr</b>	<b>TOTAL .....16cr</b>
2nd year	<b>Fall Semester</b>	<b>Spring Semester</b>
	CSCI 2001 .....4cr	CSCI 2002 .....4cr
	DSCI 2000 .....3cr	MnTC GOAL 3, 6, 7, 8, 9 or 10 .....3cr
	COMT 1181 .....3cr	
	MATH 2080 .....3cr	*Elective credits .....5cr
	MnTC GOAL 3, 6, 7, 8, 9 or 10 .....3cr	<b>TOTAL ..... 12cr</b>
<b>TOTAL ..... 16cr</b>		
*See Catalog for Sample Domain Specializations Areas		

This program provides academic and clinical educational opportunities for capable individuals to acquire the knowledge, skills, and attitudes necessary for the professional practice of dental hygiene. The curriculum focuses on sciences, as well as essential technical and clinical skills in preparation for providing preventive dental hygiene services to the public. Dental hygienists are preventive oral healthcare professionals, licensed in dental hygiene, which provide educational, clinical, and therapeutic services supporting a patient's total health through the promotion of optimal oral health.

The mission of the Dental Hygiene Program at Normandale Community College is to prepare dental hygiene students in the provision of comprehensive dental hygiene care, while emphasizing professionalism, communication, social responsibility, and lifelong learning.

Program goals include the intent to:

- Prepare graduates who will be competent to provide quality comprehensive dental hygiene care
- Promote admission of a qualified and diverse student population
- Participate in interprofessional community health promotion
- Engage in professional activities and lifelong learning
- Maintain a program that reflects relevant, current and advancing dental hygiene practice
- Incorporate emerging technologies to enhance quality dental hygiene care

Normandale Community College offers the Associate of Science (AS) degree in Dental Hygiene as a two-year program located within the health sciences division. NOTE: Most students complete their required science and liberal arts courses prior to acceptance into the program. The dental hygiene coursework requires four semesters to complete and begins each fall semester. Graduates will be eligible to take the National Board Dental Hygiene Examination, Central Regional Dental Testing Examination, and the Minnesota State Board of Dentistry Jurisprudence Examination for licensure in the State of Minnesota.

Following graduation and licensure requirements of the State Board of Dentistry, the dental hygienist becomes a primary healthcare professional, oral health educator and clinician who may choose to work in a variety of settings.

#### Dual Admission and Enrollment Option - BS in Dental Hygiene

Through a partnership with Metropolitan State University, we offer the option of a dual admissions and enrollment program. This means that there is simultaneous admittance to the Normandale Associate Degree program and Metropolitan State University Bachelor of Science in Dental Hygiene (BSDH) program if an applicant chooses this option. For those who are anxious to obtain a BSDH, this can be accomplished within one to two semesters after completion of the Associate Degree Program. More information about this option is available by meeting with the Health Sciences Enrollment Manager, Kiara Taylor.

The program in dental hygiene is accredited by the Commission on Dental Accreditation. The Commission is a specialized accrediting body recognized by the United States Department of Education. The Commission on Dental Accreditation can be contacted at (312) 440-4653 or 211 E. Chicago Ave., Chicago, Illinois 60611. The Commission's web address is: <http://www.ada.org/en/coda>.

#### Core Courses – 50 Credits

Courses are web-supplemented and web-enhanced, requiring computer and Internet access

- DENH 1112 Oral and Facial Anatomy 3 cr
- DENH 1140 Pre-Clinic Theory 3 cr
- DENH 1141 Pre-Clinic Skill Development 4 cr
- DENH 1142 Clinic 1 Theory 2 cr
- DENH 1143 Clinic 1 4 cr

- DENH 2240 Clinic 2 Theory 2 cr
- DENH 2241 Clinic 2 6 cr
- DENH 2242 Clinic 3 Theory 2 cr
- DENH 2243 Clinic 3 6 cr
- DENH 2252 Clinical Radiology 1 1 cr
- DENH 2254 Clinical Radiology 2 1 cr
- DENH 2263 Pain Management 2 cr
- DENH 2264 Periodontics for the Dental Hygienist 2 cr

Complete **one** of the following two courses:

- DENH 1150 Dental Radiology 4 cr
- DENH 1151 Accelerated Dental Radiology 2 cr

- DENH 2266 General and Oral Pathology 2 cr
- DENH 2281 Preventive Concepts in Community Dental Health 2 cr

Complete **one** of the following two courses:

- DENH 1160 Dental Materials 2 cr
- DENH 1161 Accelerated Dental Materials 1 cr

- DENH 1162 Pharmacology for the Dental Hygienist 2 cr

### Additional Required Courses – 38 Credits

Progression through the program is dependent upon a grade of C or higher for each of the following courses:

<input type="checkbox"/> ENGC 1101	College Writing	4 cr
<input type="checkbox"/> COMM 1111	Interpersonal Communication	3 cr
<input type="checkbox"/> CHEM 1050	Foundations of Organic and Biochemistry	3 cr
<input type="checkbox"/> BIOL 2041	Human Anatomy	4 cr
<input type="checkbox"/> BIOL 2042	Human Physiology	4 cr
<input type="checkbox"/> BIOL 2043	Microbiology	4 cr
<input type="checkbox"/> HLTH 1107	Principles of Nutrition	3 cr
<input type="checkbox"/> PSYC 1110	Introduction to Psychology	4 cr
<input type="checkbox"/> SOC 1104	Introduction to Sociology	3 cr

Complete **two courses** from MnTC Goal areas 4, 6, 7, 8, 9 or 10. Courses must satisfy at least two different MnTC Goal areas.

- Course #1 \_\_\_\_\_
- Course #2 \_\_\_\_\_

*Students who are considering a bachelor's degree completion program are strongly encouraged to complete their Minnesota Transfer Curriculum (MnTC) electives by taking MATH 1080 (Goal 4) and one class from Goal 6 and/or 10. These courses will meet bachelor degree completion requirements at Metropolitan State University. For more information, visit [www.metrostate.edu/cnhs](http://www.metrostate.edu/cnhs).*

### Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum of 15 college-level credits at Normandale.

*Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report.*

### Admission Requirements and Application Process

- Applicants who are new to Normandale must complete the online college application, found at: [www.normandale.edu/apply](http://www.normandale.edu/apply). Acceptance to the college to the college does not imply acceptance into the dental hygiene program. A separate Normandale Health Sciences Dental Hygiene Program application must be submitted to be considered for acceptance into the dental hygiene program. The completed application is to be submitted to the Health Sciences Enrollment Manager (located in A2507) by December 31 each year, and can be found on the Dental Hygiene Apply page.
- An overall college GPA of 2.75 or higher is required.
- If the student earned credits in the fall semester, official transcripts with these fall grades must be submitted to the Health Science Enrollment Manager by January 15 to complete the application.

- All applicants will be notified of their dental hygiene program application status via US mail on or before April 30 of each year.
- Applicants who are not accepted into the dental hygiene program and have met the application requirements will be placed on an alternate list.
- Applicants who were placed on the alternate list and were not accepted into the program will need to meet all requirements and reapply for admission into the program the following year.

### Professional Licensure/Certification Disclosure

The AS in Dental Hygiene prepares students to take the written National Dental Hygiene board exam and the Central Regional Dental Services practice exam, which are the licensing exams to become a licensed Dental Hygienist in Minnesota. Students are eligible for licensure in Minnesota as well as other states. Here are the [states accepting Central Regional Testing Services examination results](#), where Normandale Dental Hygiene graduates are eligible for initial licensure via taking these two examinations.

Effective July 1, 2020 the U.S. Department of Education implemented regulation 34 CFR 668.43 (a) (5) (v)) which requires our Associate Degree Program in Dental Hygiene to provide:

1. A list of all states/jurisdictions where the institution's curriculum meets state educational requirements for professional licensure or certification;
2. A list of all states/jurisdictions where the institution's curriculum does not meet state educational requirements for professional licensure or certification; and
3. A list of all states/jurisdictions where the institution has not made a determination of whether the curriculum meets educational requirements.

At this time, Normandale has not made a determination that our dental hygiene curriculum meets or does not meet state educational requirements for licensure or certification. Please contact the dental board for the state in which you would like to be licensed. Here is [a link to the American Association of Dental Boards' list of all state boards](#).

If you have questions, please contact the Health Sciences Enrollment Manager, [HealthSciences@normandale.edu](mailto:HealthSciences@normandale.edu), 952-358-8417.

## Dental Hygiene Application Requirements

The requirements below must be completed before the application deadline of December 31. A grade of C or higher is required for each course and all science courses must have labs. Any transfer courses must be evaluated as equivalent to the required course.

- ENGC 1101 College Writing 4 cr
- CHEM 1050 Foundations of Organic and Biochemistry 3 cr
- BIOL 2041 Human Anatomy 4 cr
- Eligible for college-level mathematics\*

Must show registration for the course in spring after the deadline if not already completed:

- BIOL 2042 Human Physiology\*\* 4 cr

Recommended to complete before the deadline:

- BIOL 2043 Microbiology\*\* 4 cr

\*College-level math eligibility requirement can be met by:

- Completion of college-level mathematics course with a grade of C or higher.
- Eligibility to take a college-level mathematics course (MATH 1080 Introduction to Statistics, MATH 1090 STATWAY Statistics 2, MATH 1095 STATWAY Statistics: Accelerated, MATH 1100 College Algebra or higher) at the time of the December 31 deadline through:
  - a. An active placement through the Normandale course placement process; expired placements will not be accepted.
  - b. Completion of an appropriate developmental math course (MATH 0630 or 0990) within 5 years of the December 31 admission deadline with a C, P or higher. Information on course placement can be found at: [www.normandale.edu/placement](http://www.normandale.edu/placement)

\*\*To be a more competitive applicant, students are strongly encouraged to complete BIOL 2042 Human Physiology, BIOL 2043 Microbiology, and Minnesota Transfer Curriculum Goal 4 Elective MATH 1080 Introduction to Statistics prior to application deadline.

## Additional Program Information

Visit [www.normandale.edu/academics/degrees-certificates/dental-hygiene/index.html](http://www.normandale.edu/academics/degrees-certificates/dental-hygiene/index.html). For further questions, please contact the Health Science Enrollment Manager, Kiara Taylor at [kiara.taylor@normandale.edu](mailto:kiara.taylor@normandale.edu) or call 952-358-8417.

## General Information

In addition to general fees and books, admitted dental hygiene students purchase uniforms, instruments, clinic supplies, software and textbooks. Each student is required to purchase dental professional liability insurance which is included in course fees each fall. Students will be required to pay additional fees to take the National Board Exam, Central Regional Clinical Board Exam and State Jurisprudence examination during the spring semester of the second year of study.

Due to the nature of the dental hygiene profession, students will be participating in a learning environment that has the potential of exposure to blood borne pathogens. Students accepted into the program are provided with written policies and instruction on infection control protocol to reduce the risk of disease transmission. The program complies with all institutional, local, state and federal policies. Policies and procedures on the dental hygiene program's infection control protocol are available to applicants upon request. All students must complete the following prior to entry in fall semester of the first year of study and must be maintained throughout enrollment in the program.

- Physical examination
- Immunizations
- Optical examination
- Successful Minnesota Department of Human Services background study
- HIPAA training
- Cardiopulmonary Resuscitation (CPR) for the health care provider

Students entering the Dental Hygiene program are expected to meet the Technical Standards for Entry-Level Dental Hygiene Programs. These technical standards are required abilities for effective performance in the Minnesota State dental hygiene education program. The standards are compatible with the scope of practice as defined by the Minnesota Board of Dentistry.

**Sequence of Courses**
**First Year Fall Semester - 13 Credits**

□ COMM 1111	Interpersonal Communication	3 cr
□ DENH 1112	Oral and Facial Anatomy	3 cr
□ DENH 1140	Pre-Clinic Theory	3 cr
□ DENH 1141	Pre-Clinic Skill Development	4 cr

**First Year Spring Semester - 18 Credits**

□ BIOL 2043	Microbiology	4 cr
□ DENH 1142	Clinic 1 Theory	2 cr
□ DENH 1143	Clinic 1	4 cr
□ DENH 1150	Dental Radiology	4 cr
□ DENH 1160	Dental Materials	2 cr
□ DENH 1162	Pharmacology for the Dental Hygienist	2 cr

**Summer Sessions 1 and 2 - 8 Credits**

□ PSYC 1110	Introduction to Psychology	4 cr
□ Electives MnTC Goal area 4, 6, 7, 8, 9, or 10		4 cr

**Second Year Fall Semester - 18 Credits**

□ DENH 2240	Clinic 2 Theory	2 cr
□ DENH 2241	Clinic 2	6 cr
□ DENH 2252	Clinical Radiology 1	1 cr
□ DENH 2263	Pain Management	2 cr
□ DENH 2264	Periodontics for the Dental Hygienist	2 cr
□ DENH 2266	General and Oral Pathology	2 cr
□ HLTH 1107	Principles of Nutrition	3 cr

**Second Year Spring Semester - 14 Credits**

□ DENH 2242	Clinic 3 Theory	2 cr
□ DENH 2243	Clinic 3	6 cr
□ DENH 2254	Clinical Radiology 2	1 cr
□ DENH 2281	Preventive Concepts in Community Dental Health	2 cr
□ SOC 1104	Introduction to Sociology	3 cr

**Additional Information**

For more information on Advanced Degrees, visit  
[www.normandale.edu/academics/degrees-certificates/dental-hygiene/degrees/index.html](http://www.normandale.edu/academics/degrees-certificates/dental-hygiene/degrees/index.html)

The Economics Transfer Pathway AA offers students a powerful option: the opportunity to complete an Associate of Arts degree with course credits that directly transfer to designated economics 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.

Economics provides new way to think about the world – an analytical mindset that is valuable in a wide variety of careers. It also helps people make better decisions in their private lives.

Students study how societies, businesses and individuals manage the scarce resources they have – and sometimes what the unintended consequences of their decisions are. In doing so, they learn to think more critically about issues we all face – not just commercial matters such as supply and demand, but also societal concerns such as government intervention, pollution control, and inequality.

Some economics majors become business or government analysts. But many graduates use this data-driven way of thinking to become successful in many fields, including business, law, medicine, government, nonprofit work and international relations.

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.

### Required Courses

Incorporate the following Required Courses into the General Education/Minnesota Transfer Curriculum or Additional Course Requirements sections below.

<input type="checkbox"/>	ECON 2201	Principles of Microeconomics	3 cr
<input type="checkbox"/>	ECON 2202	Principles of Macroeconomics	3 cr
<input type="checkbox"/>	MATH 1100	College Algebra	4 cr
		<i>Or any higher numbered MATH course for which 1100 is a prerequisite.</i>	

Complete **one** of the following four courses:

<input type="checkbox"/>	BUSN 2220	Statistics for Business and Economics	4 cr
<input type="checkbox"/>	MATH 1080	Introduction to Statistics	4 cr
<input type="checkbox"/>	MATH 1090	STATWAY Statistics 2	4 cr
<input type="checkbox"/>	MATH 1095	STATWAY Statistics: Accelerated	4 cr

### General Education/Minnesota Transfer Curriculum (MnTC) – 40 Credits

\*See MnTC Curriculum for specific course options

- GOAL 1: COMMUNICATION – 2 COURSES  
 ENGC 1101  
 COMM 1101 or 1111 or 1121
- GOAL 2: CRITICAL THINKING  
 (met by completion of all 40 credits of the MnTC)
- GOAL 3: NATURAL SCIENCES – 2 COURSES  
**Select from two different departments; one must include a lab**  
 Course #1 \_\_\_\_\_  
 Course #2 \_\_\_\_\_
- GOAL 4: MATHEMATICAL/LOGICAL REASONING – 1 COURSE  
 Course met by taking required MATH courses

GOAL 5: HISTORY AND SOCIAL/BEHAVIORAL SCIENCES – 2 COURSES

**Select from two different departments**

- Course #1 met by taking required ECON courses  
 Course #2 \_\_\_\_\_

GOAL 6: HUMANITIES AND FINE ARTS – 2 COURSES

**Select from two different departments**

- Course #1 \_\_\_\_\_  
 Course #2 \_\_\_\_\_

GOAL 7: HUMAN DIVERSITY – 1 COURSE

- Course \_\_\_\_\_

GOAL 8: GLOBAL PERSPECTIVE – 1 COURSE

- Course met by taking required ECON courses

GOAL 9: ETHICAL AND CIVIC RESPONSIBILITY – 1 COURSE

- Course met by taking required ECON courses

GOAL 10: PEOPLE AND THE ENVIRONMENT – 1 COURSE

- Course \_\_\_\_\_

### Additional Course Requirements – 20 Credits

- One Health (HLTH) course.  
 One Exercise Science (EXSC) course.  
 Elective credits – additional course(s) numbered 1000 and above, if needed to complete the 60-credit requirement. *The department recommends taking at least one additional ECON course.*



**Other Degree Requirements**

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum cumulative grade point average (GPA) of 2.0 in the MnTC.
- Earn a minimum of 15 college-level credits at Normandale.

<b>Economics Transfer Pathway (AA)</b>		
needs placement into college level for ENGC 1101 and MATH 1100		
<i>Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.</i>		
	<b>Fall Semester</b>	<b>Spring Semester</b>
<b>1st year</b>	ENGC 1101 .....4cr	ECON 2202 (G5+8)..... 3cr
	COMM 1101, 1111 or 1121 ....3cr	MATH 1080 or BUSN 2220 .....4cr
	ECON 2201 (G5+9).....3cr	*MnTC Goal 6 .....3cr
	MATH 1100 (G4) .....4cr	MnTC Goal 5 (non ECON).....3cr
	EXSC elective .....1cr	HLTH elective.....3cr
	<b>TOTAL .....15cr</b>	<b>TOTAL .....16cr</b>
	<b>Fall Semester</b>	<b>Spring Semester</b>
<b>2nd year</b>	*MnTC Goal 3 .....3cr	*MnTC Goal 3 with lab .....4cr
	*MnTC Goal 6 .....3cr	MnTC Goal 10 .....3cr
	MnTC Goal 7 .....3cr	Electives .....3cr
	Elective .....3cr	Electives .....3cr
	Elective .....3cr	Electives .....1cr
	<b>TOTAL .....15cr</b>	<b>TOTAL .....14cr</b>
<i>*For MnTC Goal areas that require 2 courses, they must come from 2 different departments</i>		

The Elementary Education Foundations Transfer Pathway AS offers students a powerful option: the opportunity to complete an Associate of Science degree with course credits that directly transfer to designated elementary education 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.

Individuals who have been arrested, charged or convicted of any criminal offense should investigate the impact that the arrest, charge or conviction may have on their chances of employment in the field they intend to study or on their chances to obtain federal, state and other higher education financial aid.

### Required Courses – 60 Credits

<input type="checkbox"/>	ART 1101	The Visual Arts	3 cr
<input type="checkbox"/>	BIOL 1100	Survey of Biology	4 cr
<input type="checkbox"/>	COMM 1101	Fundamentals of Public Speaking <i>(Grade of B or higher is required)</i>	3 cr
<input type="checkbox"/>	EDUC 1101	Introduction to Education <i>(Grade of C or higher is required)</i>	4 cr
<input type="checkbox"/>	EDUC 2101	Educational Technology	3 cr
<input type="checkbox"/>	EDUC 2222	Multicultural Education and Human Relations in Schools	3 cr
<input type="checkbox"/>	EDUC 2223	Foundations of Instruction	2 cr
<input type="checkbox"/>	ENGC 1101	College Writing <i>(Grade of B or higher is required)</i>	4 cr
<input type="checkbox"/>	GEOG 1121	World Regional Geography	3 cr
<input type="checkbox"/>	HIST 1111	United States History 1	4 cr
<input type="checkbox"/>	HLTH 1106	Drug Use and Abuse	3 cr
<input type="checkbox"/>	MATH 1055	Elements of Mathematics 1	4 cr
<input type="checkbox"/>	MATH 1065	Elements of Mathematics 2	4 cr
<input type="checkbox"/>	PHYS 1001	Energy, Climate & Physics in Society	3 cr
<input type="checkbox"/>	PHYS 1002	Energy, Climate & Physics in Society Laboratory	1 cr
<input type="checkbox"/>	PSYC 1109	Child and Adolescent Development <i>(Grade of C or higher is required)</i>	3 cr
<input type="checkbox"/>	THTR 1151	Acting 1	3 cr
<input type="checkbox"/>	Complete one course from MnTC Goal 10		3 cr
<input type="checkbox"/>	Complete additional courses to reach 60 credits total. <i>The department recommends the following courses.</i>		
	EDUC 2408	Individuals with Diverse and Exceptional Needs	4 cr
	ENGL 2060	Children's and Young Adult Literature	3 cr
	ENGT 1050	Bridging Engineering and Education	3 cr
	SPAN/EDUC 1120	Spanish for Educators 1	3 cr

### Other Degree Requirements

- Complete required 30 field work hours
- Demonstrate expected standards in Professional Disposition
- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum of 15 college-level credits at Normandale.

*Coursework in this degree program satisfies the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit.*

Elementary Education Foundations Transfer Pathway (AS)		
needs placement into college level for ENGC 1101 and MATH 1055 <i>Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.</i>		
1st year	Fall Semester	Spring Semester
	ENGC 1101 .....4cr	EDUC 2223 .....2cr
	EDUC 1101 .....4cr	BIOL 1100 (G3L).....4cr
	ART 1101 (G6+8).....3cr	MATH 1065 (G4).....4cr
	MATH 1055 (G4).....4cr	PSYC 1109 (G5).....3cr
<b>TOTAL .....15cr</b>	<b>THTR 1151 (G6).....3cr</b>	
	<b>TOTAL .....16cr</b>	
2nd year	Fall Semester	Spring Semester
	EDUC 2101 .....3cr	EDUC 2222 .....3cr
	HIST 1111 (G5+7) .....4cr	COMM 1101 .....3cr
	HLTH 1106 .....3cr	GEOG 1121 (G5+8) .....3cr
	PHYS 1001 & 1002 (G3L+9).....4cr	MNTC Goal 10 .....3cr
	<b>TOTAL .....14cr</b>	ENGT 1050, SPAN 1120, OR EDUC 2408.....3cr
	<b>TOTAL .....15cr</b>	

Engineers identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics in fields as diverse as computer hardware and software, assistive technology, medical technology, infrastructure, and defense systems. They produce solutions that consider public safety and welfare, as well as environmental and economic factors. They develop and conduct experiments and analyze the results. Engineers work effectively on teams and communication with a broad range of audiences. The Associate of Science in Engineering Broad Field from Normandale ensures that students have the foundation and prerequisites to complete a bachelor's degree at a transfer institution in wide range of engineering disciplines. Our students transfer to four-year programs regionally and nationwide.

To complete the AS in Engineering Foundations at Normandale, students must:

1. Select the university to which you plan to transfer and select an engineering specialty offered at that university (such as Civil, Chemical, Mechanical, etc.).
2. Develop a coursework plan that includes all the requirements listed below.
3. Apply to graduate during their final semester at Normandale.

### Core Courses – 47 Credits

- MATH 1510 Calculus 1 5 cr
- MATH 1520 Calculus 2 5 cr
- MATH 2510 Calculus 3: Multivariable Calculus 5 cr
- MATH 2520 Calculus 4: Differential Equations with Linear Algebra 5 cr
- PHYS 1121 Physics 1 for Scientists and Engineers 5 cr
- PHYS 1122 Physics 2 for Scientists and Engineers 5 cr
- CHEM 1061 Principles of Chemistry 1 5 cr

- Select a minimum of 4 courses and 12 credits from a single Engineering Specialty 12 cr  
(e.g. civil, computer, electrical, general, mechanical, etc.)  
from the table below:

- Course #1 \_\_\_\_\_
- Course #2 \_\_\_\_\_
- Course #3 \_\_\_\_\_
- Course #4 \_\_\_\_\_

#### Key for Engineering Degrees:

- CIV Civil Engineering
- COM Computer Engineering
- ELEC Electrical Engineering
- ENV Environmental Engineering
- GEN General Engineering
- MECH Mechanical Engineering
- MANU Manufacturing Engineering
- COMP Composite Engineering

#### Key for Engineering Specialty Table:

- A See advisor/counselor to confirm course transfer to a university program
- R Required university program course

*This is a general guide. Please check with your academic advisor and transfer advisor.*

CIV	COM	ELEC	ENV	GEN	MECH	MANU	COMP	COURSE	CR
A	A	A	R	R	R	A	R	ENGR 1020 Intro to Engineering	4
	R	R	R	R	R	A	R	Computer Programming*	3
R		A	R	R	R	R	R	ENGR 2235 Statics	3
R		A	R	R	R	R	R	ENGR 2236 Dynamics	3
R				R	R	R	R	ENGR 2331 Deformable Body Mechanics	3
R		A	A	A	R	A	A	ENGR 2231 Thermodynamics	3
	R	R		R	R	R	R	ENGR 2015 Linear Circuit Analysis	4
								ENGR 2016 Steady-State Circuit Analysis	1
	R	R						ENGR 2115 Introduction to Analog and Digital Electronics	5
	R	R			A			ENGR 2301 Intro to Digital Systems Design A	2
	R	R			A			ENGR 2302 Intro to Digital Systems Design B	2
	A		A		A	A	A	MATH 2400 Probability & Statistics w/Calculus	4
A	A	A	R	A	A	A	R	CHEM 1062 Principles of Chemistry 2	5
			R				R	CHEM 2061 & 2062 Organic Chemistry 1 & 2	10

\* CSCI 1113 is typically recommended for all specialties except Computer Engineering. Consult a transfer advisor at the intended transfer university to confirm appropriate course.

### Additional Required Courses – 13 Credits

- ENGC 1101 College Writing 4 cr
- Complete **two** courses that satisfy MnTC Goals 5 and 6. One of these courses must also satisfy at least one of the following MnTC Goal areas: 7, 8, 9 or 10. 6 cr
- Complete elective course to reach a minimum of 60 credits selected from courses that fulfill requirements at the desired transfer institution.

Some transfer programs have specific course requirements. Electives can be additional required engineering courses (recommended) or additional general education courses. Consult with an advisor or counselor for guidance on course selection.

### Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum cumulative grade point average (GPA) of 2.0 in the MnTC.
- Earn a minimum of 15 college-level credits at Normandale.

Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report.

### University Admissions and Graduation Requirements

This degree has an articulation agreement with Minnesota State University, Mankato; St. Cloud State University; Winona State University; University of Minnesota; University of Minnesota, Duluth and any System college approved to offer the Associate of Science in Engineering Broad Field degree program. These schools have agreed that:

- All MnTC courses listed above and required (R) Engineering Specialty courses below will transfer and count toward university baccalaureate degree program requirements.
- Completion of the Associate of Science in Engineering Broad Field degree does not guarantee admission to a baccalaureate degree program.
- Students must meet university admission requirements and degree program admission requirements.
- Baccalaureate engineering degree programs may have limited enrollment capacity with seats available on a competitive basis.
- Students accepted into a university must fulfill the baccalaureate program graduation requirements.

Engineering Broad Field (AS)		
needs placement into college level for ENGC 1101 and MATH 1510		
<i>Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.</i>		
1st year	<b>Fall Semester</b>	<b>Spring Semester</b>
	ENGC 1101 .....4cr	MATH 1520 .....5cr
	MATH 1510 .....5cr	PHYS 1121 .....5cr
	CHEM 1061 .....5cr	ENGR elective for specialty.....4cr
	<b>TOTAL ..... 14cr</b>	<b>TOTAL ..... 14cr</b>
2nd year	<b>Fall Semester</b>	<b>Spring Semester</b>
	MATH 2510 .....5cr	MATH 2520 .....5cr
	PHYS 1122 .....5cr	ENGR elective for specialty.....4cr
	ENGR elective for specialty .....3cr	*MNTC GOAL 5 .....4cr
	ENGR elective for specialty .....3cr	*MNTC GOAL 6 .....3cr
	<b>TOTAL ..... 16cr</b>	<b>TOTAL ..... 16cr</b>
<i>*One of the above MNTC courses must also satisfy MNTC GOAL 7, 8, 9 or 10</i>		

The English Transfer Pathway AA offers students a powerful option: the opportunity to complete an Associate of Arts degree that directly transfers to a designated English bachelor's degree program at Minnesota State universities. The curriculum has been designed so that students completing this pathway and transferring to one of the seven Minnesota State universities enter the university with junior-year status. Students must take one course from each of four designated content areas: introduction to literary studies, a literature survey course, a diverse literature course, and a writing for a specific purpose course. Within the last three content areas, students at Normandale can choose from several possible courses. Four credits will transfer into at least one track (though, at each receiving school's discretion, possibly more than one) of the receiving institution's English major. Those four credits may be applied directly to a required major course when applicable at a particular receiving school or as an elective course in the major.

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.

### Required Courses

*Incorporate the following Required Courses into the General Education/Minnesota Transfer Curriculum or Additional Course Requirements sections below.*

- ENGL 2000 Introduction to Literary Studies: Writing About Literature 3 cr

Complete **one** of the following four courses

- ENGL 2150 American Literature 1 4 cr
- ENGL 2151 American Literature 2 4 cr
- ENGL 2160 British Writers 1 4 cr
- ENGL 2161 British Writers 2 4 cr

Complete **one** of the following six courses

- ENGL 1130 Literature of Diversity 3 cr
- ENGL 1140 Gender and Literature 3 cr
- ENGL 1170 Modern World Literature 3 cr
- ENGL 2130 African American Literature 3 cr
- ENGL 2133 Native American Literature 3 cr
- ENGL 2174 African Literature 3 cr

Complete **one** of the following six courses

- ENGW 1111 Introduction to Creative Writing 3 cr
- ENGW 2112 Poetry Writing 3 cr
- ENGW 2113 Fiction Writing 3 cr
- ENGW 2114 Play and Screen Writing 3 cr
- ENGW 2115 Memoir/Non-Fiction Writing 3 cr
- ENGC 2102 Business and Technical Writing 3 cr

### General Education/Minnesota Transfer Curriculum (MnTC) – 40 Credits

\*See MnTC Curriculum for specific course options

- GOAL 1: COMMUNICATION – 2 COURSES
  - ENGC 1101
  - COMM 1101 or 1111
- GOAL 2: CRITICAL THINKING  
(Met by completion of all 40 credits of the MnTC)
- GOAL 3: NATURAL SCIENCES – 2 COURSES  
**Select from two different departments; one must include a lab**
  - Course #1 \_\_\_\_\_
  - Course #2 \_\_\_\_\_
- GOAL 4: MATHEMATICAL/LOGICAL REASONING – 1 COURSE
  - Course \_\_\_\_\_

- GOAL 5: HISTORY AND SOCIAL/BEHAVIORAL SCIENCES – 2 COURSES

**Select from two different departments**

- Course #1 \_\_\_\_\_
- Course #2 \_\_\_\_\_

- GOAL 6: HUMANITIES AND FINE ARTS- 2 COURSES  
Met by taking required ENGW and ENGL courses.

- GOAL 7: HUMAN DIVERSITY – 1 COURSE
  - Course – met by taking required ENGL course

- GOAL 8: GLOBAL PERSPECTIVE – 1 COURSE
  - Course \_\_\_\_\_

- GOAL 9: ETHICAL AND CIVIC RESPONSIBILITY – 1 COURSE
  - Course \_\_\_\_\_

- GOAL 10: PEOPLE AND THE ENVIRONMENT – 1 COURSE
  - Course \_\_\_\_\_

### Additional Course Requirements – 7 Credits

- One Health (HLTH) course.
- One Exercise Science (EXSC) course.
- Elective credits – additional course(s) numbered 1000 and above, if needed to complete the 60-credit requirement *The department highly recommends that students fulfill these remaining credits with courses emphasizing an area of literature not addressed via the above requirements and/or courses that emphasize writing that requires research and MLA citation. For example, these may include writing intensive literature courses and/or advanced composition courses. Also, students planning to transfer into a specific English track, such as creative writing, at the receiving institution may fulfill these 7 credits with classes specifically aimed at that specific track.*

### Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum cumulative grade point average (GPA) of 2.0 in the MnTC.
- Earn a minimum of 15 college-level credits at Normandale.

English Transfer Pathway (AA)		
needs placement into college level for ENGC 1101		
<i>Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.</i>		
1st year	Fall Semester	Spring Semester
	ENGC 1101 .....4cr	ENGL 2000.....3cr
	COMM 1101 or 1111 .....3cr	ENGL2150, 2151, 2160 or 2161 (G6).....4cr
	MNTC Goal 4 .....3cr	*MNTC Goal 3 .....3cr
	*MNTC Goal 5 .....3cr	*MNTC Goal 5 .....4cr
TOTAL ..... 13cr	EXSC elective ..... 1cr	
		TOTAL ..... 15cr
2nd year	Fall Semester	Spring Semester
	ENGL 1130, 1140, 1170, 2130, 2133 or 2174 .....3cr	ENGL 1111, 2112, 2113, 2114 or 2115 (G6).....3cr
	*MNTC Goal 3 with lab .....4cr	MNTC Goal 10 .....3cr
	MNTC Goal 7 .....3cr	HLTH elective.....3cr
	MNTC Goal 8 .....3cr	Electives .....3cr
	MNTC Goal 9 .....3cr	Electives .....3cr
	TOTAL ..... 16cr	Electives ..... 1cr
	TOTAL ..... 16cr	
<i>*For MNTC Goal areas that require 2 courses, they must come from 2 different departments</i>		

The Exercise Science Transfer Pathway AS offers students a powerful option: the opportunity to complete an Associate of Science degree with course credits that directly transfer to designated Exercise Science 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.

Students obtaining the Exercise Science degree will have a strong working knowledge of exercise and sport physiology, applied kinesiology and positive behavior change. This degree incorporates active classroom learning. These skills are emphasized to prepare students for future performance and therapeutic applications.

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.

### Core Courses – 17 Credits

<input type="checkbox"/> EXSC 1129	Fitness for Life I	2 cr
<input type="checkbox"/> EXSC 1200	Beginning Weight Training	1 cr
<input type="checkbox"/> EXSC 2300	Introduction to Exercise Science	3 cr
<input type="checkbox"/> EXSC 2305	Exercise Physiology	3 cr
<input type="checkbox"/> EXSC 2310	Foundations of Personal Training	3 cr
<input type="checkbox"/> EXSC 2315	Exercise Prescription	3 cr
<input type="checkbox"/> EXSC 2330	Applications of Personal Training	2 cr

### Additional Required Courses – 43 Credits

<input type="checkbox"/> ENGC 1101	College Writing	4 cr
<input type="checkbox"/> BIOL 1501	Principles of Biology 1	5 cr
<input type="checkbox"/> BIOL 2041	Human Anatomy	4 cr
<input type="checkbox"/> BIOL 2042	Human Physiology	4 cr
<input type="checkbox"/> CHEM 1050	Foundations of Organic and Biochemistry	3 cr
<input type="checkbox"/> HLTH 1107	Principles of Nutrition	3 cr
<input type="checkbox"/> PSYC 1110	Introduction to Psychology	4 cr

Complete **one** of the following four courses:

<input type="checkbox"/> COMM 1100	Introduction to Communication	3 cr
<input type="checkbox"/> COMM 1101	Fundamentals of Public Speaking	3 cr
<input type="checkbox"/> COMM 1111	Interpersonal Communication	3 cr
<input type="checkbox"/> COMM 1121	Small Group Communication	3 cr

Complete **one** of the following three courses:

<input type="checkbox"/> MATH 1080	Introduction to Statistics	4 cr
<input type="checkbox"/> MATH 1090	STATWAY Statistics 2	4 cr
<input type="checkbox"/> MATH 1095	STATWAY Statistics: Accelerated	4 cr

Complete one course from MnTC Goal 5 (non-PSYC course) 3-4 cr

Complete two courses from two different MnTC Goal Areas: 7, 8, 9 or 10 6 cr

### Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum of 15 college-level credits at Normandale.
- Elective credits – additional course(s) numbered 1000 and above, if needed to complete the 60 credit requirement

*Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report.*

Exercise Science Transfer Pathway (AS)			
needs placement into college level for ENGC 1101 and MATH <i>Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.</i>			
1st year	Fall Semester	Spring Semester	
	ENGC 1101 .....4cr	BIOL 2041 .....4cr	
	EXSC 2300 .....3cr	EXSC 1200 .....1cr	
	EXSC 2305 .....3cr	EXSC 2310 .....3cr	
	EXSC 1129 .....2cr	EXSC 2330 .....2cr	
CHEM 1050 .....3cr	EXSC 2315 .....3cr		
<b>TOTAL</b> .....15cr	HLTH 1107 .....3cr		
	<b>TOTAL</b> .....16cr		
2nd year	Fall Semester	Spring Semester	
	BIOL 2042 .....4cr	BIOL 1501 .....5cr	
	MNTC Goal 1 COMM .....3cr	MNTC Goal 5 (non PSYC) .....3cr	
	MATH 1080, 1090 or 1095 .....4cr	MNTC Goal 7, 8, 9 or 10 .....6cr	
	PSYC 1110 .....4cr	<b>TOTAL</b> .....14cr	
<b>TOTAL</b> .....15cr			



The Exercise Specialist Certificate includes Exercise Science courses that provide comprehensive curriculum designed to prepare students to successfully participate in the American College of Sports Medicine (ACSM) Certified Personal Training Examination and enter the workforce as a personal trainer working with generally healthy populations. The Exercise Specialist Certificate is recognized as a "career laddering" opportunity for our students to encourage further retention of degree completion while students gain additional credentials to professionally compete for careers within the fitness industry.

### **Required Courses – 12 Credits**

Complete each of the following courses with a grade of C or higher.

<input type="checkbox"/> EXSC 2300	Introduction to Exercise Science	3 cr
<input type="checkbox"/> EXSC 2305	Exercise Physiology	3 cr
<input type="checkbox"/> EXSC 2310	Foundations of Personal Training	3 cr
<input type="checkbox"/> EXSC 2315	Exercise Prescription	3 cr

### **Other Certificate Requirements**

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn at least one third of the required certificate credits from Normandale.

Family relationships tend to pervade all aspects of our personal and professional lives. Consequently, the systematic study of these relationships can serve to improve our lives. They can also help us to better understand the lives of others. This certificate is intended to provide a foundation for all of these desirable outcomes.

The Family Studies Certificate offers students foundational coursework in preparation to transfer to a four-year college in the area of Family Studies. Or it offers students a credential to find employment in areas associated with Family Studies. While not a required credential for students who work in areas associated with Family Studies, it quickly communicates a relevant background to prospective employers. Students will gain knowledge from various fields of study by completing this certificate.

### Required Courses – 18 Credits

<input type="checkbox"/>	COMM 2111	Family Communication	3 cr
<input type="checkbox"/>	HIST 1131	Family: Sex/Gender/Power: A Cross-Cultural, Historical Perspective	3 cr
<input type="checkbox"/>	SOC 1102	Love, Sex and Family	3 cr
<input type="checkbox"/>	SOC 2114	Families in Crisis	3 cr

### Other Certificate Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn at least one third of the required certificate credits from Normandale.

Complete **two** of the following six courses:

<input type="checkbox"/>	ANTH/SOC/ WMST 1120	Introduction to Women's Studies and Gender Studies	3 cr
<input type="checkbox"/>	ANTH/SOC/ WMST 1121	Women Across Cultures	3 cr
<input type="checkbox"/>	SOC 1115	Sociology of Sex and Gender Roles	3 cr
<input type="checkbox"/>	PSYC 1109	Child and Adolescent Development	3 cr
<input type="checkbox"/>	PSYC 1220	Psychology of Adulthood and Aging	3 cr
<input type="checkbox"/>	HIST 2111	Lesbian, Gay, Bisexual, and Transgender U.S. History	3 cr

Certificates in Hospitality and Tourism may be completed by students working towards an AAS in Hospitality Management. The certificates are also appropriate for students looking to gain knowledge in the hospitality and tourism industry, to either change careers or obtain leadership skills towards a promotion within the industry. At least one-third of the credits required for these certificates must be completed at Normandale.

**Required Courses – 18 Credits**

- |                                    |  |      |
|------------------------------------|--|------|
| <input type="checkbox"/> HSMA 1103 | Introduction to Hospitality and Tourism Management | 4 cr |
| <input type="checkbox"/> HSMA 2144 | Food/Beverage Management and Cost Control          | 4 cr |
| <input type="checkbox"/> HSMA 2150 | Revenue Management in Hospitality and Tourism      | 4 cr |
| <input type="checkbox"/> HSMA 2173 | Convention and Meeting Planning Management         | 4 cr |

Complete **one** of the following two courses:

- |                                    |                                   |        |
|------------------------------------|-----------------------------------|--------|
| <input type="checkbox"/> HSMA 2096 | Hospitality Management Internship | 2-4 cr |
| <input type="checkbox"/> HSMA 2097 | Senior Hospitality Internship     | 4 cr   |

**Other Certificate Requirements**

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn at least one third of the required certificate credits from Normandale.

The Associate of Science in Food Service is designed to prepare students for transfer as juniors to a four-year program in food science. It is the basis of a transfer agreement that facilitates credit transfer from Normandale to the College of Food, Agriculture and Natural Resource Sciences (CFANS) at the University of Minnesota. Students who complete the AS may apply a minimum of 60 credits toward the bachelor's degree.

Food scientists and technologists use chemistry, microbiology, engineering, and other sciences to study the principles underlying the processing and deterioration of food; analyze food content; discover new food sources; make processed foods safe, palatable, and healthful; and determine the best ways to process, package, preserve, store and distribute food.

### Core Courses – 30 Credits

<input type="checkbox"/>	FSCI 2100	Introduction to Food Science	3 cr
<input type="checkbox"/>	MATH 1080	Introduction to Statistics	4 cr
<input type="checkbox"/>	HLTH 1107	Principles of Nutrition	3 cr
<input type="checkbox"/>	CHEM 1061	Principles of Chemistry 1	5 cr
<input type="checkbox"/>	CHEM 1062	Principles of Chemistry 2	5 cr
<input type="checkbox"/>	CHEM 2061	Organic Chemistry 1	5 cr
<input type="checkbox"/>	CHEM 2062	Organic Chemistry 2	5 cr

### Additional Required Courses – 30 Credits

<input type="checkbox"/>	ENGC 1101	College Writing	4 cr
<input type="checkbox"/>	COMM 1101	Fundamentals of Public Speaking	3 cr
<input type="checkbox"/>	MATH 1400	Survey of Calculus	4 cr
<input type="checkbox"/>	BIOL 1501	Principles of Biology 1	5 cr
<input type="checkbox"/>	PHYS 1121	Physics 1 for Scientists and Engineers	5 cr
<input type="checkbox"/>	Complete 9 additional credits from MnTC Goal areas 5, 6, 7, 8, 9 or 10 to reach 30 credits total in the MnTC		9 cr

### Other Degree Requirements

*If needed, complete additional courses to reach 60 college-level credits total.*

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum of 15 college-level credits at Normandale.

*Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report*

Food Science (AS)		
needs placement into college level for ENGC 1101 and MATH 1510		
<i>Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.</i>		
1st year	<b>Fall Semester</b>	<b>Spring Semester</b>
	ENGC 1101 .....4cr	CHEM 1062..... 5cr
	CHEM 1061.....5cr	HLTH 1107 .....3cr
	MATH 1400 ..... 5cr	COMM 1101 ..... 3cr
	<b>TOTAL ..... 14cr</b>	**PHYS 1121 ..... 5cr
		<b>TOTAL ..... 16cr</b>
2nd year	<b>Fall Semester</b>	<b>Spring Semester</b>
	CHEM 2061 5cr	CHEM 2062..... 5cr
	BIOL 1501 .....5cr	FSCI 2100 ..... 3cr
	MATH1080, 1090, or 1095 .....4cr	*MNTC GOAL 5, 6, 7, 8, 9 or 10..8cr
	<b>TOTAL ..... 14cr</b>	<b>TOTAL ..... 16cr</b>
*See Catalog for elective credits to reach 30 MNTC credits		
**See Advisor for questions prerequisite for PHYS 1121		

Through the Normandale French program students work towards linguistic proficiency and cultural competence in a language spoken in over 50 countries. The study of French provides global insight as France’s foundational contributions to political, scientific, and artistic thought continue to shape our world. The Normandale program focuses on both France and Francophone regions. Knowledge of French is useful in many professional fields, including international business, global health, and science.

### Required Courses

*Incorporate the following Required Courses into the General Education/Minnesota Transfer Curriculum or Additional Course Requirements sections below.*

- FREN 1111 French Culture and Civilization 3 cr
- FREN 1200 Beginning French 2 5 cr
- FREN 2100 Intermediate French 1 5 cr
- FREN 2200 Intermediate French 2 5 cr

### General Education/Minnesota Transfer Curriculum (MnTC) – 40 Credits

\*See MnTC Curriculum for specific course options

- GOAL 1: COMMUNICATION – 2 COURSES
  - ENGC 1101
  - COMM 1100 or 1101 or 1111 or 1121
- GOAL 2: CRITICAL THINKING  
(met by completion of all 40 credits of the MnTC)
- GOAL 3: NATURAL SCIENCES – 2 COURSES  
**Select from two different departments; one must include a lab**
  - Course #1 \_\_\_\_\_
  - Course #2 \_\_\_\_\_
- GOAL 4: MATHEMATICAL/LOGICAL REASONING - 1 COURSE
  - Course \_\_\_\_\_
- GOAL 5: HISTORY AND SOCIAL/BEHAVIORAL SCIENCES – 2 COURSES  
**Select from two different departments**
  - Course #1 \_\_\_\_\_
  - Course #2 \_\_\_\_\_
- GOAL 6: HUMANITIES AND FINE ARTS- 2 COURSES  
**Select from two different departments**
  - Course #1 met by taking required FREN courses
  - Course #2 \_\_\_\_\_
- GOAL 7: HUMAN DIVERSITY – 1 COURSE
  - Course \_\_\_\_\_
- GOAL 8: GLOBAL PERSPECTIVE – 1 COURSE
  - Course met by taking required FREN courses

- GOAL 9: ETHICAL AND CIVIC RESPONSIBILITY – 1 COURSE
  - Course \_\_\_\_\_
- GOAL 10: PEOPLE AND THE ENVIRONMENT – 1 COURSE
  - Course \_\_\_\_\_

### Additional Course Requirements – 20 Credits

- One Health (HLTH) course.
- One Exercise Science (EXSC) course.
- Elective credits – additional course(s) numbered 1000 and above, if needed to complete the 60 credit requirement

### Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum cumulative grade point average (GPA) of 2.0 in the MnTC.
- Earn a minimum of 15 college-level credits at Normandale.

French Emphasis (AA)		
needs placement into college level for ENGC 1101 and FREN 1200 <i>Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.</i>		
	Fall Semester	Spring Semester
1st year	ENGC 1101 .....4cr	FREN 1200 .....5cr
	MNTC Goal 1 COMM .....3cr	MNTC Goal 4 .....3cr
	FREN 1111 .....3cr	*MNTC Goal 5 .....3cr
	*MNTC Goal 3 with lab .....4cr	*MNTC Goal 6 (non FREN).....3cr
	EXSC elective .....1cr	HLTH elective.....2cr
	<b>TOTAL .....15cr</b>	<b>TOTAL .....16cr</b>
	Fall Semester	Spring Semester
2nd year	FREN 2100 .....5cr	FREN 2200 .....5cr
	*MNTC Goal 3 .....3cr	*MNTC Goal 5 .....3cr
	MNTC Goal 5 .....4cr	MNTC Goal 10 .....3cr
	MNTC Goal 9 .....3cr	Electives .....3cr
	<b>TOTAL .....15cr</b>	<b>TOTAL .....14cr</b>
	<p><i>*For MNTC Goal areas that require 2 courses, they must come from 2 different departments</i></p> <p><i>If you are not starting at FREN 1200, we recommend that you consult with your academic advisor for a modified plan.</i></p>	

Completing an AA in Geography gives you the background to interpret the complex relationships between people and their environment. Geographers interpret patterns of social, economic, and political activity on Earth, as they seek to understand variations in those human/environment relationships. This program provides the foundation and skills to transfer to a four-year institution to complete a degree and pursue a career in geography.

### Required Courses

Incorporate the following Required Courses into the General Education/Minnesota Transfer Curriculum or Additional Course Requirements sections below.

- GEOG 1101 Earth's Natural Environments 4 cr
- GEOG 1102 Human Geography 3 cr

Complete at least **two** of the following seven courses for a total of at least 6 credits:

- GEOG 1104 Resources, Society and Environment 3 cr
- GEOG 1121 World Regional Geography 3 cr
- GEOG 1125 Geography of the United States and Canada 3 cr
- GEOG 1170 Cities 3 cr
- GEOG 1172 Introductory Meteorology 4 cr
- GEOG 1900 Topics in Geography 1-4 cr

### General Education/Minnesota Transfer Curriculum (MnTC) – 40 Credits

\*See MnTC Curriculum for specific course options

- GOAL 1: COMMUNICATION – 2 COURSES**
- ENGC 1101
  - COMM 1100 or 1101 or 1111 or 1121
- GOAL 2: CRITICAL THINKING**  
(met by completion of all 40 credits of the MnTC)
- GOAL 3: NATURAL SCIENCES – 2 COURSES**  
**Select from two different departments; one must include a lab**
- Course #1 met by taking required GEOG courses
  - Course #2 \_\_\_\_\_
- GOAL 4: MATHEMATICAL/LOGICAL REASONING – 1 COURSE**
- Course \_\_\_\_\_
- GOAL 5: HISTORY AND SOCIAL/BEHAVIORAL SCIENCES – 2 COURSES**  
**Select from two different departments**
- Course #1 met by taking required GEOG courses
  - Course #2 \_\_\_\_\_
- GOAL 6: HUMANITIES AND FINE ARTS – 2 COURSES**  
**Select from two different departments**
- Course #1 \_\_\_\_\_
  - Course #2 \_\_\_\_\_
- GOAL 7: HUMAN DIVERSITY – 1 COURSE**  
*Can be met by taking GEOG 1125 or 1170*
- Course \_\_\_\_\_
- GOAL 8: GLOBAL PERSPECTIVE – 1 COURSE**
- Course met by taking required GEOG courses

- GOAL 9: ETHICAL AND CIVIC RESPONSIBILITY – 1 COURSE**  
*Can be met by taking GEOG 1170*
- Course \_\_\_\_\_

- GOAL 10: PEOPLE AND THE ENVIRONMENT – 1 COURSE**
- Course met by taking required GEOG courses

### Additional Course Requirements – 20 Credits

- One Health (HLTH) course.
- One Exercise Science (EXSC) course.
- Elective credits – additional course(s) numbered 1000 and above, if needed to complete the 60-credit requirement

### Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum cumulative grade point average (GPA) of 2.0 in the MnTC.
- Earn a minimum of 15 college-level credits at Normandale.

Geography Emphasis (AA)		
needs placement into college level for ENGC 1101		
<i>Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.</i>		
	Fall Semester	Spring Semester
1st year	ENGC 1101 .....4cr	GEOG 1102 (G5+8) .....3cr
	MNTC Goal 1 COMM.....3cr	MNTC Goal 4 .....3cr
	GEOG 1101 (G3L+10).....4cr	*MNTC Goal 6 .....3cr
	*MNTC Goal 6 .....3cr	MNTC Goal 5 (non GEOG).....3cr
	EXSC elective .....1cr	HLTH elective.....3cr
	<b>TOTAL ..... 15cr</b>	<b>TOTAL ..... 15cr</b>
	Fall Semester	Spring Semester
2nd year	GEOG 1172 (G3L+10) (see catalog, "Required Courses" for choices) .....4cr	GEOG 1121 (G5+8)-see catalog, "Required Courses" for choices) .....3cr
	*MNTC Goal 3 (non GEOG) .....3cr	Electives .....3cr
	MNTC Goal 9 .....3cr	Electives .....3cr
	MNTC Goal 7 .....3cr	Electives .....3cr
	Electives .....2cr	Electives .....3cr
	<b>TOTAL ..... 15cr</b>	<b>TOTAL ..... 15cr</b>
<i>*For MNTC Goal areas that require 2 courses, they must come from 2 different departments</i>		

Through the German program at Normandale, students work toward linguistic proficiency and cultural competence in a language spoken by over 100,000,000 people in the world’s fourth largest economy. Germany is the world’s foremost country in developing and using cutting-edge green technology, the economic engine of the European Union and the US’s second largest trading partner.

The study of German provides not just global insight, but a deep awareness and appreciation for the foundational contributions of the German-speaking areas in scientific, philosophical, political, humanitarian and artistic thought that have shaped, and continue to influence, our world. This program focuses not just on the German-speaking areas in Europe, but worldwide. Knowledge of German is useful in many professional fields, including international business, the sciences, green technology, the hospitality industry, music, and more.

Emphasis requirements may also be used to satisfy the Minnesota Transfer Curriculum (MnTC) Goal requirements.

### Required Courses

*Incorporate the following Required Courses into the General Education/Minnesota Transfer Curriculum or Additional Course Requirements sections below.*

- |                                    |                                 |      |
|------------------------------------|---------------------------------|------|
| <input type="checkbox"/> GERM 1111 | German Culture and Civilization | 3 cr |
| <input type="checkbox"/> GERM 1200 | Beginning German 2              | 5 cr |
| <input type="checkbox"/> GERM 2100 | Intermediate German 1           | 5 cr |
| <input type="checkbox"/> GERM 2200 | Intermediate German 2           | 5 cr |

### General Education/Minnesota Transfer Curriculum (MnTC) – 40 Credits

\*See MnTC Curriculum for specific course options

- GOAL 1: COMMUNICATION – 2 COURSES**  
 ENGC 1101  
 COMM 1100 or 1101 or 1111 or 1121
- GOAL 2: CRITICAL THINKING**  
 (met by completion of all 40 credits of the MnTC)
- GOAL 3: NATURAL SCIENCES – 2 COURSES**  
**Select from two different departments; one must include a lab**  
 Course #1 \_\_\_\_\_  
 Course #2 \_\_\_\_\_
- GOAL 4: MATHEMATICAL/LOGICAL REASONING – 1 COURSE**  
 Course \_\_\_\_\_
- GOAL 5: HISTORY AND SOCIAL/BEHAVIORAL SCIENCES – 2 COURSES**  
**Select from two different departments**  
 Course #1 \_\_\_\_\_  
 Course #2 \_\_\_\_\_
- GOAL 6: HUMANITIES AND FINE ARTS- 2 COURSES**  
**Select from two different departments**  
 Course #1 met by taking required GERM courses  
 Course #2 \_\_\_\_\_
- GOAL 7: HUMAN DIVERSITY – 1 COURSE**  
 Course \_\_\_\_\_
- GOAL 8: GLOBAL PERSPECTIVE – 1 COURSE**  
 Course met by taking required GERM courses

**GOAL 9: ETHICAL AND CIVIC RESPONSIBILITY – 1 COURSE**  
 Course \_\_\_\_\_

**GOAL 10: PEOPLE AND THE ENVIRONMENT – 1 COURSE**  
 Course \_\_\_\_\_

### Additional Course Requirements – 20 Credits

- One Health (HLTH) course.
- One Exercise Science (EXSC) course.
- Elective credits – additional course(s) numbered 1000 and above, if needed to complete the 60 credit requirement

### Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum cumulative grade point average (GPA) of 2.0 in the MnTC.
- Earn a minimum of 15 college-level credits at Normandale.

German Emphasis (AA)		
needs placement into college level for ENGC 1101 and GERM 1200 <i>Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.</i>		
	Fall Semester	Spring Semester
1st year	ENGC 1101 .....4cr MNTC Goal 1 COMM .....3cr GERM 1111 .....3cr *MNTC Goal 3 with lab.....4cr EXSC elective .....1cr <b>TOTAL .....15cr</b>	GERM 1200 .....5cr MNTC Goal 4 .....3cr *MNTC Goal 5 .....3cr *MNTC Goal 6 (non GERM).....3cr HLTH elective.....2cr <b>TOTAL .....16cr</b>
	Fall Semester	Spring Semester
2nd year	GERM 2100 .....5cr *MNTC Goal 3 .....3cr *MNTC Goal 5 .....4cr MNTC Goal 9 .....3cr <b>TOTAL .....15cr</b>	GERM 2200 .....5cr *MNTC Goal 5 .....3cr MNTC Goal 10 .....3cr Elective .....3cr <b>TOTAL .....14cr</b>
<i>*For MNTC Goal areas that require 2 courses, they must come from 2 different departments</i>		
<i>If you are not starting at GERM 1200, we recommend that you consult with your academic advisor for a modified plan.</i>		

The purpose of the Global Studies certificate is to offer educational opportunities for a student to become a productive, global citizen and future leader in the community, state, nation, and world. This certificate complements many academic fields and any career that benefits from a global perspective.

### Required Courses – 18 Credits

- |  |  |      |
|--|--|------|
| <input type="checkbox"/> COMM 1131         | Intercultural Communication                | 3 cr |
| <input type="checkbox"/> BUSN/HSMA<br>2125 | Business Practices in the<br>Global Market | 3 cr |

Complete at least **12 credits** from the following courses from a minimum of two departments:

- |   |  |        |
|---|--|--------|
| <input type="checkbox"/> ANTH/SOC 1101  | Cultural Diversity   | 3 cr   |
| <input type="checkbox"/> ANTH/SOC/<br>WMST 1121                               | Women Across Cultures  | 3 cr   |
| <input type="checkbox"/> BUSN 1130  | Introduction to International<br>Business                                | 3 cr   |
| <input type="checkbox"/> GEOG 1121  | World Regional Geography   | 3 cr   |
| <input type="checkbox"/> HIST 1131  | Family: Sex/Gender/Power:<br>A Cross-Cultural, Historical<br>Perspective | 3 cr   |
| <input type="checkbox"/> MUSC 1121  | Introduction to World Music  | 3 cr   |
| <input type="checkbox"/> PHIL 1140  | Environmental Ethics   | 3 cr   |
| <input type="checkbox"/> PHIL 1150  | Introduction to World Religions  | 3 cr   |
| <input type="checkbox"/> POLS 1150  | Introduction to World Politics<br>and Globalization                      | 3 cr   |
| <input type="checkbox"/> THTR 2111  | World Cinema   | 3 cr   |
| <input type="checkbox"/> Topics Study Abroad Course (strongly recommended)    |  | 3 cr   |
| <input type="checkbox"/> CHIN, FREN, GERM, JAPN, SMLI or SPAN language course |  | 5 cr   |
| <input type="checkbox"/> MnTC Goal 8 course                                   |  | 3-5 cr |

### Other Certificate Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn at least one third of the required certificate credits from Normandale.

This degree provides students a broad base of courses that fulfill the Minnesota Transfer Curriculum goals and prerequisite science courses that may be required to transfer to a baccalaureate degree in Health Sciences. The AS in Health Science Broad Field also provides the opportunity for students to be awarded two degrees, for example Nursing or Dental Hygiene and AS Health Science Broad Field.

### Required Courses – 60 Credits

<input type="checkbox"/> BIOL 1501	Principles of Biology 1	5 cr
<input type="checkbox"/> BIOL 2041	Human Anatomy	4 cr
<input type="checkbox"/> BIOL 2042	Human Physiology	4 cr
<input type="checkbox"/> BIOL 2043	Microbiology	4 cr
<input type="checkbox"/> CHEM 1050	Foundations of Organic and Biochemistry	3 cr
<input type="checkbox"/> COMM 1111	Interpersonal Communication	3 cr
<input type="checkbox"/> ENGC 1101	College Writing	4 cr
<input type="checkbox"/> HLTH 1107	Principles of Nutrition	3 cr
<input type="checkbox"/> MATH 1100	College Algebra	4 cr
<input type="checkbox"/> PHIL 1103	Ethics	3 cr
<input type="checkbox"/> PSYC 1110	Introduction to Psychology	4 cr
<input type="checkbox"/> PSYC 2210	Developmental Psychology: Life Span	4 cr
<input type="checkbox"/> SOC 1104	Introduction to Sociology	3 cr

Complete **one** of the following three courses:

<input type="checkbox"/> MATH 1080	Introduction to Statistics	4 cr
<input type="checkbox"/> MATH 1090	STATWAY Statistics 2	4 cr
<input type="checkbox"/> MATH 1095	STATWAY Statistics: Accelerated	4 cr

Complete one course from MnTC Goal 6, 8 or 10 3-5 cr

Complete an additional 4 credit CHEM course 4-5 cr

### Other Degree Requirements

*If needed, complete additional courses to reach 60 college-level credits total.*

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum of 15 college-level credits at Normandale.

*Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report.*

Health Science Broad Field (AS)		
needs placement into college level for ENGC 1101		
<i>Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.</i>		
	Fall Semester	Spring Semester
1st year	ENGC 1101 .....4cr	CHEM 1050.....3cr
	CHEM 1020.....4cr	MATH1080, 1090, or 1095 .....4cr
	MATH 1100 .....4cr	BIOL 1501 .....5cr
	COMM 1111 .....3cr	HLTH 1107 .....3cr
	<b>TOTAL ..... 15cr</b>	<b>TOTAL ..... 15cr</b>
	Fall Semester	Spring Semester
2nd year	BIOL 2041 .....4cr	BIOL 2042 .....4cr
	PSYC 1110 .....4cr	BIOL 2043.....4cr
	PHIL 1103 .....3cr	PSYC 2210.....4cr
	SOC 1104 .....3cr	MNTC GOAL 6, 8 or 10 .....4cr
	<b>TOTAL ..... 14cr</b>	<b>TOTAL ..... 16cr</b>

This is a multidisciplinary program infused with the skills necessary to build a strong foundation in computer technology, health information technology and healthcare. More specifically, students in this program learn: software database design, data management, data privacy laws and regulations, work flow analysis and design, and healthcare and computer terminology. Additionally, graduates of this program have the knowledge to bridge the gap in communication between multiple departments within the organization.

### Core Courses – 40 Credits

<input type="checkbox"/>	COMT 1107	Introduction to Computer Technology	4 cr
<input type="checkbox"/>	COMT 1173	PC Architecture Operation and Interface	3 cr
<input type="checkbox"/>	COMT 1181	Database Management Systems	3 cr
<input type="checkbox"/>	COMT 1182	Advanced Database Management Systems	3 cr
<input type="checkbox"/>	COMT 2188	Systems Analysis and Design	3 cr
<input type="checkbox"/>	COMT 2250	Object Oriented Programming with Java for HCST	4 cr
<input type="checkbox"/>	CSCI 1101	Introduction to Computing and Problem Solving	4 cr
<input type="checkbox"/>	HLTH 1010	Medical Terminology	3 cr
<input type="checkbox"/>	HLTH 2010	Healthcare in the US	3 cr
<input type="checkbox"/>	HCST 2100	Introduction to Health Information Technology	4 cr
<input type="checkbox"/>	HCST 2200	Privacy and Security in Health Information Technology	2 cr
<input type="checkbox"/>	HCST 2300	Healthcare Systems Technology Capstone	4 cr

### Additional Required Courses – 20 Credits

<input type="checkbox"/>	ENGC 1101	College Writing	4 cr
--------------------------	-----------	-----------------	------

Complete one of the following two courses:

<input type="checkbox"/>	COMM 1111	Interpersonal Communication	3 cr
<input type="checkbox"/>	COMM 1121	Small Group Communication	3 cr

Complete one of the following three courses:

<input type="checkbox"/>	MATH 1080	Introduction to Statistics	4 cr
<input type="checkbox"/>	MATH 1090	STATWAY Statistics 2	4 cr
<input type="checkbox"/>	MATH 1095	STATWAY Statistics: Accelerated	4 cr

<input type="checkbox"/>	Complete at least 9 credits from MnTC Goals 3, 5, 6, 7, 8, 9 or 10	9 cr
--------------------------	--	------

### Other Degree Requirements

If needed, complete additional courses to reach 60 college-level credits total.

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum of 15 college-level credits at Normandale.

Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report.

Healthcare Systems Technology (AAS)		
needs placement into college level for ENGC 1101 and MATH		
<i>Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.</i>		
1st year	Fall Semester	Spring Semester
	ENGC 1101 .....4cr	COMT 1173 .....3cr
	COMT 1107 .....4cr	HLTH 1010 .....3cr
	COMM 1111 or 1121 .....3cr	HLTH 2010 .....3cr
	MATH1080 or 1090 .....4cr	CSCI 1101 .....4cr
	<b>TOTAL .....15cr</b>	MnTC GOAL 3, 5, 6, 7, 8, 9 or 10 .....3cr
	<b>TOTAL .....16cr</b>	
2nd year	Fall Semester	Spring Semester
	COMT 1181 .....3cr	HCST 2200 .....2cr
	HCST 2100 .....4cr	HCST 2300 .....4cr
	COMT 2250* .....4cr	COMT 1182 .....3cr
	MnTC GOAL 3, 5, 6, 7, 8, 9 or 10 .....3cr	COMT 2188 .....3cr
	<b>TOTAL .....14cr</b>	MnTC GOAL 3, 5, 6, 7, 8, 9 or 10 .....3cr
	<b>TOTAL .....15cr</b>	
*Work with your advisor on careful course planning for COMT courses		

The History Transfer Pathway AA offers students a powerful option: the opportunity to complete an Associate of Arts degree with course credits that directly transfer to designated History 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.

History prepares students to research, analyze, and present evidence with a range of oral and written styles. Students will gain both a broad understanding of the past in U.S. and world history and an appreciation for diverse historical perspectives. The AA in history prepares students for careers that share the skills of historians, such as evaluating the credibility of information, analyzing a variety of data to tell a story, and presenting a coherent story from varied sources.

The skills and knowledge gained from an AA in history prepare students for a variety of careers, among them business, digital research, entertainment, government, law, healthcare, non-profit work, and teaching.

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.

### Required Courses

Incorporate the following Required Courses into the General Education/Minnesota Transfer Curriculum or Additional Course Requirements sections below.

Complete **three** of the following four courses:

- |                                    |                                  |      |
|------------------------------------|----------------------------------|------|
| <input type="checkbox"/> HIST 1111 | United States History 1          | 4 cr |
| <input type="checkbox"/> HIST 1112 | United States History 2          | 4 cr |
| <input type="checkbox"/> HIST 1101 | History of World Civilizations 1 | 4 cr |
| <input type="checkbox"/> HIST 1102 | History of World Civilizations 2 | 4 cr |

### General Education/Minnesota Transfer Curriculum (MnTC) – 40 Credits

\*See MnTC Curriculum for specific course options

- GOAL 1: COMMUNICATION – 2 COURSES**  
 ENGC 1101  
 COMM 1101 or 1111 or 1121
- GOAL 2: CRITICAL THINKING**  
 (met by completion of all 40 credits of the MnTC)
- GOAL 3: NATURAL SCIENCES – 2 COURSES**  
**Select from two different departments; one must include a lab**  
 Course #1 \_\_\_\_\_  
 Course #2 \_\_\_\_\_
- GOAL 4: MATHEMATICAL/LOGICAL REASONING – 1 COURSE**  
*MATH 1080 or MATH 1090 or MATH 1095 recommended unless student will pursue a Social Studies Education Licensure, in which case MATH 1100 is recommended. Students should check with their transfer institution for their recommendations or requirements.*  
 Course \_\_\_\_\_

**GOAL 5: HISTORY AND SOCIAL/BEHAVIORAL SCIENCES – 2 COURSES**

- Select from two different departments**  
 Course #1 met by taking required HIST courses  
 Course #2 \_\_\_\_\_

**GOAL 6: HUMANITIES AND FINE ARTS – 2 COURSES**

- Select from two different departments**  
 Course #1 \_\_\_\_\_  
 Course #2 \_\_\_\_\_

**GOAL 7: HUMAN DIVERSITY – 1 COURSE**

- Course met by taking required HIST courses

**GOAL 8: GLOBAL PERSPECTIVE – 1 COURSE**

- Course met by taking required HIST courses

**GOAL 9: ETHICAL AND CIVIC RESPONSIBILITY – 1 COURSE**

- Course \_\_\_\_\_

**GOAL 10: PEOPLE AND THE ENVIRONMENT – 1 COURSE**

- Course \_\_\_\_\_

### Additional Course Requirements – 20 Credits

- One Health (HLTH) course.
- One Exercise Science (EXSC) course.
- Elective credits – additional course(s) numbered 1000 and above, if needed to complete the 60 credit requirement.
- An additional history course is recommended, but this is not a requirement. Students should check with the receiving institution to understand how it will transfer; a fourth history course may transfer into the major program in history or it may transfer only as an elective toward the bachelor's degree.

### Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum cumulative grade point average (GPA) of 2.0 in the MnTC.
- Earn a minimum of 15 college-level credits at Normandale.

History Transfer Pathway (AA)		
needs placement into college level for ENGC 1101		
<i>Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.</i>		
1st year	Fall Semester	Spring Semester
	ENGC 1101 .....4cr	HIST 1101 or 1102 (G5+8) ..... 4cr
	MnTC Goal 1 COMM.....3cr	*MnTC Goal 3 with lab..... 4cr
	HIST 1111 or 1112 (G5+7) .....4cr	MnTC Goal 5 (non HIST)..... 3cr
	MATH 1080, 1090, 1095 or 1100 (G4) ..... 4cr	*MnTC Goal 6 .....3cr
<b>TOTAL ..... 15cr</b>	EXSC elective ..... 1cr <b>TOTAL ..... 15cr</b>	
2nd year	Fall Semester	Spring Semester
	HIST 1111, 1112, 1101 or 1102 .....4cr	HIST 1133 (G10) ..... 3cr
	*MnTC Goal 3 .....3cr	HLTH elective..... 3cr
	*MnTC Goal 6 .....3cr	Electives .....3cr
	MnTC Goal 9 .....3cr	Electives ..... 3cr
	Elective .....3cr	Electives .....2cr
<b>TOTAL ..... 16cr</b>	<b>TOTAL ..... 14cr</b>	
<i>*For MnTC Goal areas that require 2 courses, they must come from 2 different departments</i>		

Normandale's hospitality management program prepares students to lead businesses in the hospitality, travel and tourism industry. The program concentrates on developing the interpersonal communication, conceptual-creative, leadership, technical and administrative skills needed to lead hospitality and tourism business towards current profitability and sustainability in the future. Graduates in hospitality management go on to positions such as hotel general manager, conventions manager, event manager, rooms division director, housekeeping/maintenance director, hotel sales and marketing director, banquet/catering manager, restaurant/bar manager, casino operations, tourism manager, etc. Upon completion of a degree, students may go on to obtain a bachelor's degree in hospitality management or related programs.

Complementing the traditional degree program, the Hospitality Department offers five Certificate Programs designed for working adults. Students may also elect to complete one or more certificate concentrations and select courses to fulfill this requirement. Normandale's Hospitality Management Program is nationally accredited by the Accreditation Council for Business Schools and Programs (ACBSP).

### Core Courses – 31 Credits

<input type="checkbox"/>	BUSN 1107	Leadership in the Workplace	4 cr
<input type="checkbox"/>	HSMA 1103	Introduction to Hospitality and Tourism Management	4 cr
<input type="checkbox"/>	HSMA 1162	Hotel/Lodging Management and Operations	4 cr
<input type="checkbox"/>	HSMA 2144	Food/Beverage Management and Cost Control	4 cr
<input type="checkbox"/>	HSMA 2150	Revenue Management in Hospitality and Tourism	4 cr
<input type="checkbox"/>	HSMA 2172	Hospitality Sales and Marketing Management	4 cr
<input type="checkbox"/>	HSMA 2173	Convention and Meeting Planning Management	4 cr
<input type="checkbox"/>	HSMA 2096	Hospitality Management Internship	2-4 cr

### Additional Required Courses – 29 Credits

<input type="checkbox"/>	ACCT 2251	Financial Accounting	4 cr
<input type="checkbox"/>	ECON 2201	Principles of Microeconomics	3 cr
<input type="checkbox"/>	ENGC 1101	College Writing	4 cr

Complete **one** of the following two courses:

<input type="checkbox"/>	COMM 1101	Fundamentals of Public Speaking	3 cr
<input type="checkbox"/>	COMM 1111	Interpersonal Communication	3 cr

Complete at least 3 credits from MnTC Goal 6 3 cr

Complete at least 9 credits from MnTC Goal areas 3, 4, 7, 8 or 10\* 8 cr

*\*Highly recommended that students complete a MnTC Goal 3 science course with lab if planning to transfer to a bachelor's degree program.*

Complete **one** of the following seven courses:

<input type="checkbox"/>	BUSN 1130	Introduction to International Business	3 cr
<input type="checkbox"/>	BUSN/CIM 1201	Information Technology Concepts and Business Software 1	3 cr
<input type="checkbox"/>	BUSN 1210	Exceptional Customer Service	3 cr
<input type="checkbox"/>	BUSN 2100	Human Relations and Effective Teams	3 cr
<input type="checkbox"/>	BUSN 2155	Legal Environment of Business	3 cr
<input type="checkbox"/>	BUSN 2200	Human Resource Management	3 cr
<input type="checkbox"/>	HSMA 2125	Business Practices in the Global Market	3 cr

*BUSN 1201: Highly recommended for students planning to transfer to a bachelor's degree program.*

### Other Degree Requirements

*If needed, complete additional courses to reach 60 college-level credits total.*

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum of 15 college-level credits at Normandale.

*Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report.*

### Certificate Options

The department recommends that students complete courses which, when combined with the required courses above, lead to the achievement of a marketable hospitality certificate.

Hospitality Management (AAS)			
needs placement into college level for ENGC 1101			
<i>Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.</i>			
	Fall Semester	Spring Semester	Summer Semester
1st year	ENGC 1101 ..... 4cr	HSMA 2144.....4cr	HSMA 2150..... 4cr
	COMM 1101 or 1111 ...3cr	HSMA 2172.....4cr	<b>TOTAL .....4cr</b>
	ACCT 2251 ..... 4cr	ECON2201 .....3cr	
	HSMA 1103..... 4cr	MnTC Goal 6 ..3cr	
	<b>TOTAL ..... 15cr</b>	<b>TOTAL ..... 14cr</b>	
	Fall Semester	Spring Semester	
2nd year	HSMA 1162..... 4cr	HSMA 2097 or 2098 ..... 4cr	
	HSMA 2096..... 4cr	BUSN 1130, 1201, 1210, 2100, 2155, 2200 or HSMA 2125 .....3cr	
	HSMA 2173..... 4cr	MnTC electives from Goal 3, 4, 7, 8 or 10.....3cr	
	MnTC electives from Goal 3, 4, 7, 8 or 10 ...3cr	MnTC electives from Goal 3, 4, 7, 8 or 10.....3cr	
	<b>TOTAL ..... 15cr</b>	<b>TOTAL .....13cr</b>	

Certificates in Hospitality and Tourism may be completed by students working towards an AAS in Hospitality Management. The certificates are also appropriate for students looking to gain knowledge in the hospitality and tourism industry, to either change careers or obtain leadership skills towards a promotion within the industry. At least one-third of the credits required for these certificates must be completed at Normandale.

**Required Courses – 18-20 Credits**

- |                                    |  |      |
|------------------------------------|--|------|
| <input type="checkbox"/> HSMA 1103 | Introduction to Hospitality and Tourism Management | 4 cr |
| <input type="checkbox"/> HSMA 2150 | Revenue Management in Hospitality and Tourism      | 4 cr |
| <input type="checkbox"/> HSMA 2172 | Hospitality Sales and Marketing Management         | 4 cr |
| <input type="checkbox"/> HSMA 2173 | Convention and Meeting Planning Management         | 4 cr |

**Other Certificate Requirements**

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn at least one third of the required certificate credits from Normandale.

Complete **one** of the following two courses:

- |                                    |                                   |        |
|------------------------------------|-----------------------------------|--------|
| <input type="checkbox"/> HSMA 2096 | Hospitality Management Internship | 2-4 cr |
| <input type="checkbox"/> HSMA 2097 | Senior Hospitality Internship     | 4 cr   |

Certificates in Hospitality and Tourism may be completed by students working towards an AAS in Hospitality Management. The certificates are also appropriate for students looking to gain knowledge in the hospitality and tourism industry, to either change careers or obtain leadership skills towards a promotion within the industry. At least one-third of the credits required for these certificates must be completed at Normandale.

### Required Courses – 18-20 Credits

<input type="checkbox"/>	HSMA 1103	Introduction to Hospitality and Tourism Management	4 cr
<input type="checkbox"/>	HSMA 1162	Hotel/Lodging Management and Operations	4 cr
<input type="checkbox"/>	HSMA 2144	Food/Beverage Management and Cost Control	4 cr
<input type="checkbox"/>	HSMA 2172	Hospitality Sales and Marketing Management	4 cr

Complete **one** of the following two courses:

<input type="checkbox"/>	HSMA 2096	Hospitality Management Internship	2-4 cr
<input type="checkbox"/>	HSMA 2097	Senior Hospitality Internship	4 cr

### Other Certificate Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn at least one third of the required certificate credits from Normandale.



Certificates in Hospitality and Tourism may be completed by students working towards an AAS in Hospitality Management. The certificates are also appropriate for students looking to gain knowledge in the hospitality and tourism industry, to either change careers or obtain leadership skills towards a promotion within the industry. At least one-third of the credits required for these certificates must be completed at Normandale.

**Required Courses – 18 Credits**

<input type="checkbox"/> BUSN 1145	Supervision	3 cr
<input type="checkbox"/> BUSN/CIM 1201	Information Technology Concepts and Business Software 1	3 cr
<input type="checkbox"/> BUSN 2100	Human Relations and Effective Teams	3 cr
<input type="checkbox"/> BUSN 2155	Legal Environment of Business	3 cr
<input type="checkbox"/> BUSN 2200	Human Resource Management	3 cr
<input type="checkbox"/> BUSN 2300	Principles of Management	3 cr

**Other Certificate Requirements**

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn at least one third of the required certificate credits from Normandale.

The Individualized Studies degree is ideal for working adults and/or students who have well-defined career goals and who wish to build their own program of study. In earning an Associate of Science degree, students have the opportunity to develop competencies in both distinct and emerging fields unavailable through existing degree programs. Students create an academic plan by combining complementary coursework from existing disciplines along with core Minnesota Transfer Curriculum requirements.

The program requires submission of a written degree plan initiated by the student with assistance from the dean of an appropriate division, or an academic counselor/faculty member. Students use a plan template to guide the degree planning process that they submit to the relevant academic dean's office. The approval of an industry representative must also be obtained when the degree plan applies to a specific career field. The plan must also demonstrate transferability to at least one four-year accredited institution, even when it may not be the intention of the student to transfer immediately upon degree completion.

### Core Courses – 30 Credits

Select coursework from at least **two** discipline areas

- Coursework from selected discipline area 1                      9 cr
- Coursework from selected discipline area 2                      9 cr
- Additional courses to reach a minimum of 30                      12 cr
- Specialized Program credits

*Note: Coursework will be determined in consultation with Normandale faculty and/or administration*

### Additional Required Courses – 30 Credits

- ENGC 1101      College Writing    4 cr

Complete **one** of the following three courses:

- COMM 1101      Fundamentals of Public Speaking                      3 cr
- COMM 1111      Interpersonal Communication                      3 cr
- COMM 1121      Small Group Communication                      3 cr

- Complete one course from MnTC Goal 3 or 4                      3 cr

- Complete one course from MnTC Goal 5                      3 cr

- Complete one course from MnTC Goal 6                      3 cr

- Complete 6 credits from two different of the following      6 cr
- MnTC Goals 7, 8, 9 or 10

- Complete additional MnTC courses to reach a minimum of 30 MnTC Credits

### Other Degree Requirements

*If needed, complete additional courses to reach 60 college-level credits total.*

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum of 15 college-level credits at Normandale.

*Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report*

The International Experience Certificate focuses on the development of knowledge in world languages, area studies, and intercultural competence, providing students with the skills they need to thrive in our international community and workforce both in Minnesota and around the globe.

### Required Courses – 14 Credits

- COMM 1131 Intercultural Communication 3 cr

Complete **one** 5 credit language course; choose from the following:

#### CHINESE

- CHIN 1100 Beginning Chinese 1 5 cr
- CHIN 1200 Beginning Chinese 2 5 cr
- CHIN 2100 Intermediate Chinese 1 5 cr
- CHIN 2200 Intermediate Chinese 2 5 cr

#### FRENCH

- FREN 1100 Beginning French 1 5 cr
- FREN 1200 Beginning French 2 5 cr
- FREN 2100 Intermediate French 1 5 cr
- FREN 2200 Intermediate French 2 5 cr

#### GERMAN

- GERM 1100 Beginning German 1 5 cr
- FREN 1200 Beginning French 2 5 cr
- FREN 2100 Intermediate French 1 5 cr
- FREN 2200 Intermediate French 2 5 cr

#### JAPANESE

- JAPN 1100 Beginning Japanese 1 5 cr
- JAPN 1200 Beginning Japanese 2 5 cr
- JAPN 2100 Intermediate Japanese 1 5 cr
- JAPN 2200 Intermediate Japanese 2 5 cr

#### SOMALI

- SMLI 1100 Beginning Somali 1 5 cr
- SMLI 1200 Beginning Somali 2 5 cr
- SMLI 2100 Intermediate Somali 1 5 cr
- SMLI 2200 Intermediate Somali 2 5 cr

#### SPANISH

- SPAN 1100 Beginning Spanish 1 5 cr
- SPAN 1200 Beginning Spanish 2 5 cr
- SPAN 2100 Intermediate Spanish 1 5 cr
- SPAN 2200 Intermediate Spanish 2 5 cr

Complete **one** 3 credit culture course; choose from the following:

- CHIN 1111 Chinese Culture and Civilization 3 cr
- FREN 1111 French Culture and Civilization 3 cr
- GERM 1111 German Culture and Civilization 3 cr
- JAPN 1111 Japanese Culture and Civilization 3 cr
- SMLI 1111 Somali Culture and Civilization 3 cr
- SPAN 1111 Spanish Culture and Civilization 3 cr

Complete **one** 3 credit world languages and cultures study abroad course; choose from the following:

- CHIN 1900 Topics/Study Abroad 3 cr
- FREN 1900 Topics/Study Abroad 3 cr
- SPAN 1900 Topics/Study Abroad 3 cr

### Other Certificate Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn at least one third of the required certificate credits from Normandale.



Certificates in Hospitality and Tourism may be completed by students working towards an AAS in Hospitality Management. The certificates are also appropriate for students looking to gain knowledge in the hospitality and tourism industry, to either change careers or obtain leadership skills towards a promotion within the industry. At least one-third of the credits required for these certificates must be completed at Normandale.

**Required Courses – 18 Credits**

<input type="checkbox"/> BUSN 1145	Supervision	3 cr
<input type="checkbox"/> BUSN/CIM 1201	Information Technology Concepts and Business Software 1	3 cr
<input type="checkbox"/> BUSN 1210	Exceptional Customer Service	3 cr
<input type="checkbox"/> BUSN 2100	Human Relations and Effective Teams	3 cr
<input type="checkbox"/> BUSN 2155	Legal Environment of Business	3 cr
<input type="checkbox"/> BUSN 2300	Principles of Management	3 cr

**Other Certificate Requirements**

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn at least one third of the required certificate credits from Normandale.



Certificates in Hospitality and Tourism may be completed by students working towards an AAS in Hospitality Management. The certificates are also appropriate for students looking to gain knowledge in the hospitality and tourism industry, to either change careers or obtain leadership skills towards a promotion within the industry. At least one-third of the credits required for these certificates must be completed at Normandale.

**Required Courses – 18 Credits**

<input type="checkbox"/> BUSN 1102	Social Media Marketing	3 cr
<input type="checkbox"/> BUSN/CIM 1201	Information Technology Concepts and Business Software 1	3 cr
<input type="checkbox"/> BUSN 1210	Exceptional Customer Service	3 cr
<input type="checkbox"/> BUSN 2155	Legal Environment of Business	3 cr
<input type="checkbox"/> BUSN 2252	Professional Selling	3 cr
<input type="checkbox"/> BUSN 2400	Principles of Marketing	3 cr

**Other Certificate Requirements**

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn at least one third of the required certificate credits from Normandale.



The Associate of Fine Arts degree in Music provides a high-quality two-year curriculum that completes the first two years of a baccalaureate degree in music. Upon completion, students will be able to demonstrate comprehension of harmonic analysis, four-part voice-leading, transposition, aural intervallic and chord identification, melodic and rhythmic dictation, solmization, history of western art music, fundamental piano proficiency, solo and ensemble performance, and instrumental or vocal facility through applied study with artist-level faculty.

The AFA in Music prepares a student for transfer into the third year of a baccalaureate music program, in particular, those students pursuing a four-year degree in music performance, music education, or music therapy.

The Music Department at Normandale Community College is an accredited institutional member of the National Association of Schools of Music.

### Core Courses – 38 Credits

<input type="checkbox"/>	MUSC 1131	Music Theory 1	3 cr
<input type="checkbox"/>	MUSC 1132	Music Theory 2	3 cr
<input type="checkbox"/>	MUSC 2231	Music Theory 3	3 cr
<input type="checkbox"/>	MUSC 2232	Music Theory 4	3 cr
<input type="checkbox"/>	MUSC 1181	Ear Training 1	2 cr
<input type="checkbox"/>	MUSC 1182	Ear Training 2	2 cr
<input type="checkbox"/>	MUSC 2281	Ear Training 3	2 cr
<input type="checkbox"/>	MUSC 2282	Ear Training 4	2 cr
<input type="checkbox"/>	MUSC 1151	Applied Music 1	2 cr

(Complete MUSC 1151 in two different semesters for a total of 4 credits)

<input type="checkbox"/>	MUSC 2251	Applied Music 2	2 cr
--------------------------	-----------	-----------------	------

(Complete MUSC 2251 in two different semesters for a total of 4 credits)

<input type="checkbox"/>	MUSC 1152	Performance Class	0 cr
--------------------------	-----------	-------------------	------

(Complete MUSC 1152 four times in four different semesters)

<input type="checkbox"/>	MUSC 1159	Piano Proficiency	0 cr
--------------------------	-----------	-------------------	------

<input type="checkbox"/>	MUSC 2245	Music History 1	3 cr
--------------------------	-----------	-----------------	------

<input type="checkbox"/>	MUSC 2246	Music History 2	3 cr
--------------------------	-----------	-----------------	------

Complete one of the following Music Ensemble Courses in four different semesters for a total of 4 credits:

<input type="checkbox"/>	MUSC 1113	Concert Choir	1 cr
<input type="checkbox"/>	MUSC 1116	Concert Band	1 cr
<input type="checkbox"/>	MUSC 1118	Orchestra	1 cr

### Additional Required Courses – 30 Credits

<input type="checkbox"/>	ENGC 1101	College Writing	4 cr
--------------------------	-----------	-----------------	------

Complete **one** of the following four courses:

<input type="checkbox"/>	COMM 1100	Introduction to Communication	3 cr
<input type="checkbox"/>	COMM 1101	Fundamentals of Public Speaking	3 cr
<input type="checkbox"/>	COMM 1111	Interpersonal Communication	3 cr
<input type="checkbox"/>	COMM 1121	Small Group Communication	3 cr

Complete a minimum of 23 credits from at least three of the following MnTC Goals 3, 5, 7, 9 or 10.

### Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum cumulative grade point average (GPA) of 3.0 in ART courses.
- Earn a minimum of 15 college-level credits at Normandale.

Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report.

Music (AFA)		
needs placement into college level for ENGC 1101		
Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.		
1st year	Fall Semester	Spring Semester
	ENGC 1101 .....4cr MUSC 1131 .....3cr MUSC 1181 .....2cr MUSC 1151 .....2cr MUSC 1152 .....0cr MUSC 1113, 1116 or 1118 .....1cr *MNTC GOAL 3, 5, 7, 9 or 10 ...3cr <b>TOTAL .....15cr</b>	MUSC 1132 .....3cr MUSC 1182 .....2cr MUSC 1151 .....2cr MUSC 1152 .....0cr MUSC 1113, 1116 or 1118 .....1cr MUSC 1159 .....0cr COMM 1100,1101,1111or1121...3cr *MNTC GOAL 3, 5, 7, 9 or 10 ...4cr *MNTC GOAL 3, 5, 7, 9 or 10 .....3cr <b>TOTAL .....18cr</b>
2nd year	Fall Semester	Spring Semester
	MUSC 2231 .....3cr MUSC 2281 .....2cr MUSC 2251 .....2cr MUSC 1152 .....0cr MUSC 1113, 1116 or 1118 .....1cr MUSC 2245 .....3cr *MNTC GOAL 3, 5, 7, 9 or 10 ..3cr *MNTC GOAL 3, 5, 7, 9 or 10 .....3cr <b>TOTAL .....17cr</b>	MUSC 2232 .....3cr MUSC 2282 .....2cr MUSC 2251 .....2cr MUSC 1152 .....0cr MUSC 1113/1116/1118 .....1cr MUSC 2246 .....3cr *MNTC GOAL 3, 5, 7, 9 or 10 ..4cr *MNTC GOAL 3, 5, 7, 9 or 10 ..3cr <b>TOTAL .....18cr</b>
*Complete a minimum of 23cr from at least three of the following MNTC GOALS 3, 5, 7, 9 or 10		



The Nursing Assistant Certificate course prepares individuals to assist others with personal care needs. This certificate course is approved by the Minnesota Department of Health (MDH) and prepares students to take the National Nursing Assistant Training and Competency Evaluation Test. Upon successful completion of the test, students are placed on the Minnesota Nursing Assistant Registry (NA/R).

The Nursing Assistant (NA/R) provides care under the direct supervision of licensed nurses. Employment is primarily in facilities caring for older adults. The demand for NA/Rs continues to grow due to our aging population.

Skills and knowledge obtained while earning the Nursing Assistant Certificate provide a strong foundation for individuals planning to pursue a career in healthcare.

### **Required Course**

Complete **one** of the following two courses:

- |                                    |                                    |      |
|------------------------------------|------------------------------------|------|
| <input type="checkbox"/> NURS 1057 | Nursing Assistant Certificate      | 4 cr |
| <input type="checkbox"/> NURS 1060 | Nursing Assistant/Home Health Aide | 4 cr |

### **Other Certificate Requirements**

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn at least one third of the required certificate credits from Normandale.

*The following websites provide more information about nursing assistants, information about skills testing and links to the practice test and competency test brochure:*

- The “Contacting the Nursing Assistant Registry” page on the Minnesota Department of Health website provides links to Registry forms, training and testing sites.
- The Pearson VUE website offers a test/skills brochure and a practice written test for Minnesota nursing assistants.

The Peace Officer / Public Safety Transfer Pathway (AS) offers students a powerful option: the opportunity to complete an Associate of Science degree with course credits that directly transfer to designated Peace Officer / Public Safety 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.

This program is designed to prepare students to be eligible to take the Minnesota Peace officer Licensing Exam and eventually enter police work.

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.

*Note: If you have been arrested, charged, or convicted of any criminal offense, you should investigate the impact that the arrest, charge, or conviction may have on your future chances of employment in your intended field or on your ability to obtain federal, state, and higher education funding.*

### Required Courses – 42 Credits

<input type="checkbox"/> COMM 1111	Interpersonal Communication	3 cr
<input type="checkbox"/> ENGC 1101*	College Writing	4 cr
<input type="checkbox"/> HLTH 2209	Emergency Medical Responder	3 cr
<input type="checkbox"/> PHIL 1103	Ethics	3 cr
<input type="checkbox"/> SOC 1104*	Introduction to Sociology	3 cr
<input type="checkbox"/> SOC 2110*	American Minority Relations	3 cr
<input type="checkbox"/> SOC 2114*	Families in Crisis	3 cr
<input type="checkbox"/> SOC 2130*	Introduction to Criminal Justice	3 cr
<input type="checkbox"/> SOC 2131*	Juvenile Justice	3 cr
<input type="checkbox"/> SOC 2132*	Police and Community	3 cr

Complete one of the following two courses:

<input type="checkbox"/> PSYC 1100*	Psychology in Modern Life	3 cr
<input type="checkbox"/> PSYC 1101*	Introduction to Psychology	4 cr

Complete one of the following three courses:

<input type="checkbox"/> ENGC 2102	Business and Technical Writing	3 cr
<input type="checkbox"/> POLS 2250	Constitutional Law	3 cr
<input type="checkbox"/> PSYC 2200	Abnormal Psychology	3 cr

Complete one course in EXSC 1 cr

Complete one course from MnTC Goal 4 3-4 cr

*\* ENGC 1101, PSYC 1100 or PSYC 1110, SOC 1104, SOC 2110, SOC 2114, SOC 2130, SOC 2131, and SOC 2132 are prerequisites for admission to the Peace Officer & Police Science Center, must be completed with a minimum grade of C in each course, and require a minimum combined GPA of 2.5*

### Professional Licensing Required Courses – 26 Credits

Professional licensing courses are offered through Hennepin Technical College. Additional information, including admission requirements for the program, can be found at [Hennepin Technical College Peace Officer Advanced Technical Certificate](#).

#### Semester 1

<input type="checkbox"/> POLC 2225	Criminal Investigation	3 cr
<input type="checkbox"/> POLC 2230	Legal Issues	3 cr
<input type="checkbox"/> POLC 2231	MN Criminal and Traffic Codes	3 cr
<input type="checkbox"/> POLC 2235	Police Report Writing/Interview	2 cr
<input type="checkbox"/> POLC 2241	Crisis Intervention and Human Behavior	3 cr

#### Semester 2

<input type="checkbox"/> POLC 2262	In Progress Response	3 cr
<input type="checkbox"/> POLC 2276	Traffic	2 cr
<input type="checkbox"/> POLC 2281	Defensive Tactics	3 cr
<input type="checkbox"/> POLC 2285	Crime Scene and Evidence	1 cr
<input type="checkbox"/> POLC 2291	Firearms	3 cr
<input type="checkbox"/> POLC 2300	Tactical Driving	0 cr

### Additional Requirements to Take the POST Examination

Completion of an Emergency Medical Response or EMT course is required prior to taking the licensing exam. HLTH 2209 fulfills this requirement. Students with current certification may petition completion of the requirement and substitute another 3-credit course for HLTH 2209. NOTE: A successful petition will not affect the 68 credit requirement for the Associate of Science degree.

**Other Degree Requirements**

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum of 15 college-level credits at Normandale.

Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report.

<b>Peace Officer Transfer/Public Safety Pathway (AS)</b>		
needs placement into college level for ENGC 1101		
<i>Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.</i>		
	<b>Fall Semester</b>	<b>Spring Semester</b>
1st year	ENGC 1101 .....4cr	ENGC 2102 or POL 2250
	SOC 1104 .....3cr	or PSYC 2200.....3cr
	SOC 2130 .....3cr	MNTC Goal 4 .....3-4cr
	PSYC 1100 or 1110.....3-4cr	SOC 2114 .....3cr
	EXSSelective.....1-2cr	SOC 2110 .....3cr
	<b>TOTAL .....14-16cr</b>	<b>TOTAL .....12-13cr</b>
	<b>Fall Semester</b>	<b>Spring Semester*</b>
2nd year	SOC 2131 .....3cr	POLC 2225 .....3cr
	SOC 2132 .....3cr	POLC 2230 .....3cr
	HLTH 2209 .....3cr	POLC 2231 .....3cr
	PHIL 1103 .....3cr	POLC 2235 .....2cr
	COMM 1111 .....3cr	POLC 2241 .....3cr
	<b>TOTAL .....15cr</b>	<b>TOTAL .....14cr</b>
	<b>Fall Semester*</b>	
3rd year	POLC 2262 .....3cr	
	POLC 2276 .....2cr	
	POLC 2281 .....3cr	
	POLC 2285 .....1cr	
	POLC 2291 .....3cr	
	POLC 2300 .....0cr	
<b>TOTAL .....12c</b>		

*\*All POLC courses are offered through the Law Enforcement Education Center (LEEC) at Hennepin Technical College (HTC). Students may begin POLC sequence in fall or spring.*

The Peace Officer Certificate is designed for students who already have completed either an associate or bachelor's degree at an accredited college or university. Completion of this certificate prepares students to take the 26-credit Peace Officer Professional Licensing Core offered at the Law Enforcement Education Center (LEEC) at Hennepin Technical College.

After earning this certificate, completing the Professional Licensing Core, and completing a First Responder, Emergency Medical Response or EMT course, students are qualified to take the Minnesota Peace Officer Standards and Training (POST) Board licensing examination.

*Note: If you have been arrested, charged, or convicted of any criminal offense, you should investigate the impact that the arrest, charge, or conviction may have on your future chances of employment in your intended field or on your ability to obtain federal, state, and higher education funding.*

### Required Courses – 26 Credits

<input type="checkbox"/> ENG 1101	College Writing	4 cr
<input type="checkbox"/> SOC 1104	Introduction to Sociology	3 cr
<input type="checkbox"/> SOC 2110	American Minority Relations	3 cr
<input type="checkbox"/> SOC 2114	Families in Crisis	3 cr
<input type="checkbox"/> SOC 2130	Introduction to Criminal Justice	3 cr
<input type="checkbox"/> SOC 2131	Juvenile Justice	3 cr
<input type="checkbox"/> SOC 2132	Police and Community	3 cr

Complete **one** of the following two courses:

<input type="checkbox"/> PSYC 1100	Psychology in Modern Life	3 cr
<input type="checkbox"/> PSYC 1101	Introduction to Psychology	4 cr

Complete one course in EXSC\* 1 cr

\* Students who desire to take PSYC 1110 may submit an academic petition to waive the one-credit EXSC course.

ENG 1101, PSYC 1100 or PSYC 1110, SOC 1104, SOC 2110, SOC 2114, SOC 2130, SOC 2131, and SOC 2132 are prerequisites for admission to the Peace Officer & Police Science Center, must be completed with a minimum grade of C in each course, and require a minimum combined GPA of 2.5

### Professional Licensing Required Courses

Professional licensing courses are offered through Hennepin Technical College. Additional information, including admission requirements for the program, can be found at [Hennepin Technical College Peace Officer Advanced Technical Certificate](#).

### Additional Requirements to Take the POST Examination

Completion of an Emergency Medical Response or EMT course is required prior to taking the licensing exam. HLTH 2209 fulfills this requirement. Students with current certification may petition completion of the requirement and substitute another 3-credit course for HLTH 2209. NOTE: A successful petition will not affect the 68 credit requirement for the Associate of Science degree.

The Associate of Arts Degree with Emphasis in Philosophy provides students with the opportunity to reflect on the most fundamental questions that concern human beings. Through careful study of major figures and traditions within philosophy, courses in this program will help students develop skills for reasoning and critical analysis, and encourage imagination, intellectual curiosity and rigor, personal reflection, and civic engagement.

Since the study of philosophy cultivates intellectual curiosity and imagination, and draws upon all areas of human endeavor, students who complete the emphasis will be prepared to transfer to a four-year institution in pursuit of many different majors. Philosophy majors are prepared for a wide variety of careers, including law, journalism, business, technology, and government and politics. Philosophy courses satisfy 6 of the 10 goals in the Minnesota Transfer Curriculum.

### Required Courses

Incorporate the following Required Courses into the General Education/Minnesota Transfer Curriculum or Additional Course Requirements sections below.

Complete **two** of the following three courses:

- PHIL 1101 Introduction to Philosophy 3 cr
- PHIL 1102 Logic 3 cr
- PHIL 1103 Ethics 3 cr

Complete **one** of the following five courses:

- PHIL 1140 Environmental Ethics 3 cr
- PHIL 1150 Introduction to World Religions 3 cr
- PHIL 1160 Philosophy of Art 3 cr
- PHIL 1170 Business Ethics 3 cr
- PHIL 1180 Biomedical Ethics 3 cr

### General Education/Minnesota Transfer Curriculum (MnTC) – 40 Credits

\*See MnTC Curriculum for specific course options

- GOAL 1: COMMUNICATION – 2 COURSES
  - ENGC 1101
  - COMM 1100 or 1101 or 1111 or 1121
- GOAL 2: CRITICAL THINKING  
(met by completion of all 40 credits of the MnTC)
- GOAL 3: NATURAL SCIENCES – 2 COURSES  
**Select from two different departments; one must include a lab**
  - Course #1 \_\_\_\_\_
  - Course #2 \_\_\_\_\_
- GOAL 4: MATHEMATICAL/LOGICAL REASONING – 1 COURSE  
*Can be met by taking PHIL 1102*
  - Course \_\_\_\_\_
- GOAL 5: HISTORY AND SOCIAL/BEHAVIORAL SCIENCES – 2 COURSES  
**Select from two different departments**
  - Course #1 \_\_\_\_\_
  - Course #2 \_\_\_\_\_
- GOAL 6: HUMANITIES AND FINE ARTS- 2 COURSES  
**Select from two different departments**
  - Course #1 met by taking required PHIL courses
  - Course #2 \_\_\_\_\_
- GOAL 7: HUMAN DIVERSITY – 1 COURSE
  - Course \_\_\_\_\_
- GOAL 8: GLOBAL PERSPECTIVE – 1 COURSE  
*Can be met by taking PHIL 1150*
  - Course \_\_\_\_\_

GOAL 9: ETHICAL AND CIVIC RESPONSIBILITY – 1 COURSE  
*Can be met by taking PHIL 1103, 1140, 1170 or 1180*  
 Course \_\_\_\_\_

GOAL 10: PEOPLE AND THE ENVIRONMENT – 1 COURSE  
*Can be met by taking PHIL 1140*  
 Course \_\_\_\_\_

### Additional Course Requirements – 20 Credits

- One Health (HLTH) course.
- One Exercise Science (EXSC) course.
- Elective credits – additional course(s) numbered 1000 and above, if needed to complete the 60 credit requirement

### Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum cumulative grade point average (GPA) of 2.0 in the MnTC.
- Earn a minimum of 15 college-level credits at Normandale.

Philosophy Emphasis (AA)		
needs placement into college level for ENGC 1101		
<i>Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.</i>		
1st year	Fall Semester	Spring Semester
	ENG 1101 .....4cr	PHIL 1102 (G4).....3cr
	MNTC Goal 1 COMM.....3cr	*MNTC Goal 3 with lab.....4cr
	PHIL 1101 (G6).....3cr	*MNTC Goal 5 .....3cr
	*MNTC Goal 5 .....3cr	*MNTC Goal 6 (non PHIL) .....3cr
	MNTC Goal 7 .....3cr	Electives .....3cr
	<b>TOTAL ..... 16cr</b>	<b>TOTAL ..... 16cr</b>
2nd year	Fall Semester	Spring Semester
	*MNTC Goal 3 .....3cr	PHIL 1150 (G6+8).....3cr
	EXSC elective .....1cr	PHIL 1140 (G9+10).....3cr
	Electives .....3cr	HLTH elective.....3cr
	Electives .....3cr	Electives .....3cr
	Electives .....3cr	Electives .....3cr
	<b>TOTAL ..... 13cr</b>	<b>TOTAL ..... 15cr</b>
<i>*For MNTC Goal areas that require 2 courses, they must come from 2 different departments</i>		

Physics encompasses the study of the universe from the largest galaxies to the smallest subatomic particles and is the basis of many other sciences. Students who study physics develop a range of skills that can be applied in many areas, including: problem solving, with a pragmatic and analytical approach; constructing logical arguments; applying analytical skills; and grasping complex problems.

An Associate of Arts with Emphasis in Physics from Normandale provides students with fundamental knowledge of physics and mathematics that will ensure that they have the foundation and prerequisites to complete a bachelor's degree in physics at a transfer institution. In addition to the AA with Emphasis in Physics, the Physics Department at Normandale offers classes that fulfill requirements for students studying mathematics, the physical and biological sciences, engineering, and some health fields. All physics classes at Normandale fulfill Goal 3 (Natural Sciences) of the MnTC.

### Required Courses

Incorporate the following Required Courses into the General Education/Minnesota Transfer Curriculum or Additional Course Requirements sections below.

<input type="checkbox"/>	MATH 2510	Calculus 3: Multivariable Calculus	5 cr
<input type="checkbox"/>	MATH 2520	Calculus 4: Differential Equations with Linear Algebra	5 cr
<input type="checkbox"/>	PHYS 1121	Physics 1 for Scientists and Engineers	5 cr
<input type="checkbox"/>	PHYS 1122	Physics 2 for Scientists and Engineers	5 cr
<input type="checkbox"/>	PHYS 2250	Modern Physics	4 cr

### General Education/Minnesota Transfer Curriculum (MnTC) – 40 Credits

\*See MnTC Curriculum for specific course options

- GOAL 1: COMMUNICATION – 2 COURSES**  
 ENGC 1101  
 COMM 1100 or 1101 or 1111 or 1121
- GOAL 2: CRITICAL THINKING**  
 (met by completion of all 40 credits of the MnTC)
- GOAL 3: NATURAL SCIENCES – 2 COURSES**  
**Select from two different departments; one must include a lab**  
 Course #1 met by taking required PHYS courses  
 Course #2 \_\_\_\_\_
- GOAL 4: MATHEMATICAL/LOGICAL REASONING – 1 COURSE**  
 Course met by taking required MATH courses
- GOAL 5: HISTORY AND SOCIAL/BEHAVIORAL SCIENCES – 2 COURSES**  
**Select from two different departments**  
 Course #1 \_\_\_\_\_  
 Course #2 \_\_\_\_\_
- GOAL 6: HUMANITIES AND FINE ARTS- 2 COURSES**  
**Select from two different departments**  
 Course #1 \_\_\_\_\_  
 Course #2 \_\_\_\_\_
- GOAL 7: HUMAN DIVERSITY – 1 COURSE**  
 Course \_\_\_\_\_
- GOAL 8: GLOBAL PERSPECTIVE – 1 COURSE**  
 Course \_\_\_\_\_
- GOAL 9: ETHICAL AND CIVIC RESPONSIBILITY – 1 COURSE**  
 Course \_\_\_\_\_
- GOAL 10: PEOPLE AND THE ENVIRONMENT – 1 COURSE**  
 Course \_\_\_\_\_

### Additional Course Requirements – 20 Credits

- One Health (HLTH) course.
- One Exercise Science (EXSC) course.
- Elective credits – additional course(s) numbered 1000 and above, if needed to complete the 60 credit requirement

### Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum cumulative grade point average (GPA) of 2.0 in the MnTC.
- Earn a minimum of 15 college-level credits at Normandale.

Physics Emphasis (AA)		
needs placement into college level for ENGC 1101 and MATH 1510 <i>Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.</i>		
	Fall Semester	Spring Semester
1st year	ENGC 1101 ..... 4cr	MATH 1520 ..... 5cr
	MATH 1510 ..... 5cr	PHYS 1121 ..... 5cr
	COMM 1100, 1101, 1111 or 1121 ..... 3cr	*MNTC GOAL 5, 6, 7, 8, 9 or 10 ..... 3cr
	MNTC GOAL 3 (non-PHYS) ..... 4cr	EXSC elective ..... 1cr
	<b>TOTAL ..... 16cr</b>	<b>TOTAL ..... 14cr</b>
	Fall Semester	Spring Semester
2nd year	MATH 2510 ..... 5cr	MATH 2520 ..... 5cr
	PHYS 1122 ..... 5cr	PHYS 2250 ..... 4cr
	*MNTC GOAL 5, 6, 7, 8, 9 or 10 ..... 3cr	*MNTC GOAL 5, 6, 7, 8, 9 or 10 ..... 3cr
	HLTH elective ..... 3cr	*MNTC GOAL 5, 6, 7, 8, 9 or 10 ..... 3cr
	<b>TOTAL ..... 16cr</b>	<b>TOTAL ..... 15cr</b>
<i>*For MNTC Goal areas that require 2 courses, they must come from 2 different departments.            Some MNTC courses meet 2 different goals. With careful planning this degree can be completed in 60 credits.</i>		

The Political Science Transfer Pathway AA offers students a powerful option: the opportunity to complete an Associate of Arts degree with course credits that directly transfer to designated Political Science 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.

Employers regard Political Science as one of the two most highly-prized social science degrees among employees. Why do employers desire students who study power and government and can hold national and international perspectives on topics? Because businesses, non-profit organizations, government, public service, law, media, education, and more need and admire the rare combination of knowledge, talent, and skills that Political Science students develop.

Political Science students uniquely combine wide-ranging knowledge with skills at research, analysis, and communication. These traits make students supremely qualified to work in the Information Age. Professional life increasingly requires collecting, organizing, applying, evaluating, and presenting information and ideas, as well as thinking critically, solving problems creatively, demonstrating cross-cultural understanding, and working individually and collaboratively.

*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.*

### Required Courses

*Incorporate the following Required Courses into the General Education/Minnesota Transfer Curriculum or Additional Course Requirements sections below.*

POLS 1130 Introduction to U.S. Politics 3 cr

Complete **one** of the following two courses:

POLS 1132 Introduction to Comparative Politics 3 cr

POLS 1150 Introduction to World Politics and Globalization 3 cr

Complete **one** of the following seven courses:

*Students may take POLS 1132 or POLS 1150 (whichever was not used to satisfy the required course above)*

POLS 1132 Introduction to Comparative Politics 3 cr

POLS 1133 Middle East Politics 3 cr

POLS 1135 Introduction to Political Ideas 3 cr

POLS 1150 Introduction to World Politics and Globalization 3 cr

POLS 1152 Model United Nations 3 cr

POLS 1195 Conflict and Negotiation 3 cr

POLS 2250 Constitutional Law 3 cr

### General Education/Minnesota Transfer Curriculum (MnTC) – 40 Credits

\*See MnTC Curriculum for specific course options

GOAL 1: COMMUNICATION – 2 COURSES

ENGC 1101

COMM 1100 or 1101 or 1111 or 1121

GOAL 2: CRITICAL THINKING

(met by completion of all 40 credits of the MnTC)

GOAL 3: NATURAL SCIENCES – 2 COURSES

**Select from two different departments; one must include a lab**

Course #1 \_\_\_\_\_

Course #2 \_\_\_\_\_

GOAL 4: MATHEMATICAL/LOGICAL REASONING – 1 COURSE

*MATH 1080 or 1090 recommended*

Course \_\_\_\_\_

GOAL 5: HISTORY AND SOCIAL/BEHAVIORAL SCIENCES – 2 COURSES

**Select from two different departments**

Course #1 met by taking required POLS courses

Course #2 \_\_\_\_\_

GOAL 6: HUMANITIES AND FINE ARTS- 2 COURSES

**Select from two different departments**

Course #1 \_\_\_\_\_

Course #2 \_\_\_\_\_

GOAL 7: HUMAN DIVERSITY – 1 COURSE

*Can be met by taking POLS 1195*

Course \_\_\_\_\_

GOAL 8: GLOBAL PERSPECTIVE – 1 COURSE

Course met by taking required POLS courses

GOAL 9: ETHICAL AND CIVIC RESPONSIBILITY – 1 COURSE

Course met by taking required POLS courses

GOAL 10: PEOPLE AND THE ENVIRONMENT – 1 COURSE

Course \_\_\_\_\_

### Additional Course Requirements – 20 Credits

One Health (HLTH) course.

One Exercise Science (EXSC) course.

Elective credits – additional course(s) numbered 1000 and above, if needed to complete the 60 credit requirement

### Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum cumulative grade point average (GPA) of 2.0 in the MnTC.
- Earn a minimum of 15 college-level credits at Normandale.

Political Science Transfer Pathway (AA)		
needs placement into college level for ENGC 1101		
<i>Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.</i>		
1st year	Fall Semester	Spring Semester
	ENGC 1101 .....4cr	POLS 1132 or POLS 1150.....3cr
	MNTC Goal 1 COMM.....3cr	*MNTC Goal 3 .....3cr
	POLS 1130 .....3cr	*MNTC Goal 5 (non POLS) .....3cr
	*MNTC Goal 6 .....3cr	*MNTC Goal 6 .....3cr
	HLTH elective.....3cr	MNTC Goal 4.....3cr
<b>TOTAL ..... 16cr</b>	<b>TOTAL ..... 15cr</b>	
2nd year	Fall Semester	Spring Semester
	POLS elective.....3cr	MNTC Goal 10 .....3cr
	*MNTC Goal 3 with lab .....4cr	Elective .....3cr
	MNTC Goal 7.....3cr	Elective .....3cr
	EXSC elective .....1cr	Elective .....3cr
	Elective. ....3cr	Elective .....3cr
<b>TOTAL ..... 14cr</b>	<b>TOTAL ..... 15cr</b>	
<i>*For MNTC Goal areas that require 2 courses, they must come from 2 different departments</i>		

The Normandale Nursing Department educates students to become entry-level professional nurses. The nursing curriculum is a concept-based, spiraled curriculum that is designed to present and reinforce the knowledge necessary for successful and safe nursing practice.

Graduates are prepared to write the National Council Licensing Examination (NCLEX-RN), and upon success may begin practice as registered nurses. As part of the program's commitment to equity, holistic admission practices are utilized in granting program admission. Supervised clinical experiences are provided in various settings including but not limited to rehabilitation, long-term care, and acute care. Acute care experiences vary but may include units such as mental health, orthopedics, medical-surgical, pediatrics, and obstetrics.

Graduates are eligible to articulate to baccalaureate nursing programs in the Minnesota State system as part of the Minnesota State Nursing Articulation Agreement. Students may opt to complete the Minnesota Transfer Curriculum while completing the nursing program which prepares them to seamlessly transfer to Minnesota State Mankato to complete their BSN with only the upper division nursing courses remaining.

Reasonable accommodations may be available for individuals with disabilities. Information is available in the Office for Students with Disabilities at 952-358-8625.

Normandale's nursing program is approved by the Minnesota Board of Nursing and accredited by the Accreditation Commission for Education in Nursing (ACEN), 3343 Peachtree Rd NE, Suite 850, Atlanta, Georgia 30326. Contact at 404-975-5000 or online at [ACENursing.org](http://ACENursing.org)

### Required General Education Courses – 30 Credits

All courses must be completed with a grade of C or higher

#### Program Prerequisites

The **four** (4) following courses (or their transfer equivalents) must be complete or in-progress at the time of application. Applicants must earn an average 2.75 or higher GPA in the four prerequisite courses below.

<input type="checkbox"/> ENGC 1101	College Writing	4 cr
<input type="checkbox"/> CHEM 1050	Foundations of Organic and Biochemistry	3 cr
<input type="checkbox"/> BIOL 2041	Human Anatomy	3 cr
<input type="checkbox"/> PSYC 1050	Introduction to Human Development	3 cr

#### Notes:

- CHEM 1050 requires students complete CHEM 1020 Introductory Chemistry as a prerequisite, or have passed high school chemistry within two years of enrolling in CHEM 1050. CHEM 1061 Principles of Chemistry 1 may be substituted for CHEM 1050.
- PSYC 2210 Developmental Psychology: Life Span may be substituted for PSYC 1050.

#### Additional General Education Requirements

These general education requirements may be taken before admission, or as scheduled in the four-semester Nursing sequence shown below.

<input type="checkbox"/> BIOL 2042	Human Physiology	4 cr
<input type="checkbox"/> BIOL 2044	Introductory Microbiology	3 cr
<input type="checkbox"/> COMM 1131	Intercultural Communication	3 cr
<input type="checkbox"/> PHIL 1180	Biomedical Ethics	3 cr

Note: BIOL 2043 Microbiology may be substituted for BIOL 2044.

Complete **one** of the following two courses:

<input type="checkbox"/> ANTH 1899	Medical Anthropology: Health, Illness, and Healing Across Cultures	3 cr
<input type="checkbox"/> SOC 1104	Introduction to Sociology	3 cr

### Nursing Courses – 34 Credits

- All courses must be completed with a grade of C or higher
- Students already holding LPN licensure are required to take 30 nursing credits

#### Semester 1 Nursing Courses - Students who are not Licensed

##### Practical Nurses (LPN):

<input type="checkbox"/> NURS 1000	Role of the Professional Nurse	2 cr
<input type="checkbox"/> NURS 1050	Foundations of Health Assessment	2 cr
<input type="checkbox"/> NURS 1070	Foundations of Health Assessment Clinical 1	1 cr

#### Semester 1 Nursing Courses – Nursing students with unencumbered Licensed Practical Nurse (LPN) license:

<input type="checkbox"/> NURS 1020	Transition to the Role of the Professional Nurse	2 cr
------------------------------------	--	------

LPN students receive 4 advanced standing credits and take NURS 1020 Transition to the Role of the Professional Nurse (1 cr) in place of NURS 1000, NURS 1050, and NURS 1070.

#### Semester 2 Nursing Courses – All Students:

<input type="checkbox"/> NURS 1100	Health Promotion	2 cr
<input type="checkbox"/> NURS 1120	Health Promotion Clinical 2	3 cr
<input type="checkbox"/> NURS 1150	Parent Child Nursing	2 cr
<input type="checkbox"/> NURS 1160	Parent Child Nursing Clinical 3	1 cr

#### Semester 3 Nursing Courses – All Students:

<input type="checkbox"/> NURS 2000	Chronic and Palliative Care	4 cr
<input type="checkbox"/> NURS 2010	Chronic and Palliative Care Clinical 4	4 cr
<input type="checkbox"/> NURS 2050	Pharmacology and the Role of the Professional Nurse	2 cr

#### Semester 4 Nursing Courses – All Students:

<input type="checkbox"/> NURS 2100	Acute and Complex Care	4 cr
<input type="checkbox"/> NURS 2110	Acute and Complex Care Clinical 5	4 cr
<input type="checkbox"/> NURS 2200	Synthesis Theory and Experiential 6	3 cr

Upon successful completion of Semester 4, students will be eligible for the Associate of Science (AS) Nursing degree and to write the National Council Licensing Exam (NCLEX-RN).

### Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum of 15 college-level credits at Normandale.
- Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report.

### Admission Requirements

For information about application requirements and the admissions process, including deadlines, visit [www.normandale.edu/nursing](http://www.normandale.edu/nursing)

### Professional Licensure / Certification Disclosure

The AS in Nursing prepares students to take the National Council Licensure Examination (NCLEX) for registered nurse licensure. Effective July 1, 2020 the U.S. Department of Education regulation 34 CFR 668.43 (a) (5) (v) which requires our Associate Degree Program in Nursing to provide a [list of states categorized by whether our curriculum](#):

- meets state educational requirements for professional licensure or certification;
- does not meet state educational requirements for professional licensure or certification;
- -or where we have not made a determination of whether the curriculum meets educational requirements.

For additional information about states' requirements, please visit [NursingLicensure.org](http://NursingLicensure.org)

### If you have questions, please contact

Health Sciences Enrollment Manager  
[HealthSciences@normandale.edu](mailto:HealthSciences@normandale.edu)  
952-358-8417

Nursing (AS)		
needs placement into ENGC 1101 and CHEM 1050		
<i>Program Sequence: Admitted students complete a four-semester Nursing sequence. Prerequisites may be completed full- or part-time.</i>		
Prerequisites	Prerequisite Courses	
	ENGC 1101 .....	4cr
	CHEM 1050 .....	3cr
	BIOL 2041 .....	4cr
	PSYC 1050 .....	3cr
TOTAL .....	14 cr	
1st Year	Semester 1*	
	NURS 1000 .....	2cr
	NURS 1050 .....	2cr
	NURS 1070 .....	1cr
	BIOL 2042 .....	4cr
	BIOL 2044 .....	3cr
	TOTAL .....	12 cr
	<small>*LPN students take NURS 1020 (1 cr) in place of NURS 1000, 1050 and 1070</small>	
	Semester 2	
	NURS 1100 .....	2cr
NURS 1120 .....	3cr	
NURS 1150 .....	2cr	
NURS 1160 .....	1cr	
PHIL 1180 .....	3cr	
COMM 1131 .....	3cr	
TOTAL .....	14 cr	
2nd Year	Semester 3	
	NURS 2000 .....	4cr
	NURS 2010 .....	4cr
	NURS 2050 .....	2cr
	ANTH 1899 or SOC 1104 .....	3cr
TOTAL .....	13 cr	
Semester 4		
NURS 2100 .....	4cr	
NURS 2110 .....	4cr	
NURS 2200 .....	3cr	
TOTAL .....	11cr	

The Psychology Transfer Pathway AA offers students a powerful option: the opportunity to complete an Associate of Arts degree with course credits that directly transfer to designated Psychology 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.

The Pathway may not apply to schools outside of Minnesota State, including the University of Minnesota. Students intending to transfer to those schools should investigate the requirements at the receiving institutions. Part of the Pathway is to complete at least one elective course chosen from the extensive offerings of the Psychology Department.

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

### Required Courses

Incorporate the following Required Courses into the General Education/Minnesota Transfer Curriculum or Additional Course Requirements sections below.

- PSYC 1110 Introduction to Psychology 4 cr
  - PSYC 2100 Statistics for the Behavioral Sciences 4 cr
- Complete **one** of the following three courses:
- PSYC 2200 Abnormal Psychology 3 cr
  - PSYC 2210 Developmental Psychology: Life Span 4 cr
  - PSYC 2600 Introduction to Social Psychology 3 cr
- Complete one additional PSYC course 3-4 cr

### General Education/Minnesota Transfer Curriculum (MnTC) – 40 Credits

\*See MnTC Curriculum for specific course options

- GOAL 1: COMMUNICATION – 2 COURSES
  - ENGC 1101
  - COMM 1100 or 1111
- GOAL 2: CRITICAL THINKING  
(met by completion of all 40 credits of the MnTC)
- GOAL 3: NATURAL SCIENCES – 2 COURSES  
**Select from two different departments; one must include a lab**
  - Course #1 BIOL \_\_\_\_\_  
*Must complete one Goal 3 Biology course*
  - Course #2 \_\_\_\_\_
- GOAL 4: MATHEMATICAL/LOGICAL REASONING – 1 COURSE
  - MATH 1080 or 1090 or 1095 or 1100
- GOAL 5: HISTORY AND SOCIAL/BEHAVIORAL SCIENCES – 2 COURSES  
**Select from two different departments**
  - Course #1 met by taking required PSYC courses
  - Course #2 \_\_\_\_\_
- GOAL 6: HUMANITIES AND FINE ARTS- 2 COURSES  
**Select from two different departments**
  - Course #1 PHIL \_\_\_\_\_  
*Must complete one Goal 6 Philosophy course*
  - Course #2 \_\_\_\_\_
- GOAL 7: HUMAN DIVERSITY – 1 COURSE
  - Course met by taking required PSYC courses
- GOAL 8: GLOBAL PERSPECTIVE – 1 COURSE
  - Course \_\_\_\_\_

- GOAL 9: ETHICAL AND CIVIC RESPONSIBILITY – 1 COURSE
  - Course \_\_\_\_\_
- GOAL 10: PEOPLE AND THE ENVIRONMENT – 1 COURSE
  - Course \_\_\_\_\_

### Additional Course Requirements – 20 Credits

- One Health (HLTH) course.
- One Exercise Science (EXSC) course.
- Elective credits – additional course(s) numbered 1000 and above, if needed to complete the 60 credit requirement

### Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum cumulative grade point average (GPA) of 2.0 in the MnTC.
- Earn a minimum of 15 college-level credits at Normandale.

Psychology Transfer Pathway (AA)		
needs placement into college level for ENGC 1101 and MATH 1080		
Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.		
1st year	Fall Semester	Spring Semester
	ENGC 1101 .....4cr COMM 1100 or 1111 .....3cr PSYC 1110 .....4cr *MNTC Goal 6 PHIL.....3cr EXSC elective .....1cr TOTAL ..... 15cr	PSYC 2200, 2210 or 2600 .....3cr *MNTC Goal 3 (non BIOL) ..... 3cr *MNTC Goal 5 (non PSYC) ..... 3cr *MNTC Goal 6 (non PHIL) ..... 3cr HLTH elective.....3cr TOTAL .....15cr
2nd year	Fall Semester	Spring Semester
	PSYC elective ..... 3cr MATH 1080 or MATH1100.....4cr *MNTC Goal 3 BIOL with Lab...4cr MNTC Goal 8 .....3cr TOTAL ..... 14cr	PSYC 2100 .....4cr MNTC Goal 9 ..... 3cr MNTC Goal 10 ..... 3cr Elective .....3cr Elective .....3cr TOTAL ..... 16cr
*For MNTC Goal areas that require 2 courses, they must come from 2 different departments		

The Associate of Science in Public Health is designed specifically for students to transfer to the appropriate upper-level college or university of their choice, where they can complete a BAS or BS degree. As such, the program provides core courses in Public Health and general education requirements that would be included in the first two years of study at four-year institutions. The degree program provides students with foundational knowledge in public health. Public health professionals work within a variety of settings including state and local health departments, hospitals, workplace wellness programs, government agencies, educational institutions, research organizations, and international development agencies.

**Core Courses – 25 Credits**

- HLTH 2010 Healthcare in the US 3 cr
- HLTH 2011 Introduction to Public Health 3 cr

Complete **one** of the following two courses:

- HLTH 1104 Personal and Community Health 3 cr  
*or*
- CHWN 1500 The Community Health Worker: Health Promotion Competencies 5 cr

Complete **one** of the following two courses:

- HLTH 2012 Public Health Advocacy and Leadership 3 cr
- CHWN 1000 The Community Health Worker: Role, Advocacy, Outreach, and Resources 3 cr  
*and*
- CHWN 1200 Documentation, Legal, and Ethical Issues in Community Health Work 3 cr

Complete 8-13 credits from the following ten courses:

- HLTH 2105 Women's Health 3 cr
- HLTH 1106 Drug Use and Abuse 3 cr
- HLTH 1118 Stress Management 3 cr
- HLTH 1010 Medical Terminology 3 cr
- HLTH 1107 Principles of Nutrition 3 cr
- CHWN 1100 Cultural Health Communication, Teaching, and Capacity Building 3 cr
- CHWN 2096 Community Health Worker Navigator Internship 2 cr
- EXSC xxxx Exercise Science elective 1 cr
- HLTH 1112 CPR for the Professional Rescuer 1 cr
- HLTH 1103 College First Aid and Adult CPR 2 cr

**Additional Required Courses – 35 Credits**

- ENGC 1101 College Writing 4 cr
- BIOL 2041 Human Anatomy 4 cr
- BIOL 2042 Human Physiology 4 cr
- CHEM 1020 Introductory Chemistry 4 cr
- CHEM 1050 Foundations of Organic and Biochemistry 3 cr
- COMM 1131 Intercultural Communication 3 cr
- COMM 1101 Fundamentals of Public Speaking 3 cr
- POLS 1130 Introduction to U.S. Politics 3 cr
- SOC 1104 Introduction to Sociology 3 cr

Complete **one** of the following three courses:

- MATH 1080 Introduction to Statistics 4 cr
- MATH 1090 STATWAY Statistics 2 4 cr
- MATH 1095 STATWAY Statistics: Accelerated 4 cr

**Other Degree Requirements**

- If needed, complete additional courses to reach 60 college-level credits total.
- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum of 15 college-level credits at Normandale.

Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report.

Public Health Education (AS)		
needs placement into college level for ENGC 1101 and MATH 1080		
<i>Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.</i>		
1st year	<b>Fall Semester</b>	<b>Spring Semester</b>
	HLTH 1104 .....3cr	HLTH 1107 .....3cr
	HLTH 2011 .....3cr	HLTH elective.....3cr
	CHEM 1020 .....4cr	CHEM 1050.....3cr
	ENGC 1101 .....4cr	COMM 1101 .....3cr
<b>TOTAL .....14cr</b>	<b>TOTAL .....15cr</b>	
2nd year	<b>Fall Semester</b>	<b>Spring Semester</b>
	BIOL 2041 .....4cr	HLTH 2010.....3cr
	COMM 1131 .....3cr	HLTH 2012.....3cr
	EXSC elective .....1cr	HLTH electives .....6cr
	MATH 1080, 1090 or 1095 .....4cr	BIOL 2042.....4cr
<b>TOTAL .....15cr</b>	<b>TOTAL .....16cr</b>	

Public Health Education (AS)- completing CHWN Certificate along with AS in Public Health degree		
needs placement into college level for ENGC 1101 and MATH 1080		
<i>Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.</i>		
1st year	<b>Fall Semester</b>	<b>Spring Semester</b>
	ENGC 1101 .....4cr	CHWN 1500 .....5cr
	CHWN 1000 .....3cr	CHWN 2096 .....2cr
	CHWN 1100 .....3cr	CHEM 1020.....4cr
	CHWN 1200 .....3cr	POL 1130.....3cr
<b>TOTAL .....16cr</b>	<b>TOTAL .....14cr</b>	
2nd year	<b>Fall Semester</b>	<b>Spring Semester</b>
	BIOL 2041 .....4cr	BIOL 2042 .....4cr
	CHEM 1050 .....3cr	COMM 1131 .....3cr
	HLTH 2011 .....3cr	HLTH 1107 .....3cr
	MATH 1080 .....4cr	HLTH and/or EXSC elective.....3cr
<b>TOTAL .....14cr</b>	<b>TOTAL .....16cr</b>	

The Religious Studies Certificate is designed for students who desire a concentrated course of academic study in the field of religious studies. Students will gain knowledge of the beliefs, practices, history, struggles, and influences of various religious and spiritual traditions from the perspectives of a variety of academic disciplines. Courses are rigorous and personally enriching. Religious studies address some of the most fundamental and enduring sources of meaning and community, as well as conflict and misunderstanding in human history. Students will gain knowledge of many types of belief and practice communities. Through completing this certificate, students will demonstrate a sustained exploration and appreciation of people's strongly diverse religious beliefs and behaviors.

### Required Courses – 15-17 Credits

Complete **three** of the following four courses:

- |                          |           |   |      |
|--------------------------|-----------|---|------|
| <input type="checkbox"/> | ANTH 1188 | Magic, Witchcraft and Religion:<br>The Anthropology of Religion | 3 cr |
| <input type="checkbox"/> | PHIL 1150 | Introduction to World Religions                                 | 3 cr |
| <input type="checkbox"/> | PSYC 2400 | Psychology of Religion and<br>Spirituality                      | 3 cr |
| <input type="checkbox"/> | PHIL 1105 | Philosophy of Religion  | 3 cr |

Complete **two** of the following ten courses:

- |                          |           |   |      |
|--------------------------|-----------|---|------|
| <input type="checkbox"/> | ANTH 1150 | Native American Voices  | 3 cr |
| <input type="checkbox"/> | ANTH 1899 | Medical Anthropology: Health,<br>Illness and Healing Across<br>Cultures | 3 cr |
| <input type="checkbox"/> | ART 1102  | Foundation Art History  | 3 cr |
| <input type="checkbox"/> | ART 1105  | Non-Western Art Survey  | 3 cr |
| <input type="checkbox"/> | ENGL 1175 | Myths and Legends   | 3 cr |
| <input type="checkbox"/> | GEOL 1050 | Earth History   | 4 cr |
| <input type="checkbox"/> | HIST 1101 | History of World Civilizations 1  | 4 cr |
| <input type="checkbox"/> | HIST 1102 | History of World Civilizations 2  | 4 cr |
| <input type="checkbox"/> | MUSC 1121 | Introduction to World Music   | 3 cr |
| <input type="checkbox"/> | PSYC 1108 | Psychology of Death and Dying   | 3 cr |

### Other Certificate Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn at least one third of the required certificate credits from Normandale.

Certificates in Hospitality and Tourism may be completed by students working towards an AAS in Hospitality Management. The certificates are also appropriate for students looking to gain knowledge in the hospitality and tourism industry, to either change careers or obtain leadership skills towards a promotion within the industry. At least one-third of the credits required for these certificates must be completed at Normandale.

### Required Courses – 18 Credits

<input type="checkbox"/> BUSN 1125	Entrepreneurship	3 cr
<input type="checkbox"/> BUSN/CIM 1201	Information Technology Concepts and Business Software 1	3 cr
<input type="checkbox"/> BUSN/CIM 1220	Business Problem Solving Analyzing - Excel	3 cr
<input type="checkbox"/> BUSN 2155	Legal Environment of Business	3 cr
<input type="checkbox"/> BUSN 2310	Small Business Management	3 cr
<input type="checkbox"/> BUSN 2400	Principles of Marketing	3 cr

### Other Certificate Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn at least one third of the required certificate credits from Normandale.

The Sociology Transfer Pathway AA offers students a powerful option: the opportunity to complete an Associate of Arts degree with course credits that directly transfer to designated Sociology 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.

### Required Courses

Incorporate the following Required Courses into the General Education/Minnesota Transfer Curriculum or Additional Course Requirements sections below.

- SOC 1104 Introduction to Sociology 3 cr

Complete **one** of the following two courses:

- SOC 1102 Love, Sex and Family 3 cr
- SOC 1116 Popular Culture & Media Sociology 3 cr

Complete **one** of the following three courses:

- SOC 1109 Wealth and Poverty 3 cr
- SOC 1115 Sociology of Sex and Gender Roles 3 cr
- SOC 2110 American Minority Relations 3 cr

### General Education/Minnesota Transfer Curriculum (MnTC) – 40 Credits

\*See MnTC Curriculum for specific course options

- GOAL 1: COMMUNICATION – 2 COURSES
  - ENGC 1101
  - COMM 1100 or 1101 or 1111 or 1121
- GOAL 2: CRITICAL THINKING  
(met by completion of all 40 credits of the MnTC)
- GOAL 3: NATURAL SCIENCES – 2 COURSES  
**Select from two different departments; one must include a lab**
  - Course #1 \_\_\_\_\_
  - Must complete one Goal 3 Biology course*
  - Course #2 \_\_\_\_\_
- GOAL 4: MATHEMATICAL/LOGICAL REASONING – 1 COURSE  
*MATH 1080 or 1090 or 1095 recommended*
  - Course \_\_\_\_\_
- GOAL 5: HISTORY AND SOCIAL/BEHAVIORAL SCIENCES – 2 COURSES  
**Select from two different departments**
  - Course #1 met by taking required SOC courses
  - Course #2 \_\_\_\_\_
- GOAL 6: HUMANITIES AND FINE ARTS- 2 COURSES  
**Select from two different departments**
  - Course #1 \_\_\_\_\_
  - Course #2 \_\_\_\_\_
- GOAL 7: HUMAN DIVERSITY – 1 COURSE
  - Course met by taking required SOC courses
- GOAL 8: GLOBAL PERSPECTIVE – 1 COURSE
  - Course \_\_\_\_\_

- GOAL 9: ETHICAL AND CIVIC RESPONSIBILITY – 1 COURSE
  - Course met by completing required SOC courses
- GOAL 10: PEOPLE AND THE ENVIRONMENT – 1 COURSE
  - Course \_\_\_\_\_

### Additional Course Requirements – 20 Credits

- One Health (HLTH) course.
- One Exercise Science (EXSC) course.
- Elective credits – additional course(s) numbered 1000 and above, if needed to complete the 60 credit requirement

### Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum cumulative grade point average (GPA) of 2.0 in the MnTC.
- Earn a minimum of 15 college-level credits at Normandale.

Sociology Transfer Pathway (AA)		
needs placement into college level for ENGC 1101		
<i>Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.</i>		
1st year	Fall Semester	Spring Semester
	ENGC 1101 .....4cr	SOC 1109, 1115 or 2110 .....3cr
	MNTC Goal 1 COMM .....3cr	*MNTC Goal 3 with lab .....4cr
	SOC 1104 .....3cr	*MNTC Goal 5 (non SOC) .....3cr
	*MNTC Goal 3 .....3cr	*MNTC Goal 6 .....3cr
	*MNTC Goal 6 .....3cr	HLTH elective .....3cr
TOTAL .....16cr	TOTAL .....16cr	
2nd year	Fall Semester	Spring Semester
	SOC 1102 or 1116 .....3cr	MNTC Goal 10 .....3cr
	MATH 1080 or 1090 .....4cr	Elective .....3cr
	MNTC Goal 8 .....3cr	Elective .....3cr
	EXSC elective .....1cr	Elective .....3cr
	Electives .....3cr	Elective .....2cr
TOTAL .....14cr	TOTAL .....14cr	
<i>*For MNTC Goal areas that require 2 courses, they must come from 2 different departments</i>		

The Spanish Transfer Pathway AA offers students a powerful option: the opportunity to complete an Associate of Arts degree with course credits that directly transfer to designated Spanish 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.

### Required Courses

Incorporate the following Required Courses into the General Education/Minnesota Transfer Curriculum or Additional Course Requirements sections below.

- SPAN 1100 Beginning Spanish 1 5 cr
- SPAN 1200 Beginning Spanish 2 5 cr
- SPAN 2100 Intermediate Spanish 1 5 cr
- SPAN 2200 Intermediate Spanish 2 5 cr

### General Education/Minnesota Transfer Curriculum (MnTC) – 40 Credits

\*See MnTC Curriculum for specific course options

- GOAL 1: COMMUNICATION – 2 COURSES
  - ENGC 1101
  - COMM 1100 or 1101 or 1111 or 1121
- GOAL 2: CRITICAL THINKING  
(met by completion of all 40 credits of the MnTC)
- GOAL 3: NATURAL SCIENCES – 2 COURSES  
**Select from two different departments; one must include a lab**
  - Course #1 \_\_\_\_\_
  - Course #2 \_\_\_\_\_
- GOAL 4: MATHEMATICAL/LOGICAL REASONING – 1 COURSE
  - Course \_\_\_\_\_
- GOAL 5: HISTORY AND SOCIAL/BEHAVIORAL SCIENCES – 2 COURSES  
**Select from two different departments**
  - Course #1 \_\_\_\_\_
  - Course #2 \_\_\_\_\_
- GOAL 6: HUMANITIES AND FINE ARTS- 2 COURSES  
**Select from two different departments**
  - Course #1 met by taking required SPAN courses
  - Course #2 \_\_\_\_\_
- GOAL 7: HUMAN DIVERSITY – 1 COURSE
  - Course \_\_\_\_\_
- GOAL 8: GLOBAL PERSPECTIVE – 1 COURSE
  - Course met by taking required SPAN courses

GOAL 9: ETHICAL AND CIVIC RESPONSIBILITY – 1 COURSE  
 Course \_\_\_\_\_

GOAL 10: PEOPLE AND THE ENVIRONMENT – 1 COURSE  
 Course \_\_\_\_\_

### Additional Course Requirements – 20 Credits

- One Health (HLTH) course.
- One Exercise Science (EXSC) course.
- Elective credits – additional course(s) numbered 1000 and above, if needed to complete the 60 credit requirement. (*SPAN 1111 is recommended*).

### Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum cumulative grade point average (GPA) of 2.0 in the MnTC.
- Earn a minimum of 15 college-level credits at Normandale.

Spanish Transfer Pathway (AA)		
needs placement into college level for ENGC 1101 <i>Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.</i>		
1st year	Fall Semester	Spring Semester
	ENGC 1101 .....4cr	SPAN 1200.....5cr
	MNTC Goal 1 COMM .....3cr	*MNTC Goal 3 with lab .....4cr
	SPAN 1100 .....5cr	*MNTC Goal 5 .....3cr
	MNTC Goal 4 .....3cr	*MNTC Goal 6 (non SPAN).....1cr
	<b>TOTAL ..... 15cr</b>	<b>TOTAL ..... 15cr</b>
2nd year	Fall Semester	Spring Semester
	SPAN 2100.....5cr	SPAN 2200.....5cr
	*MNTC Goal 3 .....3cr	SPAN 1111.....3cr
	MNTC Goal 7 .....3cr	*MNTC Goal 5 .....3cr
	MNTC Goal 9 .....3cr	MNTC Goal 10 .....3cr
EXSC elective .....1cr	HLTH elective.....1cr	
	<b>TOTAL ..... 15cr</b>	<b>TOTAL ..... 15cr</b>
<p><i>*For MNTC Goal areas that require 2 courses, they must come from 2 different departments</i></p> <p><i>Some MNTC courses meet 2 different goals. With careful planning this degree can be completed in 60 credits.</i></p> <p><i>If you are not starting at SPAN 1100, we recommend that you consult with your academic advisor for a modified plan.</i></p>		

The goal of the Spanish Certificate is to provide students with the opportunity to acquire linguistic skills, cultural knowledge and intercultural competence necessary to work in an increasingly global community. This certificate complements many academic fields and careers in which students would benefit from an international perspective.

**Required Courses – 13 Credits**

- SPAN 2100 Intermediate Spanish 1 5 cr
- SPAN 2200 Intermediate Spanish 2 5 cr

Complete **one** of the following two courses:

- SPAN 1111 Spanish Culture and Civilization 3 cr
- SPAN 2210 Advanced Communication Skills 3 cr

**Other Certificate Requirements**

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn at least one third of the required certificate credits from Normandale.

The Special Education Foundations Transfer Pathway AS offers students a powerful option: the opportunity to complete an Associate of Science degree with course credits that directly transfer to designated Special Education 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.

Individuals who have been arrested, charged or convicted of any criminal offense should investigate the impact that the arrest, charge or conviction may have on their chances of employment in the field they intend to study or on their chances to obtain federal, state and other higher education financial aid.

### Required Courses – 60 Credits

<input type="checkbox"/>	COMM 1101	Fundamentals of Public Speaking <i>Grade of B or higher is required</i>	3 cr
<input type="checkbox"/>	EDUC 1101	Introduction to Education <i>Grade of C or higher is required</i>	4 cr
<input type="checkbox"/>	EDUC 2101	Educational Technology	3 cr
<input type="checkbox"/>	EDUC 2222	Multicultural Education and Human Relations in Schools	3 cr
<input type="checkbox"/>	EDUC 2331	Professional Practice and Design of Individual Education Programs	2 cr
<input type="checkbox"/>	EDUC 2408	Individuals with Diverse and Exceptional Needs	4 cr
<input type="checkbox"/>	EDUC 2409	Learning and Human Development for Diverse Learners	4 cr
<input type="checkbox"/>	ENGC 1101	College Writing <i>Grade of B or higher is required</i>	4 cr
<input type="checkbox"/>	MATH 1055	Elements of Mathematics 1	4 cr
<input type="checkbox"/>	PSYC 1109	Child and Adolescent Development <i>Grade of C or higher is required</i>	3 cr

GOAL 5: HISTORY AND SOCIAL/BEHAVIORAL SCIENCES – 2 COURSES

**Select from two different departments**  
*GEOG 1121 and HIST 1111 recommended*  
 Course #1 \_\_\_\_\_  
 Course #2 \_\_\_\_\_

GOAL 6: HUMANITIES AND FINE ARTS- 2 COURSES

**Select from two different departments**  
*ART 1101 and ENGL 2060 recommended*  
 Course #1 \_\_\_\_\_  
 Course #2 \_\_\_\_\_

GOAL 7: HUMAN DIVERSITY – 1 COURSE

*HIST 1111 recommended*  
 Course \_\_\_\_\_

GOAL 8: GLOBAL PERSPECTIVE – 1 COURSE

*ART 1101 or GEOG 1121 recommended*  
 Course \_\_\_\_\_

GOAL 9: ETHICAL AND CIVIC RESPONSIBILITY – 1 COURSE

*PHYS 1001 & 1002 recommended*  
 Course \_\_\_\_\_

GOAL 10: PEOPLE AND THE ENVIRONMENT – 1 COURSE

*BIOL 1104 recommended*  
 Course \_\_\_\_\_

### General Education/Minnesota Transfer Curriculum (MnTC) – 40 Credits

\*See MnTC Curriculum for specific course options

GOAL 1:	COMMUNICATION – 2 COURSES
	<input type="checkbox"/> ENGC 1101
	<input type="checkbox"/> COMM 1101
GOAL 2:	CRITICAL THINKING
	(met by completion of all 40 credits of the MnTC)
GOAL 3:	NATURAL SCIENCES – 2 COURSES
	<b>Select from two different departments; one must include a lab</b>
	<i>BIOL 1100 and PHYS 1101 and 1102 recommended</i>
	<input type="checkbox"/> Course #1 _____
	<input type="checkbox"/> Course #2 _____
GOAL 4:	MATHEMATICAL/LOGICAL REASONING – 1 COURSE
	<input type="checkbox"/> Course me by completing required MATH course

### Additional recommended courses to meet 60 credits

<input type="checkbox"/>	EDUC 2223	Foundations of Instruction	2 cr
<input type="checkbox"/>	ENGT 1050	Bridging Engineering and Education	3 cr
<input type="checkbox"/>	MATH 1065	Elements of Mathematics 2	4 cr
<input type="checkbox"/>	SPAN/EDUC 1120	Spanish for Educators 1	3 cr

## Additional Degree Requirements – 20 credits

- Complete required 30 field work hours.
- Demonstrate expected standards in Professional Disposition.
- Complete additional courses to reach 60 total credits, of which 40 credits must satisfy all 10 MnTC Goals.
- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum of 15 college-level credits at Normandale.

Coursework in this degree program satisfies the Minnesota Transfer Curriculum (MnTC).

Special Education Foundation (AS)		
needs placement into college level for ENGC 1101 and MATH		
<i>Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.</i>		
	Fall Semester	Spring Semester
1st year	ENGC 1101 (G1).....4cr	EDUC 2408 .....4cr
	COMM 1101 (G1) .....3cr	ART 1101 (G6+8) .....3cr
	EDUC 1101 .....4cr	HIST 1111(G5+7) .....4cr
	PSYC 1109 (G5).....3cr	MATH 1055(G4) .....4cr
	TOTAL ..... 14cr	TOTAL ..... 15cr
	Fall Semester	Spring Semester
2nd year	EDUC 2101 .....3cr	EDUC 2331 .....2cr
	EDUC 2222 .....3cr	EDUC 2409 .....4cr
	BIOL 1104 (G3L+10).....4cr	PHYS 1001 (G3+9) .....3cr
	ENGL 2060 (G6) .....3cr	MNTC Goal electives .....3cr
	GEOG 1121 (G5+8) .....3cr	MNTC Goal electives .....3cr
	TOTAL ..... 16cr	TOTAL ..... 15cr

As a Theatre Performance AFA candidate, students will prepare for a career as a stage artist. Students will build skills in auditioning, acting, voice, movement, directing and analysis as well as having multiple roles in fully produced productions. Upon completion of the degree, students will be prepared to either begin auditioning professionally or transfer into a BA or BFA theatre performance program for further training.

The Theatre Performance Transfer Pathway AFA offers students a powerful option: the opportunity to complete an Associate of Fine Arts degree with course credits that directly transfer to designated Theater Performance (BA or BFA) 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.

Acceptance into this degree program is by audition and interview only. Students should consult their intended transfer institution for any additional admissions or general education requirements.

The Theatre Department at Normandale Community College is an accredited institutional member of the National Association of Schools of Theatre.

### Required Courses – 60 Credits

<input type="checkbox"/> THTR 1101	Voice and Movement	3 cr
<input type="checkbox"/> THTR 1116	Introduction to Theatre	3 cr
<input type="checkbox"/> THTR 1120	Theatre Performance Practicum (THTR 1120 must be repeated for a total of 3 credits)	1 cr
<input type="checkbox"/> THTR 1135	Stage Makeup	2 cr
<input type="checkbox"/> THTR 1151	Acting 1	3 cr
<input type="checkbox"/> THTR 2150	Script Analysis	3 cr
<input type="checkbox"/> THTR 2151	Acting 2	3 cr
<input type="checkbox"/> THTR 2160	Audition Techniques	3 cr

GOAL 6: HUMANITIES AND FINE ARTS- 2 COURSES

**Select from two different departments**

- Course #1 met by taking required THTR course
- Course #2 \_\_\_\_\_

GOAL 7: HUMAN DIVERSITY – 1 COURSE

- Course \_\_\_\_\_

GOAL 8: GLOBAL PERSPECTIVE – 1 COURSE

- Course \_\_\_\_\_

GOAL 9: ETHICAL AND CIVIC RESPONSIBILITY – 1 COURSE

- Course \_\_\_\_\_

GOAL 10: PEOPLE AND THE ENVIRONMENT – 1 COURSE

- Course \_\_\_\_\_

### General Education/Minnesota Transfer Curriculum (MnTC) – 40 Credits

\*See MnTC Curriculum for specific course options

GOAL 1: COMMUNICATION – 2 COURSES

- ENGC 1101
- COMM 1101 or 1101 or 1111 or 1121

GOAL 2: CRITICAL THINKING

(met by completion of all 40 credits of the MnTC)

GOAL 3: NATURAL SCIENCES – 2 COURSES

**Select from two different departments; one must include a lab**

- Course #1 \_\_\_\_\_
- Course #2 \_\_\_\_\_

GOAL 4: MATHEMATICAL/LOGICAL REASONING –

- 1 COURSE
- Course \_\_\_\_\_

GOAL 5: HISTORY AND SOCIAL/BEHAVIORAL SCIENCES –

2 COURSES

**Select from two different departments**

- Course #1 \_\_\_\_\_
- Course #2 \_\_\_\_\_

## Other Degree Requirements – 20 credits

- Elective credits – additional course(s) numbered 1000 and above, if needed to complete the 60 credit requirement
- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum cumulative grade point average (GPA) of 2.0 in the MnTC.
- Earn a minimum of 15 college-level credits at Normandale.
- Earn a minimum cumulative GPA of 3.0 for THTR coursework.

Coursework in this degree program satisfies the Minnesota Transfer Curriculum (MnTC).

Theatre Performance Transfer Pathway (AFA)		
needs placement into college level for ENGC 1101		
<i>Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.</i>		
1st year	Fall Semester	Spring Semester
	ENGC 1101 ..... 4cr	THTR 1120 ..... 1cr
	MnTC Goal 1 COMM..... 3cr	THTR 1135 ..... 2cr
	THTR 1116 (G6)..... 3cr	THTR 2151 ..... 3cr
	THTR 1151 ..... 3cr	*MnTC Goal 3 with lab..... 4cr
	MnTC Goal 7 ..... 3cr	*MnTC Goal 5 ..... 3cr
<b>TOTAL ..... 16cr</b>	MnTC Goal 9 ..... 3cr	
	<b>TOTAL ..... 16cr</b>	
2nd year	Fall Semester	Spring Semester
	THTR 1101 ..... 3cr	THTR 1120 ..... 1cr
	THTR 1120 ..... 1cr	THTR 2160 ..... 3cr
	THTR 2150 ..... 3cr	*MnTC Goal 5 ..... 3cr
	*MnTC Goal 3 ..... 3cr	*MnTC Goal 6 (non THTR)..... 3cr
	MnTC Goal 4 ..... 3cr	MnTC Goal 10 ..... 3cr
	MnTC Goal 8 ..... 3cr	<b>TOTAL ..... 13cr</b>
	<b>TOTAL ..... 16cr</b>	
*For MnTC Goal areas that require 2 courses, they must come from 2 different departments		
Some MnTC courses meet 2 different goals. With careful planning this degree can be completed in 60 credits.		

As a Technical Theatre AFA candidate, students will prepare for a career as a theatre technician. Students will build skills in scenic, costume and lighting technology as well as design and rendering. Students will have opportunities to work both backstage and as technicians creating multiple fully produced productions. Upon completion of the degree, students will be prepared to either begin working professionally or transfer into a BA or BFA theatre program for further training.

The Theatre Production and Design Transfer Pathway AFA offers students a powerful option: the opportunity to complete an Associate of Fine Arts degree with course credits that directly transfer to designated Theatre Production and Design (BA or BFA) bachelor's degree programs at Minnesota State universities. \* The curriculum has been specifically designed so that students completing 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.

*Acceptance into this degree program is by audition and interview only.* Students should consult their intended transfer institution for any additional admissions or general education requirements.

The Theatre Department at Normandale Community College is an accredited institutional member of the National Association of Schools of Theatre.

## Required Courses – 60 Credits

- |                                    |  |      |
|------------------------------------|--|------|
| <input type="checkbox"/> THTR 1116 | Introduction to Theatre  | 3 cr |
| <input type="checkbox"/> THTR 1122 | Technical Theatre Practicum<br>(THTR 1122 must be repeated for a total of 2 credits) | 1 cr |
| <input type="checkbox"/> THTR 1125 | Drawing and Rendering  | 3 cr |
| <input type="checkbox"/> THTR 1140 | Stagecraft   | 3 cr |
| <input type="checkbox"/> THTR 2150 | Script Analysis  | 3 cr |
| <input type="checkbox"/> THTR 2520 | Stage Management   | 3 cr |

Complete **two** of the following three courses:

- |                                    |                      |      |
|------------------------------------|----------------------|------|
| <input type="checkbox"/> THTR 1130 | Costume Construction | 3 cr |
| <input type="checkbox"/> THTR 1145 | Lighting and Sound   | 3 cr |
| <input type="checkbox"/> THTR 2020 | Basic Design         | 3 cr |

## General Education/Minnesota Transfer Curriculum (MnTC) – 40 Credits

\*See MnTC Curriculum for specific course options

- GOAL 1: COMMUNICATION – 2 COURSES  
 ENGC 1101  
 COMM 1101 or 1101 or 1111 or 1121
- GOAL 2: CRITICAL THINKING  
 (met by completion of all 40 credits of the MnTC)
- GOAL 3: NATURAL SCIENCES – 2 COURSES  
**Select from two different departments; one must include a lab**  
 Course #1 \_\_\_\_\_  
 Course #2 \_\_\_\_\_
- GOAL 4: MATHEMATICAL/LOGICAL REASONING – 1 COURSE  
 Course \_\_\_\_\_

GOAL 5: HISTORY AND SOCIAL/BEHAVIORAL SCIENCES – 2 COURSES

**Select from two different departments**

- Course #1 \_\_\_\_\_  
 Course #2 \_\_\_\_\_

GOAL 6: HUMANITIES AND FINE ARTS- 2 COURSES

**Select from two different departments**

- Course #1 met by taking required THTR course  
 Course #2 \_\_\_\_\_

GOAL 7: HUMAN DIVERSITY – 1 COURSE

- Course \_\_\_\_\_

GOAL 8: GLOBAL PERSPECTIVE – 1 COURSE

- Course \_\_\_\_\_

GOAL 9: ETHICAL AND CIVIC RESPONSIBILITY – 1 COURSE

- Course \_\_\_\_\_

GOAL 10: PEOPLE AND THE ENVIRONMENT – 1 COURSE

- Course \_\_\_\_\_

### Other Degree Requirements – 20 credits

- Elective credits – additional course(s) numbered 1000 and above, if needed to complete the 60 credit requirement
- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum cumulative grade point average (GPA) of 2.0 in the MnTC.
- Earn a minimum of 15 college-level credits at Normandale.
- Earn a minimum cumulative GPA of 3.0 for THTR coursework.

Coursework in this degree program satisfies the Minnesota Transfer Curriculum (MnTC).

Theatre Production and Design Transfer Pathway (AFA)		
needs placement into college level for ENGC 1101		
<i>Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.</i>		
1st year	Fall Semester	Spring Semester
	ENGC 1101 .....4cr	THTR 1122 ..... 1cr
	THTR 1116 (G6).....3cr	THTR 2020 .....3cr
	THTR 1125 .....3cr	MNTC Goal 1 COMM.....3cr
	THTR 1130 .....3cr	MNTC Goal 3 .....3cr
	THTR 1140 .....3cr	*MNTC Goal 5 .....3cr
TOTAL ..... 16cr	MNTC Goal 9 .....3cr	
		TOTAL ..... 16cr
2nd year	Fall Semester	Spring Semester
	THTR 2150 .....3cr	THTR 1122 ..... 1cr
	THTR 2520 .....3cr	THTR 1145 .....3cr
	*MNTC Goal 3 with lab.....4cr	*MNTC Goal 5 .....3cr
	MNTC Goal 4 .....3cr	*MNTC Goal 6 (non THTR).....3cr
	MNTC Goal 8 .....3cr	MNTC Goal 7 .....3cr
TOTAL ..... 16cr	MNTC Goal 10 .....3cr	
		TOTAL ..... 16cr
*For MNTC Goal areas that require 2 courses, they must come from 2 different departments		
Some MNTC courses meet 2 different goals. With careful planning this degree can be completed in 60 credits.		



Certificates in Hospitality and Tourism may be completed by students working towards an AAS in Hospitality Management. The certificates are also appropriate for students looking to gain knowledge in the hospitality and tourism industry, to either change careers or obtain leadership skills towards a promotion within the industry. At least one-third of the credits required for these certificates must be completed at Normandale.

**Required Courses – 17-19 Credits**

- HSMA 1103 Introduction to Hospitality and Tourism Management 4 cr
- HSMA 2100 Casino Management and Operations 4 cr
- HSMA 2144 Food/Beverage Management and Cost Control 4 cr
- GEOG 1102 Human Geography 3 cr

Complete **one** of the following two courses:

- HSMA 2096 Hospitality Management Internship 2-4 cr
- HSMA 2097 Senior Hospitality Internship 4 cr

**Other Certificate Requirements**

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn at least one third of the required certificate credits from Normandale.

The Vacuum and Thin Film Technology program prepares a student to work as a technician in industries which rely on vacuum-based processes to create and manufacture products. Employment opportunities span a variety of industries such as semiconductor, microelectromechanical systems (MEMS), glass, optics, light-emitting diodes (LEDs) solar cells, vacuum-based equipment and other industries which use thin film coating processes.

### Core Courses – 30 Credits

<input type="checkbox"/> ENGT 1153	AC/DC Circuits	4 cr
<input type="checkbox"/> ENGT 1184	Fluid Mechanics	3 cr
<input type="checkbox"/> ENGT 1290	Measurement and Process Control	2 cr
<input type="checkbox"/> ENGT 2188	Electronics and Automation	4 cr
<input type="checkbox"/> VACT 1292	Introduction to Vacuum Technology	2 cr
<input type="checkbox"/> VACT 2293	Vacuum Analysis and Troubleshooting	4 cr
<input type="checkbox"/> VACT 2297	Thin Film Deposition	3 cr

Complete **eight credits** from the following eight courses:

<input type="checkbox"/> COMT 1107	Introduction to Computer Technology	4 cr
<input type="checkbox"/> CSCI 1101	Introduction to Computing and Problem Solving	4 cr
<input type="checkbox"/> ENGT 1180	Manufacturing Processes	2 cr
<input type="checkbox"/> ENGT 1511	Introduction to Engineering Technology (PLTW™)	3 cr
<input type="checkbox"/> ENGT 1512	Principles of Engineering (PLTW™)	3 cr
<input type="checkbox"/> ENGT 1513	Digital Electronics Technology (PLTW™)	3 cr
<input type="checkbox"/> ENGT 1514	Computer Integrated Manufacturing (PLTW)	3 cr
<input type="checkbox"/> VACT 2294	Semiconductor Processing	4 cr

### Additional Required Courses – 30 Credits

<input type="checkbox"/> ENGC 1101	College Writing	4 cr
<input type="checkbox"/> ENGC 2102	Business and Technical Writing	3 cr
<input type="checkbox"/> PHYS 1110	College Physics 1	4 cr

Complete **one** of the following two courses:

<input type="checkbox"/> CHEM 1020	Introductory Chemistry	4 cr
<input type="checkbox"/> CHEM 1061	Principles of Chemistry 1	5 cr

Complete **one** of the following four courses:

<input type="checkbox"/> COMM 1100	Introduction to Communication	3 cr
<input type="checkbox"/> COMM 1101	Fundamentals of Public Speaking	3 cr
<input type="checkbox"/> COMM 1111	Interpersonal Communication	3 cr
<input type="checkbox"/> COMM 1121	Small Group Communication	3 cr

Complete **one** of the following two courses:

<input type="checkbox"/> MATH 1100	College Algebra	4 cr
<input type="checkbox"/> MATH 1400	Survey of Calculus	4 cr

Complete **one** of the following three courses:

<input type="checkbox"/> MATH 1080	Introduction to Statistics	4 cr
<input type="checkbox"/> MATH 1090	STATWAY Statistics 2	4 cr
<input type="checkbox"/> MATH 1095	STATWAY Statistics: Accelerated	4 cr

Complete **one** of the following fourteen courses to reach 30 credits:

<input type="checkbox"/> ACCT 2251	Financial Accounting	4 cr
<input type="checkbox"/> ART 1123	Introduction to Sculpture	3 cr
<input type="checkbox"/> ART 1124	Introduction to Ceramics: Handbuilding	3 cr
<input type="checkbox"/> ART 1125	Glass Fusing 1	3 cr
<input type="checkbox"/> COMT 1107	Introduction to Computer Technology	4 cr
<input type="checkbox"/> CSCI 1101	Introduction to Computing and Problem Solving	4 cr
<input type="checkbox"/> ECON 2201	Principles of Microeconomics	3 cr
<input type="checkbox"/> ECON 2202	Principles of Macroeconomics	3 cr
<input type="checkbox"/> ENGT 1511	Introduction to Engineering Technology (PLTW™)	3 cr
<input type="checkbox"/> ENGT 1512	Principles of Engineering (PLTW™)	3 cr
<input type="checkbox"/> ENGT 1513	Digital Electronics Technology (PLTW™)	3 cr
<input type="checkbox"/> ENGT 1514	Computer Integrated Manufacturing (PLTW)	3 cr
<input type="checkbox"/> PHYS 1111	College Physics 2	4 cr
<input type="checkbox"/> THTR 1140	Stagecraft	3 cr

*Students may select COMT 1107, CSCI 1101, ENGT 1511, ENGT 1512, ENGT 1513 and ENGT 1514 if not previously used to satisfy Core Courses credit requirements.*

### Other Degree Requirements

- If needed, complete additional courses to reach 60 college-level credits total.
- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum of 15 college-level credits at Normandale.

*Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report.*

The Vacuum Maintenance Technician Certificate prepares individuals with little or no previous college coursework for a career as a technician supporting vacuum-based equipment. The coursework included in the certificate provides the student with the necessary academic experience in college algebra, chemistry, general engineering technology and vacuum technology to perform as a vacuum maintenance technician.

### Required Courses – 28-29 Credits

- |                          |           |                                     |      |
|--------------------------|-----------|-------------------------------------|------|
| <input type="checkbox"/> | ENGC 1101 | College Writing                     | 4 cr |
| <input type="checkbox"/> | ENGT 1153 | AC/DC Circuits                      | 4 cr |
| <input type="checkbox"/> | ENGT 1184 | Fluid Mechanics                     | 3 cr |
| <input type="checkbox"/> | VACT 1292 | Introduction to Vacuum Technology   | 2 cr |
| <input type="checkbox"/> | VACT 2293 | Vacuum Analysis and Troubleshooting | 4 cr |
| <input type="checkbox"/> | VACT 2297 | Thin Film Deposition                | 3 cr |

Complete **one** of the following two courses:

- |                          |           |                           |      |
|--------------------------|-----------|---------------------------|------|
| <input type="checkbox"/> | CHEM 1020 | Introductory Chemistry    | 4 cr |
| <input type="checkbox"/> | CHEM 1061 | Principles of Chemistry 1 | 5 cr |

Complete **one** of the following two courses:

- |                          |           |                    |      |
|--------------------------|-----------|--------------------|------|
| <input type="checkbox"/> | MATH 1100 | College Algebra    | 4 cr |
| <input type="checkbox"/> | MATH 1400 | Survey of Calculus | 4 cr |

### Other Certificate Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn at least one third of the required certificate credits from Normandale.

The Vacuum Technology Certificate is recommended for individuals who have either a 2-year technical degree (complete with necessary background in college algebra and chemistry) or a four-year technical or non-technical degree and the desire to acquire the necessary knowledge and skills to enter the field of vacuum technology. Completion of the certificate courses prepares the two-year technical degreed student for a career as a technician in vacuum technology. Students who possess four-year degrees will be prepared to advise on and support vacuum-based processes used in industries such as semi-conductor, microelectromechanical systems (MEMS), glass and optics, LED and solar cell and thin film coatings.

### Required Courses – 9 Credits

<input type="checkbox"/> VACT 1292	Introduction to Vacuum Technology	2 cr
<input type="checkbox"/> VACT 2293	Vacuum Analysis and Troubleshooting	4 cr
<input type="checkbox"/> VACT 2297	Thin Film Deposition	3 cr

### Other Certificate Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn at least one third of the required certificate credits from Normandale.

Coursework in this area is supportive of bachelor's degree programs in women's studies as well as the related fields of human services, education, American studies and other social sciences and humanities.

### Required Courses

Incorporate the following Required Courses into the General Education/Minnesota Transfer Curriculum or Additional Course Requirements sections below.

- WMST/ANTH SOC 1120 Introduction to Women's Studies and Gender Studies 3 cr
- WMST/ANTH SOC 1121 Women Across Cultures 3 cr

Complete **three** of the following four courses:

- BIOL 1125 Sex and Human Diversity 3 cr
- ENGL 1140 Gender and Literature 3 cr
- HIST 1131 Family: Sex/Gender/Power: A Cross-Cultural, Historical Perspective 3 cr
- SOC 1115 Sociology of Sex and Gender Roles 3 cr

### General Education/Minnesota Transfer Curriculum (MnTC) – 40 Credits

\*See MnTC Curriculum for specific course options

- GOAL 1: COMMUNICATION – 2 COURSES
  - ENGC 1101
  - COMM 1100 or 1101 or 1111 or 1121
- GOAL 2: CRITICAL THINKING  
(met by completion of all 40 credits of the MnTC)
- GOAL 3: NATURAL SCIENCES – 2 COURSES  
**Select from two different departments; one must include a lab**  
*BIOL 1125 can be used toward this requirement*
  - Course #1 \_\_\_\_\_
  - Course #2 \_\_\_\_\_
- GOAL 4: MATHEMATICAL/LOGICAL REASONING – 1 COURSE
  - COURSE \_\_\_\_\_
- GOAL 5: HISTORY AND SOCIAL/BEHAVIORAL SCIENCES – 2 COURSES  
**Select from two different departments**  
*This goal can be met by completing the required courses 1120 and 1121 from two different departments*
  - Course #1 \_\_\_\_\_
  - Course #2 \_\_\_\_\_
- GOAL 6: HUMANITIES AND FINE ARTS- 2 COURSES  
**Select from two different departments**  
*ENGL 1140 can be used toward this requirement*
  - Course #1 \_\_\_\_\_
  - Course #2 \_\_\_\_\_
- GOAL 7: HUMAN DIVERSITY – 1 COURSE
  - Course met by completing required courses
- GOAL 8: GLOBAL PERSPECTIVE – 1 COURSE
  - Course met by completing required courses
- GOAL 9: ETHICAL AND CIVIC RESPONSIBILITY – 1 COURSE
  - Course \_\_\_\_\_
- GOAL 10: PEOPLE AND THE ENVIRONMENT – 1 COURSE
  - Course \_\_\_\_\_

### Additional Course Requirements – 20 Credits

- One Health (HLTH) course.
- One Exercise Science (EXSC) course.
- Elective credits – additional course(s) numbered 1000 and above, if needed to complete the 60 credit requirement

### Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum cumulative grade point average (GPA) of 2.0 in the MnTC.
- Earn a minimum of 15 college-level credits at Normandale.

Women's Studies Emphasis (AA)		
needs placement into college level for ENGC 1101		
<i>Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.</i>		
1st year	Fall Semester	Spring Semester
	ENGC 1101 .....4cr	*ANTH 1121 (G5+8).....3cr
	MNTC Goal 1 COMM.....3cr	*MNTC Goal 3 with lab (non BIOL).....4cr
	*WMST 1120 (G5+9).....3cr	*MNTC Goal 6 (non ENGL).....3cr
	ENGL 1140 (G6) .....3cr	HIST 1131, PSYC 1106 or SOC 1115 .....3cr
BIOL 1125 (G3+7) .....3cr	HLTH elective.....3cr	
<b>TOTAL ..... 16cr</b>	<b>TOTAL ..... 16cr</b>	
2nd year	Fall Semester	Spring Semester
	MNTC Goal 4 .....3cr	MNTC Goal 10 .....3cr
	HIST 1131, PSYC 1106 or SOC 1115 .....3cr	EXSC elective .....1cr
	MNTC Elective.....3cr	Electives .....3cr
	Electives .....3cr	Electives .....3cr
	Electives .....2cr	Electives .....1cr
	<b>TOTAL ..... 14cr</b>	<b>TOTAL ..... 14cr</b>
<i>*For MNTC Goal areas that require 2 courses, they must come from 2 different departments</i>		



## Concurrent Registration

Sometimes a course requires that another course be completed either prior to or concurrently with it. For example, a student can complete GEOL 1110 prior to enrollment in GEOL 1111, or the student can take both GEOL 1110 and GEOL 1111 during the same semester (concurrently). The catalog description reflects when a course allows for concurrent registration.

## Corequisite

Corequisites are courses in which a student must be enrolled at the same time to ensure knowledge and skills are learned concurrently. Courses are set up at the curricular level, such as MATH 0995 and MATH 1095, and must always be taken together. Only a faculty member instructing the course can waive the corequisite requirement; however, the student must still meet course prerequisites.

The registration system enforces corequisite registration when the student is both adding and dropping or withdrawing from courses.

## Course Number and Class Title

Each course is designated by a department (such as ENGW, English Writing), a number, and a title. Courses numbered from 0 to 0999 are developmental and do not count toward degree requirements. Courses numbered 1000 to 2999 are college-level and apply toward certificate and associate degree program requirements.

## Credits

One credit equals one hour of class time per week for the duration of the semester. Courses are offered for fixed credits and for variable credits. A fixed-credit course is one whose hours are determined by the nature of the course as approved by faculty governance. A variable-credit course means that a student will determine how many credits a class will be worth in consultation with the instructor. Variable credits are seen in independent studies, internships, cooperative education experience, and other such courses.

## Course Description

The course description reflects the course's main content. It also gives information such as laboratory or clinical hours, repeat policies and other class-related requirements.

## Same as

A cross listed course is one that is offered by more than one department but has the same title, course description and content. The courses are offered together as one class, with students enrolling under the department that meets their academic goals.

Example: BUSN 1201 / CIM 1201, GEOG 1130 / GEOL 1130

## MnTC Goal

If the class satisfies one or more goal areas of the Minnesota Transfer Curriculum (MnTC), the course description will reflect it. While the credits awarded for a class will be counted only one time, the class can be applied toward all of the Goal areas as reflected in the course description. Topics courses (those numbered 1900 and 2900) cannot be used to satisfy MnTC Goal requirements.

## Prerequisite

A prerequisite is a requirement that a student must complete in order to enroll in a course. Prerequisites include courses and other criteria established by faculty to ensure a student has adequate preparation to be academically successful in a course. The college catalog and eServices indicate course prerequisites. Students are responsible for understanding and adhering to prerequisite requirements for all classes. For mathematics courses, prerequisites must have been completed within the 5 years prior to the date the course begins.



## ACCT - Accounting

### **ACCT 1051 Accounting Basics 1 cr**

This class provides preparation for future accounting work. It will help develop basic accounting knowledge in the following areas: the role of accounting in business, the accounting equation, rules of debits and credits, analyzing and recording transactions, adjusting accounts, preparing financial statements, and completing the accounting cycle.

### **ACCT 1052 Computerized Accounting 2 cr**

This course is designed for non-accounting majors. The course provides an environment in which students use computerized accounting software to create financial statements and other financial reports, reinforce learned accounting concepts, and see how computer software can be used to make business decisions. Prerequisite: ACCT 1051 or ACCT 2251.

### **ACCT 1900 Topics in Accounting 1-4 cr**

Examination of a special topic in accounting (e.g. accounting information systems). Intended for all interested students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum. Prerequisite: Topic-dependent.

### **ACCT 2096 Internship in Accounting 2-4 cr**

This internship course explores careers and training in a supervised work setting and combines theory with field experience in an approved accounting environment. Students must complete 45 hours per credit, additional academic work, and meet regularly with a faculty member. Students may earn 2 to 4 credits. Prerequisite: ACCT 2251 and consent of instructor

### **ACCT 2251 Financial Accounting 4 cr**

This course, the first of the two consecutive courses in financial and managerial accounting, is designed to develop basic accounting knowledge of students in the following areas: generally accepted accounting principles and concepts, accounting cycle, preparation of financial statements, cash management, accounting for merchandising operations, receivables, inventory, current and long-term liabilities, long-term assets, stock transactions and financial statement analysis.

### **ACCT 2252 Managerial Accounting 4 cr**

This course is the second of the two consecutive courses in financial and managerial accounting. The course focuses on managerial accounting concepts and accounting tools and techniques used for decision-making. The course content includes job and process costing, activity-based costing, cost volume-profit analysis, target pricing, budgets, variances and cost-revenue analysis for decision-making. Prerequisite: ACCT 2251.

### **ACCT 2254 Introduction to Management Information Systems 4 cr**

Introduction to Management Information Systems focuses on the role of computer-based information systems in organizations and the use of information to satisfy business information needs. This course explores the use of information technology in redesigning products and procedures to make businesses more efficient and competitive. Coverage includes concepts and approaches in developing information systems, the growing role of Internet in electronic commerce, and the social and ethical impact of information systems. Emphasis is also placed on the design and use of databases.

### **ACCT 2853 Federal Individual Income Tax 4 cr**

This course is intended to cover Internal Revenue Code as applied to individual income tax returns. The material covered would include filing requirements, personal tax credits and exemptions, gross income inclusions and exclusions, itemized deductions, employee business expenses, self-employment, rental activities, property basis, and capital gains and losses. Students will have the opportunity to prepare federal and state income tax returns using tax preparation software. Recommended: ACCT 2251.

### **ACCT 2900 Topics in Accounting 1-4 cr**

Examination of a special topic in accounting (e.g. accounting information systems); intended for second-year students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum. Prerequisite: Topic-dependent.

## ANTH - Anthropology

### **ANTH 1100 Introduction to Anthropology What it Means to be Human 4 cr**

This course is designed to introduce students to a full four-field approach to the anthropological study of human beings. Students will survey the ways that humans shape and live within the cultural realms through historical, environmental, biological and cultural (social) factors. The importance of context in research will be emphasized in this course, with key concepts, sub-discipline content, approaches and questions relating to cultural, biological and linguistic anthropology, plus archaeology introduced. In addition, specific categories of key vocabulary, theoretical orientations, methods, and practices will be provided as a general introduction to what it means to be human. MnTC Goals: 5, 8.

### **ANTH 1101 Cultural Diversity 3 cr**

This course aims to promote understanding and appreciation of cultural diversity. Sociological and anthropological perspectives will be used to examine socio-cultural diversity, the challenges and opportunities it presents, and its importance in our dynamic contemporary world. The course also emphasizes processes such as workplace diversity and long-term trends in cultural pluralism, which are transforming our everyday experiences and identities. MnTC Goals: 5, 8.

**ANTH 1102 Tracing the Roots of Racism Through Anthropology 3 cr**  
Emphasizing the role of anthropology as a primary creator and contributor historically to our understanding and use of the terms race and racism, this course focuses on how biological and cultural conceptions of race intersect both in the United States and globally. Historical and comparative approaches will be used to trace how early perspectives of race and racism evolved politically, socially, continuing to this day. One specific focus will be to demonstrate how racism perpetuates inequalities that give rise to health disparities throughout the world.  
MnTC Goals: 5, 8.

**ANTH 1120 Introduction to Women's and Gender Studies 3 cr**  
This course investigates the evolving position of women in society and the role of gender in shaping opportunities and experiences. Through various cultural and theoretical perspectives, students analyze how women's rights and roles change and how gender influences power, status and meaning.  
Cross-Listed as: SOC 1120 and WMST 1120.  
MnTC Goals: 5, 9.

**ANTH 1121 Women Across Cultures 3 cr**  
This course focuses on the major institutions of family, education, economic, and political systems as they define, provide for, and frequently limit women. The course addresses women's issues throughout many cultures of the world and considers how women's gender intersects with race, religion, and sexual orientation.  
Cross-Listed as: SOC 1121 and WMST 1121.  
MnTC Goals: 5, 8.

**ANTH 1127 Cultural Anthropology -The Global Human Experience 3 cr**  
This course examines the human way of life by recognizing and evaluating cultural adaptations to natural and social environments. The cultural organization of non-western and western cultures including indigenous and modern societies is analyzed with emphasis upon subsistence patterns, social structure, languages, belief systems, family and kinship, personality, culture change and applied anthropology.  
MnTC Goals: 5, 8.

**ANTH 1145 Introduction to Forensic Anthropology 3 cr**  
This course examines the physical diversity of human populations – the young and old, male and female, large and small, and people of broadly varying ancestry. Scientific study of differences among human populations in skeletal anatomy, dentition, hair, certain soft tissue and DNA can be useful in understanding and debunking historical prejudices, understanding how natural selection operates, and to identify victims from their remains. Students will examine actual human bones and gain understanding of how physical evidence can be applied to subjects ranging from archaeology to judicial proceedings.  
Recommended: Eligible for ENGC 1101 and READ 1106. MnTC Goals: 5, 7.

**ANTH 1148 Examining Culture – Seeing and Doing Anthropology 3 cr**  
Participation observation has been, and continues to be, the primary method used by anthropologists in evaluating culture. Students who take this course, either as a supplement to having taken introductory cultural anthropology or as an alternative to typical cultural anthropology courses, will actively participate in either ethnographic fieldwork and/or presentations based upon individual visual essays presented, and thus, a very broad exploration of experiential learning in anthropology will be presented.  
MnTC Goals: 5, 8.

**ANTH 1150 Native American Voices 3 cr**  
This course introduces North American Pre and Post-Contact History from an anthropological lens: by examining selected traditional Native American cultures from the perspectives of Native peoples with emphasis on change through time.  
MnTC Goals: 5, 7.

**ANTH 1188 Magic, Witchcraft and Religion: The Anthropology of Religion 3 cr**  
This course offers a systematic comparison of the many religions in human cultures, from straightforward to complex. Students will explore not only beliefs, mythology, and rituals, but also the sacred, symbolism, organization, practitioners, and religion as it relates to other aspects of culture, such as language and politics. May include one or more field trips.  
MnTC Goals: 5, 8.

**ANTH 1210 Human Evolution - An Introduction to Bio-Anthropology 4 cr**  
This course introduces humans as biological organisms, descended from animal ancestors and closely related to other living primates. The processes involved in evolution such as natural selection, population genetics, genetic inheritance, and bio-cultural adaptation will be discussed. Human ancestry, inferred from the fossil record, will be a primary focus, especially those attributes and selection pressures that led to behaviorally modern humans. Students will be involved with hands-on activities with various fossils and artifacts for this course.  
MnTC Goals: 5, 10.

**ANTH 1230 Archaeology - Prehistory and Humanity's Cultural Origins 4 cr**  
This course examines how the physical remains of past cultures are used to reconstruct vanished societies, explain their origins, and understand the factors that contributed to their ultimate collapse. It focuses on the universal cultural, economic and ecological factors that affected ancient peoples and how these staged the modern world.  
MnTC Goals: 5, 10.

**ANTH 1235 Field Archeology – Methods of Exploring the Past 3 cr**

This course will provide an introduction to field and laboratory archeology. The course covers the full scope of the scientific methods used to locate, excavate, analyze, and interpret the material evidence of vanished prehistoric cultures. Field archeology requires familiarity with the legal and ethical responsibilities that govern such work, and the course will discuss these in detail. Particular focus will be given to field work, including an intensive two-day excavation of a Native American site in southwestern Minnesota. The laboratory component will also include hands-on interaction with artifacts, interpreting, and cataloging materials that have been recently recovered by teams at Normandale.

MnTC Goals: 5, 9.

**ANTH 1236 Archaeology of Minnesota - Prehistoric Native Cultures 3 cr**

This course will evaluate the prehistory and cultures in Minnesota from the earliest prehistoric human presence to the time of contact with European settlements. Students will examine how the physical remains of past cultures in Minnesota are used to reconstruct the past. The focus will be on the environmental and resource factors that affected these early cultural groups in Minnesota.

Prerequisite: Eligible for ENGC 1101 and READ 1106. MnTC Goals: 5, 10.

**ANTH 1899 Medical Anthropology: Health, Illness and Healing Across Cultures 3 cr**

This course introduces students to the ways that medical anthropologists understand disease, illness, suffering, and healing as it occurs in a complex weave of biological, psychological, cultural, environmental, and political-economic processes. Particular emphasis, through case studies, will be placed upon the cultural context in which illnesses and suffering are experienced, narrated, and addressed. The importance of cultural competence in health-related practices (the ability to understand and communicate effectively with people from different cultures) will be emphasized throughout this course.

Recommended: Eligible for ENGC 1101 and READ 1106. MnTC Goals: 5, 8.

**ANTH 1900 Topics in Anthropology 3 cr**

Examination of a special topic in anthropology. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

**ANTH 2096 Internship in Anthropology 2-4 cr**

This internship course explores museology careers and training in a supervised work setting and combines theory with field experience in an approved museum environment. Students must complete 45 hours per credit on the job, additional academic work, and meet with a faculty member monthly for the duration of this internship. Students may earn 2 to 4 credits.

Prerequisite: ANTH 1100 and consent of instructor

## ART - Art

**ART 1101 The Visual Arts 3 cr**

Introduction to the concepts underlying the creation and appreciation of the visual arts. Examination of works of Western and non-Western art: the visual elements and principles of design, art mediums, expression, and style. In addition to lecture, weekly studio sessions allow for the exploration of the creative process in works of art using a variety of materials. Lecture 2 hours per week; studio 2 hours per week.

MnTC Goals: 6, 8.

**ART 1102 Foundation Art History 3 cr**

Examines major Western art movements from Paleolithic cave painting through the Renaissance and Reformation in Northern Europe. Explores architecture, sculpture, painting, and craft through lecture, discussion, and written assignments.

MnTC Goals: 6, 8.

**ART 1103 Foundation Art History 3 cr**

Examines major Western art movements from the Baroque through Expressionism and other movements of the 1940s. Explores architecture, photography, sculpture, painting, and craft through lecture, discussion, and written assignments.

MnTC Goals: 6, 8.

**ART 1104 Contemporary Art Survey 3 cr**

Examines art movements from Abstract Expressionism through Postmodern and Contemporary styles, encompassing 1945 to the present day. Explores architecture, painting, photography, video art, sculpture, and craft through lecture, discussion, and written assignments.

MnTC Goals: 6, 8.

**ART 1105 Non-Western Art Survey 3 cr**

Examines art from the cultures of Asia, Africa, and the Americas. Explores architecture, painting, sculpture, craft, textile, and body adornment through lecture, discussion, and written assignments.

MnTC Goals: 6, 8.

**ART 1110 Introduction to Film Photography 3 cr**

Introduction to the technical and conceptual practices of photography as a creative medium. Camera operation and technique, photographic composition and design, processing and printing in a traditional darkroom. Development of critique and related vocabulary. Lecture 1 hour per week; studio 4 hours per week.

MnTC Goals: 6.

**ART 1113 Video Art 3 cr**

Introduction to the technical and conceptual practices of video as a creative medium. Concentration on conceptualization, interpretation, and evaluation of video-based art through screenings, discussions, critiques, demonstrations, and assigned projects. Development of critique and related vocabulary. Lecture 1 hour per week; studio 4 hours per week.

MnTC Goals: 6.

**ART 1114 Introduction to Digital Photography 3 cr**

Introduction to the technical and conceptual practices of photography and digital technology as a creative medium.

Camera operation and techniques, composition and design, digital image capture, related software, and digital output using the computer as a digital darkroom for creating photographic images. Development of critique and related vocabulary. Lecture 1 hour per week; studio 4 hours per week.

MnTC Goals: 6.

**ART 1115 2D Animation and Interactivity 3 cr**

Introduction to the technical and conceptual practice of two-dimensional animation and interactivity as a creative medium. Computer software applications are used to create animations and interactive content. Development of critique and related vocabulary. Lecture 1 hour per week; studio 4 hours per week.

MnTC Goals: 6.

**ART 1116 Introduction to Graphic Design 3 cr**

This course presents an introduction to graphic design as a form of visual expression. Emphasis will be placed on layout, design elements, typography and output. Relevant software, critique, and related vocabulary are also incorporated. Lecture 1 hour per week; studio 4 hours per week.

MnTC Goals: 6.

**ART 1118 Foundation Two-Dimensional Design 3 cr**

Introduction to making art in two-dimensions. Composition and the arrangement of color, line, shape, texture, value, and space using the principles of design. Assignments use a variety of tools, techniques, and materials. Development of critique and related vocabulary. Lecture 1 hour per week; lab 4 hours per week.

MnTC Goals: 6.

**ART 1120 Foundation Three-Dimensional Design 3 cr**

Introduction to making art in three-dimensions. Theory and application using the elements and principles of design.

Assignments use a variety of tools, techniques, and materials. Development of critique and related vocabulary. Lecture 1 hour per week; studio 4 hours per week.

MnTC Goals: 6.

**ART 1121 Foundation Drawing 1 3 cr**

Introduction to concepts, materials, and methods of drawing. Emphasis on visual elements and principles of design using various drawing media. Development of critique and related vocabulary. Lecture 1 hour per week; studio 4 hours per week.

MnTC Goals: 6.

**ART 1122 Foundation Digital Imaging 3 cr**

Introduction to the technical and conceptual practices of computer-generated art. Raster and vector computer software programs are used for digital output of projects. Development of critique and related vocabulary. Lecture 1 hour per week; studio 4 hours per week.

MnTC Goals: 6.

**ART 1123 Introduction to Sculpture 3 cr**

Introduction to the basic language and spatial concepts of sculpture to develop an understanding of additive, subtractive, and assemblage techniques. Create three-dimensional sculptures using a variety of materials to solve technical and creative problems. Development of critique and related vocabulary. Lecture 1 hour per week; studio 4 hours per week.

Lecture 1 hour per week; studio 4 hours per week.

MnTC Goals: 6.

**ART 1124 Introduction to Ceramics: Handbuilding 3 cr**

Introduction to concepts, materials, and methods of ceramics. Handbuilding techniques used to create various artworks that solve technical and creative problems. Development of critique and related vocabulary. Lecture 1 hour per week; studio 4 hours per week.

MnTC Goals: 6.

**ART 1125 Glass Fusing 1 3 cr**

Introduction to concepts, materials, and methods of fused glass. Glass fusing techniques used to create various artworks that solve technical and creative problems. Development of critique and related vocabulary. Lecture 1 hour per week; studio 4 hours per week.

MnTC Goals: 6.

**ART 1127 Introduction to Painting 3 cr**

Introduction to concepts, materials, and methods of painting. Explore paint to create various artworks that solve technical and creative problems. Development of critique and related vocabulary. Lecture 1 hour per week; studio 4 hours per week.

Recommended: ART 1118 or ART 1121.

MnTC Goals: 6.

**ART 1128 Watercolor Painting 3 cr**

Introduction to the concepts, materials and methods of watercolor painting. Explore watercolor to create various artworks that solve technical and creative problems. Development of critique and related vocabulary. Lecture 1 hour per week; studio 4 hours per week.

MnTC Goals: 6.

**ART 1130 Introduction to Ceramics: Wheel Throwing 3 cr**

Introduction to concepts, materials, and methods of ceramics. Wheel throwing techniques used to create various artworks that solve technical and creative problems. Development of critique and related vocabulary. Lecture 1 hour per week; studio 4 hours per week.

MnTC Goals: 6

**ART 1131 Introduction to Printmaking 3 cr**

This course introduces students to the concepts, materials, and methods of printmaking. Traditional and contemporary printing techniques are used to create various artworks that solve technical and creative problems, with an emphasis on relief (woodcut and linocut) and screenprinting processes. Students will critique artwork using vocabulary acquired in the course.

MnTC Goals: 6

**ART 1132 Mixed Media 3 cr**  
This course introduces concepts, materials, and methods of using mixed media to solve creative problems. Students are exposed to and experiment with a variety of media such as screenprinting, felting, batik, papermaking, and/or bookbinding. Through the introduction of formal analysis, students will critique artwork utilizing related, learned vocabulary.  
MnTC Goals: 6

**ART 1900 Topics in Art 1-4 cr**  
An examination of a special topic in art; intended for all interested students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.  
Prerequisite: Topic-dependent.

**ART 2200 AFA In Art Capstone: Portfolio and Professional Practices 3 cr**  
Introduction to presentation, documentation, business skills, and career planning specific to studio art. Practical applications to assist in transfer and career building. AFA in Art Capstone: Portfolio and Professional Practices, along with the AFA in Art Capstone: Exhibition course, are culminating activities for the AFA in Art degree. Lecture 1 hour per week; studio 4 hours per week.  
Prerequisite: ART 1118 and ART 1121 and ART 1122.

**ART 2201 Figure Drawing 3 cr**  
Explore, refine, and expand on concepts and skills learned in Drawing I. Introduction to drawing both nude and clothed models with an emphasis on human proportion, human anatomy, and composition. Work with various drawing techniques and materials. Lecture 1 hour per week; studio 4 hours per week.  
Prerequisite: ART 1121.  
MnTC Goals: 6.

**ART 2203 Advanced Ceramics: Handbuilding 3 cr**  
Continued and advanced exploration of various handbuilding, surface decoration, and kiln firing techniques. Emphasis on developing content and personal direction through discussion, critique, and contemporary ceramic context. Lecture 1 hour per week; studio 4 hours per week.  
Prerequisite: ART 1124.  
MnTC Goals: 6

**ART 2204 Foundation Drawing 2 3 cr**  
Explore, refine, and expand on concepts and skills learned in Drawing I. Emphasis on experimentation, the expressive potential of the medium use of color, and developing a personal vision that utilizes both formal and conceptual concerns. Lecture 1 hour per week; studio 4 hours per week.  
Prerequisite: ART 1121.  
MnTC Goals: 6

**ART 2206 Glass Fusing 2 3 cr**  
Explore, refine, and expand on concepts and skills learned in Glass Fusing 1. Emphasis on experimentation, the expressive potential of the medium, and developing a personal vision that utilizes both formal and conceptual concerns. Lecture 1 hour per week; studio 4 hours per week.  
Prerequisite: ART 1125.  
MnTC Goals: 6.

**ART 2207 Advanced Photography 3 cr**  
Explore, refine, and expand on concepts and skills learned in Black and White Photography or Digital Photography. Emphasis on experimentation, the expressive potential of the medium, and developing a personal vision that utilizes both formal and conceptual concerns. Lecture 1 hour per week; studio 4 hours per week.  
Prerequisite: ART 1110 or ART 1114.  
MnTC Goals: 6.

**ART 2208 Advanced Painting 3 cr**  
Explore, refine, and expand on concepts and skills learned in Painting or Watercolor Painting. Emphasis on experimentation, the expressive potential of the medium, and developing a personal vision that utilizes both formal and conceptual concerns. Lecture 1 hour per week; studio 4 hours per week.  
Prerequisite: ART 1127 or ART 1128.  
MnTC Goals: 6.

**ART 2210 AFA In Art Capstone: Exhibition 1 cr**  
Plan, design, and install an art exhibition with fellow degree students, in a gallery setting. Exhibiting a body of artwork is a culminating activity for the AFA in Art degree. Studio 2 hours per week.  
Prerequisite: Applied and accepted into AFA in Art degree program and ART 2200 (C or higher) and ten or fewer art credits remain for program completion.

**ART 2900 Topics in Art 1-4 cr**  
An examination of a special topic in art; intended for second-year students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.  
Prerequisite: Topic-dependent.

## BIOL - Biology

**BIOL 1001 Biology Boot Camp 2 cr**  
A non-majors course designed for the student with little or no background in biology, or as a refresher for the student who has not taken a biology course in the last three years. Provides a basic foundation for further course work in the biological sciences. Lecture 2 hours per week.

**BIOL 1100 Survey of Biology 4 cr**

A non-majors general education lab course that explores the organization of life. Topics include the scientific method, cells, metabolism, molecular biology, genetics, species diversity, ecology, and evolution. Lecture 3 credits, 3-hour lab 1 credit.  
Prerequisite: ENGC 0960 (C or higher) or READ 0960 (C or higher) or placement into ENGC 1101.  
MnTC Goals: 3.

**BIOL 1101 Introduction to Human Genetics 4 cr**

A non-majors general education lab course that explores the basic principles of human genetics. Topics include the scientific method, Mendelian genetics, sex determination, karyotypes, molecular genetics, ethical, legal, and social issues, genetics of cancer, and population genetics. Lecture 3 credits, 3-hour lab 1 credit.  
Prerequisite: ENGC 0960 (C/P or higher) or READ 0960 (C/P or higher) or placement into ENGC 1101.  
MnTC Goals: 3.

**BIOL 1102 Human Biology 4 cr**

A non-majors general education lab course that introduces the topics of human structure and function and causes of disease. Topics include the scientific method, cells and organ systems with an emphasis on contemporary issues. Lab requires dissection of a small mammal, collaborative data collection, and collecting data from students. Lecture 3 credits, 3-hour lab 1 credit.  
Prerequisite: ENGC 0960 (C/P or higher) or READ 0960 (C/P or higher) or placement into ENGC 1101.  
MnTC Goals: 3.

**BIOL 1103 Introduction to Emerging Diseases 4 cr**

A non-majors general education lab course that introduces the global, national, and local factors that cause and influence the emergence and re-emergence of infectious disease. Topics include the scientific method, epidemiology, disease transmission, survey of microorganisms, bioterrorism, food and water safety, and sexually transmitted diseases. Lab exercises mandate following biosafety practices for handling microbial pathogens. Lecture 3 credits, 3-hour lab 1 credit.  
Prerequisite: ENGC 0960 (C/P or higher) or READ 0960 (C/P or higher) or placement into ENGC 1101.  
MnTC Goals: 3, 8.

**BIOL 1104 Minnesota Natural History and Field Biology 4 c**

A non-majors education biology lab course that emphasizes the diversity of life in Minnesota from a natural history perspective. Topics include the scientific method, adaptation and evolution of plants and animals, ecology of terrestrial and aquatic biomes, endangered species, and the decline of biodiversity. Lab requires field trips on- and off-campus, which might include required field trips on prescribed dates. Lecture 3 credits, 3-hour lab 1 credit, which may include field trips on specific dates and times listed in eServices.

Prerequisite: ENGC 0960 (C/P or higher) or ENGC 0900 (C/P or higher) and READ 0960 (C/P or higher) or placement into ENGC 1101  
MnTC Goals: 3, 10.

**BIOL 1110 Environmental Biology 3 cr**

A non-majors general education course without lab. Introduction to and analysis of ecological principles, resources, population, energy and pollutants and their relationships to Minnesota and global environmental concerns.  
Prerequisite: ENGC 0960 (C/P or higher) or ENGC 0900 (C/P or higher) and READ 0960 (C/P or higher) or placement into ENGC 1101.  
MnTC Goals: 3, 10.

**BIOL 1120 Introduction to Evolutionary Biology 3 cr**

A non-majors, general education course that explores the process of biological evolution and the fundamental mechanisms and concepts by which evolution works. Topics typically covered include the nature of science, the scientific history of evolution, evidence and processes of evolution, natural selection and adaptation, role of DNA variation and gene regulation in evolution, origin of life, macroevolution and the tree of life. Lecture 3 hours per week.  
Prerequisite: ENGC 0960 (C/P or higher) or ENGC 0900 (C/P or higher) and READ 0960 (C/P or higher) or placement into ENGC 1101.  
MnTC Goals: 3.

**BIOL 1125 Sex and Human Diversity 3 cr**

A non-majors general education course without lab. An introduction to the biological concepts underlying human sexuality, reproduction, and development from an evolutionary perspective. Topics include the evolution of sex, sex determination and gender identity, anatomy and physiology of the human reproductive systems, development, and reproductive health.  
Prerequisite: ENGC 0960 (C/P or higher) or ENGC 0900 (C/P or higher) and READ 0960 (C/P or higher) or placement into ENGC 1101.  
MnTC Goals: 3, 7.

**BIOL 1501 Principles of Biology 1 5 cr**

This course is designed for students majoring in biology and other science related fields, including the health professions. Students will explore major biological processes occurring at the cellular level, with emphasis on cell structure and function, metabolism, reproduction, development, genetics and gene expression, and evolution. Students will engage in techniques appropriate to the study of biological processes and gain experience in experimental design, data analysis and interpretation, and the communication of results. Lecture 3 credits, 3-hour lab 1 credit.

Prerequisite: MATH 1080 or MATH 1090 or MATH 0700 (C/P or higher, valid for 5 years) or placement into MATH 1500/MATH 1150 or higher; and ENGC 0960 (C/P or higher) or ENGC 0900 (C/P or higher) and READ 0960 (C/P or higher) or placement into ENGC 1101.

MnTC Goals: 3.

**BIOL 1502 Principles of Biology 2 4 cr**

This course is the second in a sequence designed for students majoring in biology and other science related fields, including the health professions. Students will explore the evolution and diversity of organisms and their interactions with each other and the environment. Students will engage in techniques appropriate to the study of diverse organisms and their interactions and gain experience in experimental design, data analysis and interpretation, and the communication of results. Lecture 3 credits, 3-hour lab 1 credit.

Prerequisite: BIOL 1501 (C or higher).

MnTC Goals: 3.

**BIOL 1900 Topics in Biology 1-4 cr**

An examination of a special topic in biology; intended for all interested students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

**BIOL 2041 Human Anatomy 4 cr**

A scientifically rigorous and systematic study of the human body, intended for students pursuing careers in the health professions. Emphasis is on both gross and microscopic anatomy. Laboratory includes small mammal dissection, basic histology, and the gross and microscopic study of the human organ systems. Small mammal dissection is required for course completion. Lecture 3 credits, 3-hour lab 1 credit.

Prerequisite: CHEM 1050 or CHEM 1061 (C or higher) or concurrent registration; and ENGC 0960 (C/P or higher) or ENGC 0900 (C/P or higher) and READ 0960 (C/P or higher) or placement into ENGC 1101.

**BIOL 2042 Human Physiology 4 cr**

This course provides an integrative understanding of how the human body functions with emphasis on homeostatic mechanisms. Body systems studied include nervous, endocrine, muscular, cardiovascular, respiratory, digestive, urinary, immune, and reproductive. Laboratory studies include collecting data from students. Lecture 3 credits, 3-hour lab 1 credit.

Prerequisite: BIOL 2041 (C or higher), CHEM 1050 or CHEM 1061 (C or higher).

MnTC Goals: 3.

**BIOL 2043 Microbiology 4 cr**

A rigorous lab course intended for students pursuing careers in the medical professions. This course examines the biology of bacteria, protozoa, fungi, helminths, viruses, and prions. Topics include prokaryotic and eukaryotic cell structure and function, microbial metabolism, microbial genetics, physical and chemical methods of control, host defenses, and clinical applications. Lab exercises mandate following biosafety level 2 practices for handling microbial pathogens. Lecture 3 credits, 3-hour lab 1 credit.

Prerequisite: BIOL 1100 or BIOL 1501 or BIOL 2041 (C or higher), CHEM 1050 or CHEM 1061 (C or higher).

MnTC Goals: 3.

**BIOL 2044 Introductory Microbiology 3 cr**

A rigorous lab course intended for students pursuing careers in the health sciences, such as nursing and dental hygiene. This course examines the biology of bacteria, protozoa, fungi, helminths, viruses, and prions. Topics include prokaryotic and eukaryotic cell structure and function, microbial metabolism, microbial genetics, physical and chemical methods of control, host defenses, and health care applications. Lab exercises mandate following biosafety level 2 practices for handling microbial pathogens. Lecture 2 credits, 3-hour lab 1 credit.

Prerequisite: BIOL 2041 (C or higher), CHEM 1050 (C or higher).

MnTC Goals: 3

**BIOL 2096 Internship in Biology 2-4 cr**

This internship course provides career exploration and training in a supervised work setting and combines biological theory with practical experience. A student works 45 hours per credit at the internship site under the direction of the site supervisor and completes academic work in regular consultation with the faculty mentor. A student may choose to earn 2 to 4 credits.

Prerequisite: Previous coursework in Biology and consent of instructor and acceptance by internship program.

**BIOL 2202 Animal Diversity 4 cr**

A laboratory science course intended for biology and related majors. Students will explore evolutionary relationships among animal taxa from morphological, physiological, developmental, and ecological perspectives. Dissection of preserved animals is a required part of the laboratory. Lecture 3 hours per week; lab 3 hours per week.

Prerequisite: BIOL 1106 or BIOL 1502 (C or higher).

MnTC Goals: 3.

**BIOL 2203 Botany 4 cr**

A majors lab course that introduces the biology of plants and plant-like organisms. Course takes an evolutionary perspective emphasizing morphology, anatomy, adaptations, physiology, reproduction, ecology and economic importance of plants. Lecture 3 hours. Lab requires a minimum of 3 hours per week of scheduled or self-directed lab work.

Prerequisite: BIOL 1501 (C or higher).

MnTC Goals: 3.

**BIOL 2205 Genetics 4 cr**  
This course is designed for students majoring in biology. Students will explore major concepts in Mendelian, molecular, and population genetics, with emphasis on prokaryotic and eukaryotic gene expression, recombination, gene mapping, and chromosome analysis. Students will engage in techniques appropriate to genetic analysis and gain experience in experimental design, data analysis and interpretation, and the communication of results. Lecture 3 credits, 3-hour lab 1 credit.  
Prerequisite: BIOL 1502 (C or higher).  
MnTC Goals: 3.

**BIOL 2206 Ecology 4 cr**  
This course is designed for students majoring in biology. Students will explore ecological concepts and the scientific research that has built our understanding of interactions in nature at the organismal, population, community, ecosystem, and global levels. Students will acquire an understanding of how the different levels of ecology are studied, how these levels relate to each other, and what properties are important at increasing levels of complexity. Additional topics include evolutionary ecology and contemporary environmental change and its consequences. Students will engage in techniques appropriate to ecological study and gain experience in experimental design, data analysis and interpretation, and the communication of results. Lab requires field trips on and off campus which might include required field trips on prescribed dates. Lecture 3 credits, 3-hour lab 1 credit.  
Prerequisite: BIOL 1502 (C or higher).  
MnTC Goals: 3, 10.

**BIOL 2207 Cell Biology 4 cr**  
This course is designed for students majoring in biology. Students will explore major concepts in cell biology including eukaryotic cell structure and function, the cellular use of biomolecules, membranes, signal transduction, motility, and the extracellular matrix. Students will engage in techniques appropriate to the study of cells and cellular processes and gain experience in experimental design, data analysis and interpretation, and the communication of results. Lecture 3 credits, 3-hour lab 1 credit.  
Prerequisite: BIOL 1502 (C or higher).  
MnTC Goals: 3.

**BIOL 2208 Biology of Microorganisms 4 cr**  
This course is designed for students majoring in biology. Students will explore major concepts in microbiology including taxonomy, structure and function, biochemistry, metabolism, pathogenesis, immunology, and ecology of microbes, emphasizing the diverse role of microbes in the biological world. Students will engage in techniques appropriate to the study of microorganisms and gain experience in experimental design, data analysis and interpretation, and the communication of results. Lecture 3 credits, 3-hour lab 1 credit.  
Prerequisite: BIOL 1502 (C or higher).  
MnTC Goals: 3.

**BIOL 2900 Topics in Biology 1-4 cr**  
An examination of a special topic in biology; intended for second-year students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.  
Prerequisite: Topic-dependent.

## BUSN - Business

**BUSN 1102 Social Media Marketing 3 cr**  
In this course, students examine how organizations use social media to listen, understand and engage their target markets, provide value to their customers and potential customers, and promote calls to action that lead to sales of products and services. Topics include blogs, microblogs, social networks, video sharing, photo and image sharing, podcasting, various social media platforms, and careers in social media marketing.

**BUSN 1105 Introduction to Business 3 cr**  
The world of business, its relationship to the modern American economy, management, marketing, and financial disciplines. A broad overview of business functions and organizations.

**BUSN 1107 Leadership in the Workplace 3 cr**  
This course provides a basic introduction to leadership in the workplace. Students will assess their leadership traits and develop skills to improve their own leadership performance.

**BUSN 1125 Entrepreneurship 3 cr**  
Examines the skills needed to be a successful entrepreneur; screens a business opportunity and assesses the resources needed for successful setup of a company.

**BUSN 1130 Introduction to International Business 3 cr**  
International dimensions of business: global business environment (economic, legal, cultural, and political), and international business functions (management, marketing, finance, exporting, and importing).

**BUSN 1145 Supervision 3 cr**  
This course is designed for those students who are interested in becoming supervisors, or have recently become supervisors at their current jobs. Students will learn, develop, and improve the core competencies that will assist them in becoming a good supervisor.  
Recommended: Eligible for READ 1106, ENGC 0900 and MATH 0500.

**BUSN 1152 Hotel/Lodging Management 4 cr**  
This course examines the theoretical applications of room division operations including yield management and other vital hotel information concepts, with an emphasis on the bottom line.  
Cross-Listed as: HSMA 1162.

**BUSN 1153 Principles of Food Production and Sanitation 4 cr**  
Students are given hands on laboratory experiences in all major areas of food production. Lectures allow students to bridge the gap of food production with operating profitable food service and restaurant entities.  
Cross-Listed as: HSMA 1143.

**BUSN 1154 Food/Beverage Management and Cost Control 4 cr**  
A working understanding and application of the principles of food, beverage, labor, cost control, and management functions.  
Cross-Listed as: HSMA 2144.

**BUSN 1156 Casino Management and Operations 4 cr**  
Develop a working understanding of the principles of casino management and operational procedures necessary for state, federal, and Native American compliance (regulations and legal issues).  
Cross-Listed as: HSMA 2100.

**BUSN 1157 Introduction to Hospitality and Tourism Management 4 cr**  
This introductory course provides a portal to the dynamic field of hospitality, travel, and tourism industry. It provides students with a comprehensive overview of hospitality and tourism management including hotels, restaurants, food service, marketing, service companies, as well as the functional areas of hotel operations.  
Cross-Listed as: HSMA 1103.

**BUSN 1158 Convention and Meeting Planning Management 4 cr**  
An overview of successful convention and meeting planning management including all services, execution, and follow-up.  
Cross-Listed as: HSMA 2173.

**BUSN 1159 Hospitality Sales and Marketing Management 4 cr**  
Organization and functioning of marketing and sales department, the need for sales planning through analysis of product, competitors and market. In addition to sales planning and analysis, students will work with industry experts selling the hospitality product.  
Recommended: Strong interest in hotel management along with computer skills.  
Cross-Listed as: HSMA 2172.

**BUSN 1170 Introduction to Club Management 4 cr**  
Introduction to Club Management provides a unique perspective on all types of club management including spa, fitness, athletic, and city. Unique discussion and case study provide the student with the keys to successful leadership development complemented with relationship marketing skills and manufacturing successful club managers.  
Cross-Listed as: HSMA 1170.

**BUSN 1201 Information Technology Concepts and Business Software 1 3 cr**  
The purpose of the course is to prepare students for their future academic and professional pursuits using computers. The outcomes are designed to give students the tools to exceed the minimum expectations of employers. The course includes computer concepts and computer application software. Students will learn computer concepts of how computers operate, how they are used in industry, and how they improve communications as well as computer hardware, software and development, personal productivity software, data communications, the World Wide Web and e-mail, the social challenge, and career options. Students will also learn computer application software using document production in word processing, spreadsheets, and database management. Students will create text-based documents to include letters, research reports in MLA and APA formatting with citations, one-page brochure with clip art, page and section breaks, reviewing/tracking features, and creating a resume as a web page, use the formula features, charting, functions, pivot tables and goal seeking for spreadsheets; and use the database features to create tables and reports. Import data from Excel, set validation rules, and establish referential integrity of data including sorting and querying to gain skills to use in other courses or in the workplace. This course is required for most general computer requirements at 4-year colleges.  
Prerequisite: ENGC 0860 (C or higher) or ENGC 0800 (C or higher) or placement into ENGC 0960.  
Cross-Listed as: CIM 1201.

**BUSN 1210 Exceptional Customer Service 3 cr**  
Examines exceptional customer service issues that are key to building a successful customer driven organization.

**BUSN 1220 Business Problem Solving Analyzing – Excel 3 cr**  
Emphasizes worksheet formatting, formula design, advanced functions, macro commands (Visual Basic for Applications), graphing, PivotTables, and data analysis. Students will learn features using business scenarios. After taking this course, students will be prepared to take the Microsoft Office Systems (MOS) Excel Certified Application Specialist Exam.  
Prerequisite: CIM 1201 or BUSN 1201 (C or higher) or completion of equivalent computer competency tests administered by Normandale's CIM Department and eligible for ENGC 1101 and READ 1106. Recommended: Keyboarding and proofreading skills. This course is taught using Microsoft Office latest version business software for a PC.  
Cross-Listed as: CIM 1220.

**BUSN 1250 Intro to Project Management Software 3 cr**  
An introduction to project management using MS Project. Includes topics such as project management terminology, navigation in MS Project, creating and editing a project schedule, working with charts, resources and filters, tracking progress and costs, and closing a project. Provides a foundation for globally recognized Project Management Institute credentials such as CAPM and PMP.

Prerequisite: CIM 1201 or BUSN 1201 (C or higher) or completion of equivalent computer competency tests administered by Normandale's CIM Department and eligible for ENG 1101 and READ 1106.

Recommended: Keyboarding and proofreading skills. This course is taught using Microsoft Office latest version business software for a PC.

Cross-Listed as: CIM 1250.

**BUSN 1900 Topics in Business 1-4 cr**

An examination of a special topic in business; intended for all interested students. Topics may include public administration, supervision, and others. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

**BUSN 2096 Internship in Business 2-4 cr**

This internship course explores careers and training in a supervised work setting and combines theory with field experience in an approved business environment. Students must complete 45 hours per credit on the job, additional academic work, and meet regularly with a faculty member. Students may earn 2 to 4 credits.

Prerequisite: Previous coursework in Business and consent of instructor

**BUSN 2100 Human Relations and Effective Teams 3 cr**

Focuses on the importance of personal and group interrelationships within an organization. Topics covered are behavioral types, the communication process, diversity, equal opportunity, workplace bias, group leadership, and the psychological aspects of group dynamics.

**BUSN 2125 Business Practices in the Global Market 3 cr**

Provides understanding and application into the complex global business arena. Global markets have created the need for companies to do business in every corner of the world. It is imperative that businesses conduct themselves in a professional, ethical, yet sensitive manner regarding regional customs, traditions, and religious practices. This course examines the need for professional business practices, ethics, protocol, etiquette, and professional and social behavior in all settings of business, national and international.

Prerequisite: At least one course in BUSN or HSMA. Cross-Listed as: HSMA 2125.

**BUSN 2150 Revenue Management in Hospitality and Tourism 4 cr**

This course provides a foundation for managing revenues and costs in the hospitality and tourism industry. Students will learn the historical development of yield management (YM) and its formation into modern day revenue management (RM). The course will rely upon cases and articles to analyze trends and develop effective revenue management strategies in the accommodations, food and beverage, attractions and transportation sectors of the hospitality and tourism industry.

[Type here]

**BUSN 2155 Legal Environment of Business 3 cr**

A survey course about the legal aspects of managing a business. It includes a review of the basic U.S. legal system, ethics, contracts, legal structure of business, employment, consumer issues and international business law.

**BUSN 2200 Human Resource Management 3 cr**

An overview of the principles and practices of administering the human resource management functions in modern organizations to achieve an organization's objectives. Topics include employee selection and retention, training, job evaluation, compensation, health and safety, labor-management relations, communication with diverse workforces, employment law, and outsourcing.

**BUSN 2220 Statistics for Business and Economics 4 cr**

Basic statistics of business, economics, and public administration. Descriptive statistics, probability, and statistical inference. Understanding statistical methods as tools of decision-making. Prerequisite: Eligible for MATH 1100.

**BUSN 2252 Professional Selling 3 cr**

Analyze successful sales practices. Develop need satisfaction selling skills through skill practice that may apply to both selling and non-selling.

**BUSN 2300 Principles of Management 3 cr**

Develop insights into successful planning, organizing, directing, staffing, and controlling an organization and its employees.

**BUSN 2310 Small Business Management 3 cr**

All phases of setting up a small business: management, marketing, and financial operations. The final project is the development of a business plan.

**BUSN 2400 Principles of Marketing 3 cr**

The total marketing process from a strategic view, emphasizing managerial implications for product, promotion, price, and distribution strategies.

**BUSN 2500 Principles of Property and Liability Insurance 3 cr**

This course presents the basic principles of insurance, introducing insurance regulation, financial performance, marketing techniques, underwriting, claims, risk management, loss exposures and insurance policies.

Prerequisite: BUSN 1105

**BUSN 2501 Introduction to Property and Casualty Insurance 3 cr**

This course presents an overview of insurance, the major insurer functional areas, insurance regulation, insurance policies, and personal and commercial insurance with the goal of providing the learner with foundational knowledge and a familiarity with property-casualty insurance terminology.

Prerequisite: BUSN 1105

**BUSN 2502 Personal Insurance 3 cr**

This course presents an overview of personal loss exposures and an in-depth description of property-casualty personal insurance policies, including personal auto, homeowners, and others. Additionally, this course describes the loss exposures and planning needed to deal with premature death, retirement, disability, and illness.

Prerequisite: BUSN 1105

**BUSN 2503 Commercial Insurance 3 cr**

This course provides an in-depth examination of property-liability commercial insurance policies, including commercial property, business income, commercial crime, equipment breakdown, inland and ocean marine, general liability, commercial auto, workers compensation and employers' liability, business owners, farm, and specialty coverages.

Prerequisite: BUSN 1105

**BUSN 2900 Topics in Business 1-4 cr**

An examination of a special topic in business; intended for all interested students. Topics may include public administration, supervision, and others. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

## CCD-Counseling-Career-Development

**CCD 1170 Career Exploration 1 cr**

Relate self-understanding of interests, values, personality and skills to career options through exercises and inventories as you explore career fields.

Prerequisite: Eligible for ENGC 0900 or higher and READ 0960 or higher or consent of instructor.

**CCD 2000 Global Career Development Facilitator Program (GCDF) 8 cr**

A certificate training program for career development facilitators. The course consists of the education of career development facilitators in the following areas: career development overview, theory and information, helping and assessment skills, career information, resources and program design, reality checks, goal setting and action goals.

Prerequisite: Prior experience and instructor's permission.

Recommended: Eligible for READ 0960 and ENGC 0900.

## CHEM - Chemistry

**CHEM 1000 Real World Chemistry 3 cr**

This course, designed for non-science majors, is an introduction to basic chemical concepts and principles with an emphasis on a conceptual understanding of chemistry. Topics will focus on various applications of chemistry in the world today. This course is suitable for students who may not have a strong math or science background.

MnTC Goals: 3.

**CHEM 1001 Real World Chemistry and Lab 4 cr**

This lab course, designed for non-science majors, is an introduction to basic chemical concepts and principles with an emphasis on a conceptual understanding of chemistry. Topics will focus on various applications of chemistry in the world today. This course is suitable for students who may not have a strong math or science background. Lecture 3 hours per week; lab 2 hours per week.

MnTC Goals: 3.

**CHEM 1010 Environmental Chemistry 4 cr**

Chemical concepts are covered and applied to understanding and analyzing current environmental issues. Topics include air and water pollution, nuclear power, energy usage, and recycling.

Lecture 3 hours; lab 2 hours.

MnTC Goals: 3, 10.

**CHEM 1020 Introductory Chemistry 4 cr**

Basic principles of chemistry discussed and applied to everyday situations. Tools and methods of investigation used by chemists are introduced through weekly laboratory sessions. Lecture 3 hours; lab 2 hours.

MnTC Goals: 3.

**CHEM 1050 Foundations of Organic and Biochemistry 3 cr**

This one-term laboratory course, designed for non-majors, builds on general chemistry concepts to provide an overview of organic and biochemistry with an emphasis on applications to the chemistry of the human body. Topics include solutions and body fluids, acid-base chemistry, relation between structure and reactivity for biochemical molecules, metabolic pathways, and applications of nuclear chemistry. Lecture 2 hours; lab 2 hours.

Prerequisite: CHEM 1020 or high school chemistry within the past 2 academic years.

MnTC Goals: 3.

**CHEM 1061 Principles of Chemistry 1 5 cr**

Basic concepts of chemistry: atomic theory, stoichiometry, thermochemistry, chemical bonding, molecular structure, properties and behavior of the physical states, reaction types. Lecture 4 hours; lab 3 hours.

Prerequisite: CHEM 1020 (C or higher) or high school chemistry with lab within the past 2 academic years and MATH 0700 proficiency or concurrent registration or high school equivalent.

MnTC Goals: 3.

**CHEM 1062 Principles of Chemistry 2** **5 cr**  
Continuation of Chemistry 1061: Physical properties of solutions, chemical equilibrium, kinetics, reaction mechanisms, acid-base chemistry, thermodynamics, electrochemistry, qualitative analysis, nuclear chemistry, and chemistry in the atmosphere. Lecture 4 hours; lab 3 hours.  
Prerequisite: CHEM 1061 (C or higher).  
MnTC Goals: 3.

**CHEM 1900 Topics in Chemistry** **1-4 cr**  
An examination of a special topic in chemistry; intended for all interested students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.  
Prerequisite: Topic-dependent.

**CHEM 2041 Quantitative Analysis** **4 cr**  
Lecture and laboratory course emphasizing the theory and practice of gravimetric, volumetric, and instrumental analysis. Lecture 3 hours; lab 3 hours.  
Prerequisite: CHEM 1062.

**CHEM 2061 Organic Chemistry 1** **5 cr**  
Mechanisms and reactions of aliphatic compounds, stereochemistry, spectral analysis, and relevant instrumentation. Lecture 4 hours; lab 4 hours.  
Prerequisite: CHEM 1062.  
MnTC Goals: 3.

**CHEM 2062 Organic Chemistry 2** **5 cr**  
Aromaticity and reactions of aromatic compounds, heterocyclic compounds, polynuclear aromatic compounds, carbonyl polyfunctional compounds (aldehydes, ketones, carboxylic acids, carboxylic acid derivatives), enol and enolate chemistry, carbohydrates, synthetic polymers, amino acids, and proteins. Lecture 4 hours; lab 4 hours.  
Prerequisite: CHEM 2061 or CHEM 2058 with instructor's permission.  
MnTC Goals: 3.

**CHEM 2900 Topics in Chemistry** **1-4 cr**  
An examination of a special topic in chemistry; intended for second-year students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.  
Prerequisite: Topic-dependent.

**CHEM 2921 Biochemistry** **3 cr**  
This is a one semester non-biochemistry major course designed for students who intend to complete a four-year biological sciences major or enter a pre-professional program in dentistry, medicine, veterinary medicine, or pharmacology. Introduction to the fundamentals of biochemistry: structure and function of biological macromolecules; including the study of enzyme catalysis, metabolism and the regulation of metabolism (carbohydrates, lipids, amino acids and nucleotides), comprehensive, quantitative analysis of chemical equilibria, bioenergetics, and the chemical foundation of genetic information. Lecture 3 hours.  
Prerequisite: CHEM 2061 and BIOL 1501.

## CHIN - Chinese

**CHIN 1100 Beginning Chinese 1** **5 cr**  
Introduction to basic language skills. Development of listening, reading, speaking, and writing skills. Cultural understanding and sensitivity are important aspects of the course.  
MnTC Goals: 8.

**CHIN 1101 Introduction to Interpreting and Translation** **2 cr**  
Introduction to Interpreting and Translation introduces students to the career competencies, ethics and major theories related to the fields of interpreting and translation. Through readings by experts in the field, case studies, and professional profiles, students will learn about the fields of interpreting and translation and exercise key skills required to work in these professions. Taught in English. Cross-Listed as: INDS 1101, FREN 1101, GERM 1101, JAPN 1101, SPAN 1101.

**CHIN 1111 Chinese Culture & Civilization** **3 cr**  
This course acquaints students with aspects of the culture and civilization of the Chinese-speaking peoples. Course topics will be selected from among the areas of the arts, literature and history to allow students to gain an awareness of cultural, social, religious and linguistic aspects of the target culture. Students will develop an understanding of the responsibility that world citizens share for their common global future by comparing and contrasting their own culture with that of Chinese-speaking peoples. Taught in English.  
MnTC Goals: 6, 8.

**CHIN 1200 Beginning Chinese 2** **5 cr**  
This course is a continuation of the listening, speaking, reading, and writing competencies developed in CHIN 1100. Students further explore cultural differences, helping them to develop a deeper understanding of the world and a greater cultural perspective  
Recommended: CHIN 1100.  
MnTC Goals: 8.

**CHIN 2100 Intermediate Chinese 1 5 cr**  
Students continue the development and strengthening of the four communication skills (listening, speaking, reading, and writing). Cultural and literary materials will develop an appreciation for the arts, history, culture, and the literature of Chinese-speaking peoples and create an awareness of cultural, social, and linguistic differences and similarities. Major grammar focus includes resultative and potential complements, progressive change, and the aspect particle.  
Recommended: CHIN 1200.  
MnTC Goals: 6, 8.

**CHIN 2200 Intermediate Chinese 2 5 cr**  
Students continue the development and strengthening of the four communication skills (listening, speaking, reading, and writing). Cultural and literary materials will develop an appreciation for the arts, history, culture, and the literature of Chinese-speaking peoples and create an awareness of cultural, social, and linguistic differences and similarities. Major grammar focus includes the passive structure, compound sentences, causative and pivotal constructions, and tone/mood.  
Recommended: CHIN 2100.  
MnTC Goals: 6, 8.

## CHWN - Community Health Worker-Navigator

**CHWN 1000 The Community Health Worker: Role, Advocacy, Outreach, and Resources 3 cr**  
The course defines the role of the Community Health Worker (CHW). Students will explain strategies for personal safety in relation to home visits. Students will gain an understanding of the value of self-care and personal wellness. Students will become familiar with the health-related needs of their communities and cultural considerations. Students will also learn about their role as a liaison and connecting clients to appropriate community resources.

**CHWN 1100 Cultural Health Communication, Teaching, and Capacity Building 3 cr**  
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 capacity of the community and the client to access the health care and social services systems. Course materials will emphasize empowering clients to become self-sufficient in achieving personal health goals within the role of the CHW.

**CHWN 1200 Documentation, Legal, and Ethical Issues in Community Health Work 3 cr**  
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.

**CHWN 1500 The Community Health Worker: Health Promotion Competencies 5 cr**  
This course focuses on the role of the Community Health Worker in health promotion and disease prevention/management including cultural navigation, social determinants of health, connections to resources, and supporting clients and families.

**CHWN 2096 Community Health Worker Navigator Internship 2 cr**  
The goal of the Community Health Worker/Navigator Internship is to provide students the opportunity to use the skills and tools they have learned and apply them to assigned agency's needs. Students will apply these skills of advocacy and outreach to help individuals and families reduce health disparities. Students will be required to complete a minimum of 80 hours of on the job training and coursework. The on the job weekly hours requirement will be an agreement between the organization, student and faculty advisor.

## CIM - Computers Information Management

**CIM 1000 Keyboarding and Essential Computer Skills 3 cr**  
This is a course to develop mastery of computer keyboarding, essential computer skills, and introductory word processing. Computer keyboarding includes keying by touch no less than 30 words a minute with emphasis on proofreading and accuracy. Essential computer skill includes file management, creating and editing documents, and Normandale's learning management system (D2L). Students will apply their skills to create emails, memos, letters, and multiple page documents in a Windows environment. Recommended first year course so that skills and knowledge can be applied to other Normandale courses.

**CIM 1052 Desktop Publishing 3 cr**  
Designing and producing information-oriented publications utilizing a personal computer and page-layout software.  
Prerequisite: CIM 1201 or BUSN 1201.

**CIM 1101 Computer Basics 1 cr**  
Information about computers that provides the foundation for understanding how computers operate, how they are used in industry, and how they improve communications. Hands-on work with major applications not included.

**CIM 1111 Word Processing 1 1 cr**  
Same word processing content that is presented in CIM 1201 and BUSN 1201.

Prerequisite: Eligible for READ 0860 and ENGC 0800 this course is taught using Microsoft Office latest version business software for a PC.

**CIM 1121 Spreadsheets 1 1 cr**  
Same spreadsheet content that is presented in CIM 1201 and BUSN 1201.

Prerequisite: Eligible for READ 0860 and ENGC 0800 this course is taught using Microsoft Office latest version business software for a PC.

**CIM 1131 Database Management 1 1 cr**  
Same database management content that is presented in CIM 1201 and BUSN 1201.

Prerequisite: Eligible for READ 0860 and ENGC 0800 this course is taught using Microsoft Office latest version business software for a PC.

**CIM 1141 Presentation Graphics 1 1 cr**  
Same presentation graphics content that is presented in CIM 1201, using the most current release of software.

Prerequisite: Eligible for READ 0860 and ENGC 0800 this course is taught using Microsoft Office latest version business software for a PC.

**CIM 1201 Information Technology Concepts and Business Software 1 3 cr**

The purpose of the course is to prepare students for their future academic and professional pursuits using computers. The outcomes are designed to give students the tools to exceed the minimum expectations of employers. The course includes computer concepts and computer application software. The students will learn computer concepts of how computers operate, how they are used in industry, and how they improve communications. They will learn computer hardware, software and development, personal productivity software, data communications, the World Wide Web and e-mail, the social challenge, and career options. The students will learn computer application software using document production in word processing, spreadsheets, and database management. Students will create text-based documents to include letters, research reports in MLA and APA formatting with citations, one-page brochure with clip art, page and section breaks, reviewing/tracking features, and creating a resume as a web page; use the formula features, charting, functions, pivot tables and goal seeking for spreadsheets; and use the database features to create tables and reports, import data from Excel, set validation rules, and establish referential integrity of data including sorting and querying to gain skills to use in other courses or in the workplace. This course is required for most upper level Management Information Systems classes at 4-year colleges. Prerequisite: ENGC 0860 (C or higher) or ENGC 0800 (C or higher) or placement into ENGC 0960.

Cross-Listed as: BUSN 1201.

[Type here]

**CIM 1212 Word Processing 2 1 cr**  
Same word processing content that is presented in CIM 1201 and BUSN 1201.

Prerequisite: CIM 1111. Recommended: Keyboarding and proofreading skills. This course is taught using Microsoft Office latest version business software for a PC.

**CIM 1220 Business Problem Solving Analyzing – Excel 3 cr**  
Emphasizes worksheet formatting, formula design, advanced functions, macro commands (Visual Basic for Applications), graphing, PivotTables, and data analysis. Students will learn features using business scenarios. After taking this course, students will be prepared to take the Microsoft Office Systems (MOS) Excel Certified Application Specialist Exam.

Prerequisite: CIM 1201 or BUSN 1201 (C or higher) or completion of equivalent computer competency tests administered by Normandale's CIM Department and eligible for READ 1106 and ENGC 1101. Recommended: Keyboarding and proofreading skills. This course is taught using Microsoft Office latest version business software for a PC. Cross-Listed as: BUSN 1220.

**CIM 1222 Spreadsheets 2 1 cr**  
Same spreadsheet content that is presented in CIM 1201 and BUSN 1201.

Prerequisite: CIM 1121 Recommended: Keyboarding and proofreading skills. This course is taught using Microsoft Office latest version business software for a PC.

**CIM 1230 Business Information Management – Access 3 cr**  
Emphasizes creating and maintaining a database, creating simple and advanced queries, creating standard and custom forms and reports, enhancing table design, automating tasks with macros, managing and securing a database. After taking this course, students will be prepared to take the Microsoft Office Systems (MOS) Access Certified Application Specialist Exam. Prerequisite: CIM 1201 or BUSN 1201 (C or higher) or completion of equivalent computer competency tests administered by Normandale's CIM Department and eligible for READ 1106 and ENGC 1101.

**CIM 1232 Database Management 2 1 cr**  
Same database management content that is presented in CIM 1201 and BUSN 1201.

Prerequisite: CIM 1131 Recommended: Keyboarding and proofreading skills. This course is taught using Microsoft Office latest version business software for a PC.

**CIM 1240 Business Word Processing 3 cr**  
This course provides skills for students in word processing to be successful in the work place, thus increasing opportunities for employment. Students will use the latest release of word processing application software to create and maintain documents, enhance page layout, create tables and reports, and use templates to create professional business documents. After taking this course, students will be prepared to take the Microsoft Office Systems (MOS) Word Certified Application Specialist Exam.

Prerequisite: CIM 1201 or BUSN 1201 (C or higher) or completion of equivalent computer competency tests administered by Normandale's CIM Department and eligible for READ 1106 and ENGC 1101.

**CIM 1242 Presentation Graphics 2 1 cr**

This course is taught using Microsoft Office latest version business software for a PC.

Prerequisite: CIM 1141 Recommended: Keyboarding and proofreading skills. This course is taught using Microsoft Office latest version business software for a PC.

**CIM 1250 Intro to Project Management Software 3 cr**

An introduction to project management using MS Project. Includes topics such as project management terminology, navigation in MS Project, creating and editing a project schedule, working with charts, resources and filters, tracking progress and costs, and closing a project. Provides a foundation for globally recognized Project Management Institute credentials such as CAPM and PMP. Prerequisite: CIM 1201 or BUSN 1201 (C or higher) or completion of equivalent computer competency tests administered by Normandale's CIM Department and eligible for READ 1106 and ENGC 1101. Recommended: Keyboarding and proofreading skills. This course is taught using Microsoft Office latest version business software for a PC. Cross-Listed as: BUSN 1250.

**CIM 1260 Presentation Software 3 cr**

The purpose of this course is to prepare students for their future academic and professional pursuits. Students will use the latest release of presentation software to plan and create presentations, print slides, handouts and speaker notes, apply themes, slide transitions, and animation. After taking this course students will be prepared to take the Microsoft Office Systems (MOS) PowerPoint Specialist Certification Exam.

Prerequisite: CIM 1201, BUSN 1201 (C or higher) and eligible for READ 1106 and ENGC 1101. Recommended: Keyboarding and proofreading skills. This course is taught using Microsoft Office latest version business software for a PC.

**CIM 1900 Topics in Computers/Information Management 1-3 cr**

Examination of a special topic in computer applications; intended for all interested students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

**CIM 2000 Computer Applications Training Practicum 3 cr**

This is a capstone course designed to be taken by students in their final semester of the Computer Information Management AAS degree. The course ties together the key learning objectives students are expected to master during the program. The course also serves as a training and development experience to reinforce computer applications skills and knowledge. Students will practice problem-solving skills by tutoring computer users and responding to typical technical application issues in business, office, classroom/training, emails, or videoconferencing settings.

Prerequisite: BUSN 1201 (C or higher); CIM 1220 (C or higher); keyboarding skills of at least 35 words per minute and consent of instructor.

**CIM 2900 Topics in Computers/Information Management 1-3 cr**

Examination of a special topic in computer applications; intended for second-year students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

## COMM - Communication

**COMM 1100 Introduction to Communication 3 cr**

The primary purpose of this course is to provide students an introduction to the field of communication. Students will practice and develop skills in the areas of interpersonal communication, public speaking, and small group communication.

MnTC Goals: 1.

**COMM 1101 Fundamentals of Public Speaking 3 cr**

The primary purpose of this course is to provide instruction and practical experience in the basic fundamentals of effective public speaking. Students will prepare, perform and evaluate a variety of speeches throughout the semester.

MnTC Goals: 1.

**COMM 1106 Mass Media 3 cr**

The purpose of this course is to develop media literate citizens through the examination of the nature, function, history, and effects of mass media. A primary emphasis will be placed on developing a critical awareness of mass media (print media, radio, film, music, television, social media, video games, etc.), advertising, media ethics, and societal impact.

MnTC Goals: 5, 9.

**COMM 1111 Interpersonal Communication 3 cr**

The primary purpose of this course is to assist the student in examining and developing competence as an interpersonal communicator. Students will practice skills and learn strategies to develop and manage relationships more effectively in a variety of contexts.

MnTC Goals: 1.

**COMM 1113 Principles of Public Relations 3 cr**

The primary purpose of this course is to provide students with a general overview of the methodologies, theories, and practices of public relations. Issues of PR history, ethics, effects, and trends throughout a variety of industries will be addressed. Students are encouraged to think broadly about the globalized communication function of the field, and how mischaracterizations of public relations can be dissected and dismantled.

MnTC Goals: 9.

**COMM 1121 Small Group Communication 3 cr**

The primary purpose of this course is to assist the student in understanding and applying small group communication principles. Students will develop skills while participating in groups, completing group projects, and analyzing group processes.

MnTC Goals: 1.

**COMM 1131 Intercultural Communication 3 cr**

The primary purposes of this course are to raise awareness of cultural values, beliefs, norms, and biases and address how culture affects communication choices on the interpersonal, group, cross-cultural and global levels. Issues of nationality, race, ethnicity, class, gender, religion, etc., will be addressed.

MnTC Goals: 7, 8.

**COMM 1141 Nonverbal Communication 3 cr**

Nonverbal messages as a formal message system used to communicate. Focuses on the major areas of nonverbal messages. Identifies how nonverbal messages differ according to gender, culture and power and how this translates into various contexts such as education, business, environment, and interpersonal relationship development.

MnTC Goals: 7.

**COMM 1151 Storytelling 3 cr**

The primary purpose of this course is to discover the cultural and personal connections in oral storytelling. Through critical analysis and performance, students will explore the art of storytelling. Emphasis will be given to vocal and physical delivery elements as a means to communicate the message of cultural and personal narrative. Students will perform a variety of stories.

MnTC Goals: 6.

**COMM 1450 Social Media and Digital Communication 3 cr**

The primary purpose of this course is to provide students with a fundamental understanding of the communicative impact of social media. Students will be introduced to the general concept of what social media is, its impact on society, and the influence that mediated communication has on the development of identity and relationships with others.

MnTC Goals: 5.

**COMM 1900 Topics in Communication 1-4 cr**

An examination of a special topic in the field of communication; intended for all interested students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

**COMM 2096 Internship in Communication 2-4 cr**

Students will explore careers in the communication field in a local organization, putting into practice skills learned in communication courses. Students must finish 45 hours per credit at the internship, complete additional course work, and meet with a communication faculty member. Students may register for 2 to 4 credits.

Prerequisite: Previous coursework in Communication and consent of instructor.

**COMM 2111 Family Communication 3 cr**

This course explores how communication functions within families to develop, maintain, enrich, or limit family relationships. Descriptive rather than prescriptive, the course emphasizes understanding families as unique communication systems embedded within sub-cultural and cultural ecosystems.

Awareness of the functions of communication in families can help students understand more about how and why their families behave as they do. The course also provides several theoretical approaches to help students better understand the interactional dynamics occurring in their family or families.

Prerequisites: COMM 1100 or COMM 1111 (C or higher).

MnTC Goals: 5.

**COMM 2900 Topics in Communication 1-4 cr**

An examination of a special topic in the field of communication; intended for second-year students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

## COMT - Computer Technology

**COMT 1107 Introduction to Computer Technology 4 cr**

Topics associated with computers and computing: input/output, central processing unit, storage devices, programming languages, operating systems, PC software programs, security and privacy issues, and trends in computing.

**COMT 1173 PC Architecture Operation and Interface 3 cr**

Introductory course on the architecture of computers. Using the PC as a representative architecture, the primary components of the PC and their interfaces are examined. Function of the operating system and its interaction with the computer hardware. Must be completed within the last seven years prior to receiving the AAS degree or certificate in Computer Technology.

Prerequisite: COMT 1107.

**COMT 1181 Database Management Systems 3 cr**

Various database models with emphasis on the relational model. Data relationships and attributes, the use of entity relationship diagrams, and data mapping operations. Must be completed within the last seven years prior to receiving the AAS degree or certificate in Computer Technology.

Prerequisite: COMT 1107.

**COMT 1182 Advanced Database Management Systems 3 cr**  
This course will present advanced features of relational database including concurrency control, query optimization, distributed databases, and database administration. It will present many of the constructs of SQL (Structure Query Language), including queries, updates, and deletes. It will provide students with the tools and techniques for report generation.  
Prerequisite: COMT 1181.

**COMT 1184 Telecommunications 3 cr**  
Aspects of telecommunications such as network topology, standards, OSI model, media, modems, data compression, data security, and the Internet. Must be completed within the last seven years prior to receiving the AAS degree in Computer Technology.  
Prerequisite: COMT 1107.

**COMT 1205 Introduction to Visual Basic 3 cr**  
This course introduces the Visual Basic programming language through hands-on development of projects of increasing complexity as the student gains increased understanding of the language. The course will include forms, controls, menus, programming fundamentals, syntax, and file formats. Must be completed within the last seven years prior to receiving the AAS degree or certificate in Computer Technology.

**COMT 1900 Topics in Computer Technology 3 cr**  
An examination of a special topic in computer technology; intended for all interested students. Topics may include hardware structures of PCs, hardware/software interactions, structure of programming language, input/output. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.  
Prerequisite: Topic-dependent.

**COMT 2096 Internship in Computer Technology 2-4 cr**  
Computer skills gained throughout the program are enhanced and comprehensively exercised through an on-the-job experience. This internship course provides career exploration and training in a supervised work setting and combines computing technology theory with practical experience. A student works 45 hours per credit at the internship site under the direction of the site supervisor and completes academic work in regular consultation with the faculty mentor. A student may choose to earn 2 to 4 credits.  
Prerequisite: Previous coursework in Computer Technology and consent of instructor.

**COMT 2186 Microprocessors and Digital Logic (Lecture only) 3 cr**  
Basic building blocks of digital logic-gates, flip-flops, shift registers. These building blocks are used to create more and more complex forms with the microprocessors being a programmable logic element. Comparison between hard-wired and software-based elements are developed as well. There is no laboratory and the prerequisite for ENGT 1153 is waived. Must be completed within the last 7 years prior to receiving the AAS degree or certificate in Computer Technology.  
Prerequisite: COMT 1107 or COMT 1173 (C or higher).

**COMT 2188 Systems Analysis and Design 3 cr**  
The total environment of a computer-based system - analysis, design, implementation, and maintenance. Concepts and tools used in the system development life cycle and analysis of large systems are introduced. Must be completed within the last 7 years prior to receiving the AAS degree in Computer Technology.  
Prerequisite: COMT 1173 (C or higher). Offered: Spring.

**COMT 2201 Preparation for the A+ Exam 2 cr**  
The A+ Certification course covers the topics required for the two qualifying exams of the A+ certification, Core Hardware, and OS Technologies, (the exams are administered by third-party examiners selected by Comp TIA). The course consists of lecture materials covering exam topics as well as a hands-on laboratory component where the student replaces and updates major components of a personal computer.  
Prerequisite: COMT 1173.

**COMT 2250 Object Oriented Programming with Java for HCST 4 cr**  
This course enables students to learn object oriented programming principles using the Java programming language. Students will become familiar with Java techniques that are widely used in the industry, including best practices for the implementation of component based software architecture.  
Prerequisite: Eligible for CSCI 1101 and COMT 2188.

**COMT 2900 Topics in Computer Technology 3 cr**  
An examination of a special topic in computer technology. Intended for second-year students. Topics may include hardware structures of PCs, hardware/software interactions, structure of programming language, and input/output. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.  
Prerequisite: Topic-dependent.

## CSCI - Computer Science

**CSCI 1100 Fundamentals of Computers 4 cr**  
Overview of the computer system: the CPU and chip technology, input and output, storage devices, communications and networks, the Internet and World Wide Web, programming and languages, operating systems, applications software, security, privacy and ethics, artificial intelligence, expert systems and robotics, virtual reality, ergonomics, Windows, word processing, spreadsheets, database management systems, presentation graphics.

**CSCI 1101 Introduction to Computing and Problem Solving 4 cr**  
Problem solving techniques in computer programming. A structured approach to algorithm development to solve a large number of problems. Students will write pseudo code to develop problem solving skills. They will write simple programs in one or more programming languages.  
Prerequisite: MATH 0700 or MATH 0670 (C or higher) or eligible for MATH 1100.

**CSCI 1111 Introduction to Programming in C 4 cr**  
Problem solving using the C programming language. Topics will include the syntax of the language, operators and expressions, control structures, scoping rules, functions, parameter passing, arrays, strings, pointers, structures, type definitions, file handling, libraries.  
Prerequisite: CSCI 1101.

**CSCI 1113 Intro to C/C++ for Engineers 4 cr**  
Programming for scientists/engineers. C/C++ programming constructs, object-oriented programming, software development, fundamental numerical techniques; exercises/examples from various scientific fields.  
Prerequisite: MATH 1510.

**CSCI 1202 Introduction to Object-Oriented Programming in C++ 4 cr**  
Programming in C++ and concepts of C++, with an emphasis on programming techniques and object-oriented programming. Must be completed within the last 7 years prior to receiving the AAS degree in Computer Technology.  
Prerequisite: CSCI 1111.

**CSCI 1203 Introduction to Computer Programming in Java 4 cr**  
Introduction to object-oriented programming using the Java programming language. Use of Java for developing conventional applications and Internet-based applications will be examined. Must be completed within the last seven years prior to receiving the AAS degree in Computer Technology.  
Prerequisite: CSCI 1111.

**CSCI 1900 Topics in Computer Science 1-4 cr**  
Topics of current interest in the computer sciences, including specialized language courses and operating system courses. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.  
Prerequisite: Topic-dependent.

**CSCI 2001 Computer Programming Concepts 4 cr**  
Introduces students to the fundamental principles of programming. Procedures, recursion, and iteration will be presented as algorithmic development techniques. Abstract data types, modularity and the use of abstraction to hide program details will be emphasized throughout the course. The computer language Python is used as a formal way of expressing algorithms and data.  
Prerequisite: CSCI 1101 and MATH 1510 or concurrent registration.

**CSCI 2002 Algorithms and Data Structures 4 cr**  
Reinforces the concepts presented in CSCI 2001, such as data abstractions, from an object-oriented programming perspective. Introduces data structures such as stacks, queues, and trees, and introduces sorting algorithms. Students will implement data structures and their operations as abstract data types using an object-oriented approach. The programming language Java is used to express the concepts of the course.  
Prerequisite: CSCI 1111 and CSCI 2001.

**CSCI 2011 Discrete Structures of Computer Science 4 cr**  
Concepts fundamental to the analysis of algorithms. Topics include logic, sets, methods of proof including mathematical induction, combinatorics, relations, solution of recurrence relations, graphs, trees.  
Prerequisite: MATH 1510. Cross-Listed as: MATH 2011. MnTC Goals: 4.

**CSCI 2021 Machine Architecture and Organization 4 cr**  
Introduction to computer organization, machine language, and use of assembly language programming using the Motorola 680x0.  
Prerequisite: CSCI 1101 and experience with C, C++, or Java.

**CSCI 2033 Elementary Computational Linear Algebra 4 cr**  
Matrices and linear transformations, basic theory, linear vector spaces, inner product spaces. Systems of linear equations, Eigenvalues, and singular values. Algorithms and computational matrix methods using MATLAB. Use of matrix methods to solve a variety of computer science problems.  
Prerequisite: MATH 1510. Cross-Listed as: MATH 2033.

**CSCI 2900 Topics in Computer Science 1-4 cr**  
Special topic of current interest in the computer sciences, including specialized language courses and operating system courses. Intended for second-year students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.  
Prerequisite: Topic-dependent.

## DSCI - Data Science

### **DSCI 2000 Foundations of Data Science 3 cr**

An introduction to Data Science and Data Analytics. Various mathematical and statistical techniques and software tools will be used to analyze a variety of data sets in order to develop basic skills and gain a general understanding of the field.

Prerequisite: MATH 1080 or MATH 1090 or MATH 2400 or BUSN 2220, and CSCI 1111 or CSCI 1113 or COMT 2250.

## DENH - Dental Hygiene

### **DENH 1112 Oral and Facial Anatomy 3 cr**

Study of the structures of the head, neck, and oral cavity. Topics include histology, embryology, tooth morphology, eruption patterns of the teeth, head and neck anatomy, and occlusion as it relates to the practice of dental hygiene. Practical laboratory exercises.

Prerequisite: Acceptance into Dental Hygiene Program.

### **DENH 1140 Pre-Clinic Theory 3 cr**

Introduction to the fundamentals of dental hygiene care. Emphasis on infection control, patient assessment, emergencies, the special needs patient, periodontal disease process, patient self-care and dental deposits. Practical application experience in pre-clinical skill development. Lecture 3 hours.

Prerequisite: Acceptance into Dental Hygiene Program.

Corequisite: DENH 1141.

### **DENH 1141 Pre-Clinic Skill Development 4 cr**

Skill development sessions are structured to develop actual experience in infection control procedures, patient assessment, instrumentation skills, dental emergencies, deposit removal, mechanical polishing, and topical fluoride application. Small groups will be utilized for practical application skills with students working on each other. Lab/clinic 8 hours.

Prerequisite: Acceptance into Dental Hygiene Program.

Corequisite: DENH 1140.

### **DENH 1142 Clinic 1 Theory 2 cr**

Continuation in the study of the dental hygiene care process. Emphasis on professionalism, patient care planning, record keeping, periodontal conditions, scaling/root planing, dentifrices, mouth rinses, dental caries process, dietary counseling, saliva, dentinal hypersensitivity, and fluoride. Lecture 2 hours.

Prerequisite: Acceptance into Dental Hygiene Program, DENH 1112, DENH 1140 and DENH 1141. Corequisite: DENH 1143.

### **DENH 1143 Clinic 1 4 cr**

Students begin fundamental patient care by providing clinical, preventive, educational, and therapeutic service in a supervised clinical setting. Clinic 8 hours.

Prerequisite: Acceptance into Dental Hygiene Program, DENH 1112, DENH 1140 and DENH 1141. Corequisite: DENH 1142.

### **DENH 1150 Dental Radiology 4 cr**

Theory, techniques, and procedures for exposing and processing dental radiographs; interpretation of dental radiographs, radiation safety, and practical application in dental radiography lab and clinical setting. Lecture 3 hours; lab/clinic 2 hours.

Prerequisite: Acceptance into Dental Hygiene Program, and DENH 1112. Corequisite: DENH 1142 and DENH 1143.

### **DENH 1151 Accelerated Dental Radiology 2 cr**

Theory, techniques, and procedures for exposing and processing dental radiographs; interpretation of dental radiographs, radiation safety, and practical application in dental radiography lab and clinical setting. Lecture 3 hours; clinic 2 hours last five weeks of semester.

Prerequisite: Acceptance into Dental Hygiene Program, and instructor's permission. Corequisite: DENH 1142 and DENH 1143.

### **DENH 1160 Dental Materials 2 cr**

The study, demonstration, and manipulation of materials used in dental and dental hygiene procedures. Lecture online; lab 3 hours.

Prerequisite: Acceptance into Dental Hygiene Program, and DENH 1140, DENH 1141 and CHEM.

### **DENH 1161 Accelerated Dental Materials 1 cr**

The advanced study, demonstration, and manipulation of materials used in dental and dental hygiene procedures. Dates and times are determined by course instructor.

Prerequisite: Acceptance into Dental Hygiene Program, and instructor's permission. Corequisite: DENH 1140, DENH 1141 and CHEM 1050.

### **DENH 1162 Pharmacology for the Dental Hygienist 2 cr**

This course focuses on applying pharmacology knowledge to dental hygiene clinical practice. Understanding drug groups, pharmacologic effects, adverse reactions, drug contraindications, and interactions will encourage treatment modification and ensure safe patient care. Lecture 2 hours.

Prerequisite: Acceptance into Dental Hygiene Program, and DENH 1140 and BIOL 2042. Corequisite: DENH 1142 and DENH 1143.

### **DENH 1900 Topics in Dental Hygiene 1-4 cr**

Skill development in various special areas of dental hygiene; intended for any interested dental hygiene student. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum. Prerequisite: Topic-dependent.

### **DENH 2240 Clinic 2 Theory 2 cr**

Emphasis on advanced clinical procedures, professionalism, ethics, quality assurance, and evidence-based dental hygiene practice. Lecture 2 hours.

Prerequisite: Acceptance into Dental Hygiene Program, and DENH 1142. Corequisite: DENH 2241.

**DENH 2241 Clinic 2 6 cr**  
Continuation of patient care by providing clinical, preventive, educational, and therapeutic services in a supervised clinical setting. Clinic 12 hours.  
Prerequisite: Acceptance into Dental Hygiene Program, and DENH 1143. Corequisite: DENH 2240.

**DENH 2242 Clinic 3 Theory 2 cr**  
Orientation to ethics, jurisprudence, dental specialties, practice management, job placement, resumes, interviewing skills, and career opportunities. Lecture 2 hours.  
Prerequisite: Acceptance into Dental Hygiene Program, and DENH 1142, DENH 2240, DENH 2241 and DENH 2264. Corequisite: DENH 2241.

**DENH 2243 Clinic 3 6 cr**  
Continuation of patient care to attain clinical competency in preparation for practical examinations and licensure. Clinic 12 hours.  
Prerequisite: Acceptance into Dental Hygiene Program, and DENH 2240, DENH 2241 and DENH 2264. Corequisite: DENH 2242.

**DENH 2244 Clinical Enrichment 1-3 cr**  
This course is designed to offer students additional skill development in areas of clinical dental hygiene and/or radiology.  
Prerequisite: DENH 2241 or DENH 2243 and instructor's permission.

**DENH 2252 Clinical Radiology 1 1 cr**  
Practice of radiographic technique and radiographic interpretation in a clinical setting. Clinic 2 hours.  
Prerequisite: Acceptance into Dental Hygiene Program, and DENH 1150. Corequisite: DENH 2241.

**DENH 2254 Clinical Radiology 2 1 cr**  
Practice of radiographic technique and radiographic interpretation in a clinical setting. Clinic 2 hours.  
Prerequisite: Acceptance into Dental Hygiene Program, DENH 1150 and DENH 2252. Corequisite: DENH 2243.

**DENH 2263 Pain Management 2 cr**  
Preparation of the dental hygiene student in effective and safe administration of local anesthesia and nitrous oxide-oxygen inhalation sedation. Lecture 1 hour; lab/clinic 2 hours.  
Prerequisite: Acceptance into Dental Hygiene Program, and in the process of developing competence in clinical dental hygiene care, DENH 1142, DENH 1162 and BIOL 2042.

**DENH 2264 Periodontics for the Dental Hygienist 2 cr**  
The study of periodontal diseases as the scientific basis for dental hygiene with recognition of the etiologic factors and abnormal conditions in the supporting structures with emphasis on the role of the dental hygienist in the philosophical and clinical approaches to periodontal therapy. Lecture 2 hours.  
Prerequisite: Acceptance into Dental Hygiene Program, BIOL 2204 or 2043, DENH 1112, DENH 1142, DENH 1143. Corequisite: DENH 2240 and DENH 2241.

**DENH 2266 General and Oral Pathology 2 cr**  
The identification, pathogenesis, histology, prevention and management of oral diseases; the oral manifestations and complications associated with systemic diseases; and the basic principles and aspects of pathology related to dental healthcare. Lecture 2 hours.

Prerequisite: Acceptance into Dental Hygiene Program, and DENH 1112 and DENH 2240 and DENH 2241 and DENH 2264.  
Corequisite: DENH 2240 and DENH 2241 and DENH 2264.

**DENH 2281 Preventive Concepts in Community Dental Health 2 cr**  
Introduction to federal, state, and local public health programs. Epidemiology, prevention and control of oral diseases at the community level. Principles of assessment, diagnosis, planning, implementation, evaluation, and documentation of dental public health programs. Implementation of a community oral health service project in an extramural setting. Lecture 2 hours.  
Prerequisite: Acceptance into Dental Hygiene Program, .

**DENH 2900 Topics 1-4 cr**  
Skill development in various special areas of dental hygiene; intended for second-year dental hygiene students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.  
Prerequisite: Topic-dependent.

## EAP-English for Academic Purposes

**EAP 0750 EAP Grammar and Writing 5 cr**  
This course for English Language Learners provides instruction in Intermediate-level grammar and writing. Topics include verb tenses, sentence skills, mechanics, and paragraph writing.  
Prerequisite: Writing sample

**EAP 0850 Reading and Vocabulary 3 cr**  
This course for English Language Learners improves reading skills by building vocabulary, an effective reading process, and connections between grammar, morphology, and meaning.  
Prerequisite: Writing sample

**EAP 0960 College Communication for English Language Learners 6 cr**  
This course for English Language Learners provides instruction in the reading, writing, listening, and speaking skills necessary for success and self-advocacy in college, workplace, and community settings. Topics include grammar and vocabulary, paragraph and short essay writing, responding to diverse texts, note-taking, and giving classroom presentations.  
Prerequisite: EAP 0750 (C/P or higher) and EAP 0850 (C/P or higher; or writing sample

**EAP 1100 College Writing for English Language Learners 2 cr**

This course for English Language Learners is a corequisite with ENGC 1101: College Writing. It provides instruction in the reading and writing skills necessary for English Language Learners to complete College Writing successfully. Topics include grammar and vocabulary, responding to diverse texts, essay writing, and research skills.

Prerequisite: EAP 0960 (C/P or higher) or writing sample

## **ECON – Economics**

**ECON 1100 Personal Finance 3 cr**

A survey of cash management, credit management, housing, taxes, insurance, investing, and retirement planning. Tools and strategies for making responsible financial decisions and improving one's financial well-being. How to craft financial plans consistent with one's goals and values.

Recommended: Eligible for READ 1106.

MnTC Goals: 9.

**ECON 1200 Consumer Economics 3 cr**

Economic principles relevant to consumers; consumer information gathering and decision-making; consumer issues and problems. Laws, government regulations, and policies affecting consumers.

Recommended: Eligible for READ 1106.

MnTC Goals: 5, 9.

**ECON 1400 Survey of Economics 3 cr**

A survey of microeconomic and macroeconomic principles illustrated by a discussion of current economic policies, issues, and problems. This course cannot be taken for credit after ECON 2201 or ECON 2202. This course is not intended to satisfy the entrance prerequisites for most four-year programs in economics, business, or accounting.

Recommended: Eligible for READ 1106.

MnTC Goals: 5, 9.

**ECON 1900 Topics in Economics 1-3 cr**

Examination of a special topic in economics; intended for all interested students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

**ECON 2201 Principles of Microeconomics 3 cr**

Theories of how various types of product, service, and resource markets operate and resulting implications for public policy. Decision-making by consumers, business firms, and government. Price determination, resource allocation, and income determination via markets.

Recommended: READ 1106.

MnTC Goals: 5, 9.

**ECON 2202 Principles of Macroeconomics 3 cr**

Theories that explain the overall performance of the economy. Measurement of national income, unemployment, and inflation; role of money and the banking system. Policies that stabilize the economy and promote economic growth. International trade and finance within the framework of the global economy.

Recommended: READ 1106.

MnTC Goals: 5, 8.

**ECON 2900 Topics in Economics 1-3 cr**

Examination of a special topic in economics; intended for second-year students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

## **EDUC - Education**

**EDUC 1101 Introduction to Education 4 cr**

Introduction to Education provides an overview of the education profession and the U.S. educational system, including historical development, social foundations and educational institutions. Other topics include current theories, trends and issues in education and the community, certification standards, roles and responsibilities of teachers, learners, and other school personnel, introductory instructional methods and classroom environment strategies, and a field experience/practicum. Every student must complete a field experience in an area school. Students must receive a grade of C or higher to take subsequent EDUC courses.

**EDUC 1120 Spanish for Educators 1 3 cr**

Spanish for Educators 1 is the first of two courses designed for English-speaking educators and future educators who need to acquire vocabulary and develop basic Spanish skills in order to communicate with Spanish-speaking students and their parents on a variety of school-related topics. In addition, the course seeks to provide learners with an understanding of key concepts about Hispanic culture which influence interactions in educational settings.

Cross-Listed as: SPAN 1120.

**EDUC 1220 Spanish for Educators 2 3 cr**  
Spanish for Educators 2 is the second of two courses designed for English-speaking educators who need to develop basic conversational Spanish skills in order to communicate with Spanish-speaking students and their parents on a wide variety of school-related topics. In this course, students will learn to construct sentences and questions using twelve "high-frequency" structures in Spanish, along with one hundred and twenty verbs relevant to educational settings. Students continue to develop vocabulary related to classroom and school settings. Situational dialogues and role-plays are an important part of this course. Along with developing conversational skills, attention is given to further development of beginning listening, reading and writing skills. Cultural practices and perspectives are presented through the art and literature of the Spanish-speaking peoples. The cultural components in Spanish for Educators 2 are designed to encourage teachers to use authentic Hispanic art and literature in their own classrooms or school communities to raise awareness and understanding about the cultures of Spanish-speaking peoples in Minnesota and the United States.  
Prerequisite: EDUC 1120. Cross-Listed as: SPAN 1220.

**EDUC 2101 Educational Technology 3 cr**  
This course is designed to provide opportunities to explore and develop skills, using current technology platforms, software and formats; demonstrate the current best practices of using technology as a tool to enhance learning; integrating technology platforms in today's kindergarten through twelfth-grade classrooms; and raising awareness of technological accessibility tools that could meet the needs of students with impairments or disabilities. A grade of C or higher is required in EDUC 1101 in order to register for this course.  
Prerequisite: EDUC 1101 (C or higher).

**EDUC 2222 Multicultural Education and Human Relations in Schools 3 cr**  
Multicultural Education and Human Relations in Schools, introduces pre-service teachers to core concepts and approaches to multicultural education including issues related to student, family, and community diversity based on culture, language, race, class, gender, sexual identity, and disability. Issues discourses, hierarchy of education with regards to privilege, equity and access to high quality education are topics addressed as students use knowledge of their life experiences and those of diverse students in urban and rural public schools and learn culturally and linguistically responsive classroom strategies. Emphasis is placed on demonstrating the multicultural competence required of all successful teachers working with today's diverse youth. A grade of C or higher is required in EDUC 1101 in order to register for this course.  
Prerequisite: EDUC 1101 (C or higher).

**EDUC 2223 Foundations of Instruction 2 cr**  
Foundations of Instruction will allow students to apply their knowledge of cognitive, moral, social, emotional and physical development, and individual variations, to instructional strategies and learning activities. Students will be able to create appropriate lessons and learning activities given the levels of development of children. A grade of C or higher is required in EDUC 1101 in order to register for this course.  
Prerequisite: EDUC 1101 (C or higher).

**EDUC 2331 Professional Practice and Design of Individual Education Programs 2 cr**  
This course will introduce teacher candidates to different aspects of being a Special Educator, including writing Individualized Education Program plans, communicating and working collaboratively, addressing strategies for working with paraprofessionals, and developing an understanding of collaboration, including co-teaching in the classroom to assist student learning and communicating effectively with parents and co-teachers. A grade of C or higher is required in EDUC 1101 and EDUC 2408 in order to register for this course.  
Prerequisite: EDUC 1101 (C or higher) EDUC 2408 (C or higher).

**EDUC 2408 Individuals with Diverse and Exceptional Needs 4 cr**  
Individuals with Diverse and Exceptional Needs is designed to provide an introduction and overview of the characteristics and educational needs of children and youth with diverse and exceptional needs in all schools. The course introduces students to the language of Special Education used in Minnesota. A grade of C or higher is required in EDUC 1101 and PSYC 1109 in order to register for this course.  
Prerequisite: EDUC 1101 (C or higher) and PSYC 1109 (C or higher).

**EDUC 2409 Learning and Human Development for Diverse Learners 4 cr**  
Learning and Human Development for Diverse Learners is designed to introduce students to theories of learning and human development as they relate to diverse learning populations. Students will acquire an understanding of the many factors that affect learning and human development as well as strategies that can be used to enhance learning for all populations. A grade of C or higher is required in EDUC 1101 and PSYC 1109 in order to register for this course.  
Prerequisite: EDUC 1101 (C or higher) and PSYC 1109 (C or higher).

## ENGC-English Composition

### **ENGC 0800 Fundamentals of Writing 4 cr**

This course focuses on the skills needed to produce paragraphs and short essays. During the semester, students 1) read and critically evaluate a variety of texts; 2) understand the planning and writing process for paragraphs and short essay writing; 3) communicate clear ideas, developing paragraphs with main points, supporting details, and logically sequenced sentences; 4) develop conventional grammatical sentence structure, punctuation, and spelling; 5) practice strategies to develop vocabulary and word usage skills; 6) create documents using word processing software. Grading options are A-F or Pass/No Credit. A grade of Pass/C or better is required to register for ENGC 0900. Prerequisite: Placement into ENGC 0800 and eligible for READ 0860 or a Pass/C or higher in EAP 0760 and eligible for READ 0860.

### **ENGC 0860 Integrated Reading and Writing 1 6 cr**

Normandale's Integrated Reading and Writing program values students' diverse needs and experiences to empower them to develop agency and literacy in college and in life. In this specific course, which focuses on developing literacies, students will practice reading and writing in a variety of situations. Students will explore a variety of texts and their contexts by asking questions and pursuing answers through their own lived experience as well as others' ideas. Students will begin to develop reading and writing processes that build on and overlap with each other, which will help facilitate academic success. Through this process of integrated reading and writing, students will experience the transformative nature of literacy and its power to promote equity and justice. Grading method is A/F, with the option of Pass/No Credit.

Prerequisite: Completed EAP 0760 with a C/P or higher and EAP 0855 with a C/P or higher; OR placement into non-EAP coursework via HS GPA <2.0, ACCUPLACER Next Gen Read score <235, ACCUPLACER Classic Read score <60; OR ACCUPLACER Classic ESL Reading Skills score 97-109

### **ENGC 0900 Preparation for College Writing 4 cr**

This course focuses on writing skills needed to write essays. During the semester, students 1) understand the planning and writing process for thesis-focused, multi-paragraph essays; 2) develop ideas in paragraphs containing a topic sentence, clear order, adequate detail, transitions, and a conclusion; 3) become familiar with the basic process of research and citation; 4) demonstrate conventional grammatical sentence structure, punctuation, and spelling; 5) move towards college-level vocabulary and usage. Sources for writing model analysis and study include published articles and essays and assigned student work. Grading options are A-F or Pass/No Credit. A grade of Pass/C (or higher) is required to register for ENGC 1101. Prerequisite: ENGC 0800 (Pass/C or higher) and eligible for READ 0960 or eligible for ENGC 0900 and READ 0960.

### **ENGC 0960 Integrated Reading and Writing 2 6 cr**

Normandale's Integrated Reading and Writing program values students' diverse needs and experiences to empower them to develop agency and literacy in college and in life. In this specific course, which focuses on literacy proficiency, students will practice reading and writing in a variety of situations with specific attention to various academic disciplines. Students will explore a variety of texts and their contexts by asking questions and pursuing answers through their own lived experience as well as introductory research practices. Students will develop proficiency in reading and writing processes that build on and overlap with each other, which will help facilitate academic success. Through this process of integrated reading and writing, students will experience the transformative nature of literacy and its power to promote equity and justice. Grading method is A/F, with the option of Pass/No Credit.

Prerequisite: Completed ENGC 0860 with a C or higher; OR placement into non-EAP coursework via HS GPA 2.0 or higher, ACCUPLACER Next Gen: Read 235-249, ACCUPLACER Classic: Read 60-77; OR ACCUPLACER Classic: ESL Reading Skills 110-120

### **ENGC 1100 College Writing Plus 1 cr**

The course pairs with ENGC 1101: College Writing as a way to offer students more support and new ways of approaching writing. This course will provide students enrolled in College Writing with more one-on-one time with faculty to get deeper feedback and more in-class time to develop writing skills. Each class will have a specific focus, which will be described in the notes for the class. This focus for the course will be used to explore non-traditional ways of approaching college writing to help students gain confidence in their writing and develop a writing process grounded in the knowledge they bring to the class. This course will also examine the context for the language and forms of writing used in academic discourse to help students understand the broader picture of the English language.

Prerequisites: ENGC 0960 (C/P or higher) or ENGC 0900 (C/P or higher) and READ 0960 (C/P or higher) or placement into ENGC 1101.

### **ENGC 1101 College Writing 4 cr**

This course focuses on critical thinking and writing skills necessary in college and professional writing through text analyses and argument strategies. Students 1) study the writer's purpose, audience, and rhetorical structure in a variety of genres and college-level texts, 2) organize and develop clear, thesis-driven logical arguments in various personal and academic essays, 3) find sources, and synthesize, and document information in research-based academic essays, and 4) demonstrate proficient command of English writing conventions. Prerequisite: ENGC 0900 (C or higher) and eligible for READ 1106 or eligible for ENGC 1101 and READ 1106. MnTC Goals: 1.

### **ENGC 1900 Topics in Composition 1-4 cr**

Examination of a special topic or field in composition. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

**ENGC 2020 Advanced Grammar 3 cr**  
This course presents an overview of basic to advanced grammar concepts, their functions, and their varied and appropriate usage in written English at different levels. It also incorporates various explanations of how grammar is learned. Additional topics may include language acquisition and its cultural contexts.  
Prerequisite: ENGC 1101 and eligible for READ 1106.

**ENGC 2102 Business and Technical Writing 3 cr**  
Students will explore the forms of business and technical writing common in the professions through documents such as memos, emails, reports, proposals, instructions, sales messages, and technical descriptions. Students will produce documents while focusing on document design, ethical principles in communication, and developing of a keen sense of audience, purpose, and author through informed research.  
Prerequisite: ENGC 1101.  
MnTC Goals: 9.

**ENGC 2900 Topics in Composition 1-4 cr**  
Examination of a special topic or field in composition. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.  
Prerequisite: Topic-dependent.

## ENGL-English Literature

**ENGL 1000 Introduction to Literature 3 cr**  
By reading a variety of literary works and discussing/interpreting them from multiple perspectives, students will learn to understand and enjoy literature.  
Prerequisite: Eligible for ENGC 0900 and READ 0960. MnTC Goals: 6.

**ENGL 1021 Literary Magazine 3 cr**  
By reading, discussing and evaluating contemporary works written in a variety of genres, enrolled students will develop a critical appreciation for literature as a living art form and become "literary citizens," taking part in the reading, writing, publication and discussion of creative work through their work on the student literary journal, The Paper Lantern.  
Prerequisite: Eligible for ENGC 0900 and READ 0960.

**ENGL 1120 Graphic Novels 3 cr**  
Students will read, discuss, and analyze graphic novels from a variety of genres in terms of the interplay of word and image central to this narrative medium. Analysis will include looking at the ways graphic novels represent popular culture, politics, philosophy, history, social issues, and personal identity across multiple cultures.  
Prerequisite: Eligible for ENGC 1101 and READ 1106. MnTC Goals: 6.

**ENGL 1130 Literature of Diversity 3 cr**  
Students will read, discuss, and write about literature written by Americans who have traditionally been under-represented in the literary canon. The readings will include works by African Americans, Asian Americans, Latina/o Americans, Native Americans, and others, including American-educated writers born elsewhere. The writers will represent various literary periods, as well as genres, and will be discussed in socio-cultural and historical contexts.  
Prerequisite: Eligible for ENGC 1101 and READ 1106. MnTC Goals: 6, 7.

**ENGL 1140 Gender and Literature 3 cr**  
Read, discuss, and write about works of literature from a gender-focused perspective. Topics students may explore include literary images of men and women, representations of gender in literature, portrayals of gender-based attitudes and values, and the ways in which writing can change conventional views of gender.  
Prerequisite: Eligible for ENGC 1101 and READ 1106. MnTC Goals: 6.

**ENGL 1170 Modern World Literature 3 cr**  
Students will study fiction, poetry, and drama by selected authors from Latin America, Continental Europe, Africa and the Middle East, and Asia and the South Pacific. As part of their study, students will analyze these texts within their diverse cultural and historical contexts, including selected literary movements. The course will primarily focus upon literature written from the early 18th century to the present.  
Prerequisite: Eligible for ENGC 1101 and READ 1106. MnTC Goals: 6, 8.

**ENGL 1175 Myths and Legends 3 cr**  
Students will study the myths and legends of ancient, classical, and medieval cultures from various parts of the world. Topics of study may include written works, transcriptions of oral works, and sacred texts, as well as contemporary re-imaginings of such works.  
Prerequisite: Eligible for ENGC 1101 and READ 1106. MnTC Goals: 6, 8.

**ENGL 1186 Introduction to Poetry 3 cr**  
Students will explore the way poets use words in concentrated form to convey sensory, emotional, imaginative, and intellectual experience. Students will practice close and full reading of a variety of poems, noting imagery, figurative language, sound, and tone.  
Prerequisite: Eligible for ENGC 1101 and READ 1106. MnTC Goals: 6.

**ENGL 1188 Introduction to Short Stories 3 cr**  
Students will explore the short story form and its various effects. Students will improve critical reading and thinking skills by reading a variety of short stories, examining the essential techniques of short fiction, and considering multiple perspectives on a work of fiction.  
Prerequisite: Eligible for ENGC 1101 and READ 1106. MnTC Goals: 6.

**ENGL 1189 Introduction to the Novel 3 cr**  
Students will explore the novel form and its various effects. Students will improve critical reading and thinking skills by reading a variety of novels, and examining the essential techniques of longer fiction, and considering multiple perspectives on a work of fiction.  
Prerequisite: Eligible for ENGC 1101 and READ 1106. MnTC Goals: 6.

**ENGL 1900 Topics in Literature 1-4 cr**  
Examination of a special topic or field in literature. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.  
Prerequisite: Topic-dependent.

**ENGL 2000 Introduction to Literary Studies: Writing About Literature 3 cr**  
This course introduces students to the discipline of literary studies, focusing on writing about literature using multiple critical lenses. The students write increasingly sophisticated essays analyzing literature and synthesizing critical sources while developing their understanding of audience and tone in writing.  
Prerequisite: ENGC 1101 (C or higher) and eligible for READ 1106. MnTC Goals: 6.

**ENGL 2060 Children's and Young Adult Literature 3 cr**  
Students will study literature written for children and young adults, from birth through high school, to effectively select, evaluate, and appreciate this literature. Course material includes various formats (picture books, early readers, chapter books, middle grade books, young adult novels, or graphic narratives) and genres (traditional literature, fantasy, realism, historical fiction, factual books, or poetry). Topics include supporting young readers' selection of and responses to literature; studying the history of children's and young adult literature; responding to censorship and controversy; and introducing children and young adults to books about diversity (race, ethnicity, disability, etc.) and to works by under-represented populations and from a variety of cultures.  
Prerequisite: ENGC 1101.  
MnTC Goals: 6.

**ENGL 2120 Shakespeare 3 cr**  
Studying William Shakespeare's writing is a journey of discovery. This course is designed to start students on that journey as they discover the power of Shakespeare's language as well as his uncanny and modern insight into human nature. Students will read, discuss, and write about Shakespeare's plays and poems.

Prerequisite: Eligible for ENGC 1101 and READ 1106. MnTC Goals: 6.

**ENGL 2125 Novels of Jane Austen 3 cr**  
Students examine the six major novels of Jane Austen in sequence (*Northanger Abbey*, *Sense and Sensibility*, *Pride and Prejudice*, *Mansfield Park*, *Emma*, and *Persuasion*). This course offers an excellent opportunity to chart how an author develops the skills of characterization and plot development.  
Prerequisite: Eligible for ENGC 1101 and READ 1106. MnTC Goals: 6.

**ENGL 2127 Sherlock Holmes and the Victorian Age 3 cr**  
This course examines classic literary works of the Victorian era through the lens of the Sherlock Holmes series of detective stories, investigating key themes and concerns of the age such as social class, the status of women and children, the role of science, and ethics as they are represented in literature of the period.  
Prerequisite: Eligible for ENGC 1101 and READ 1106. MnTC Goals: 6.

**ENGL 2130 African American Literature 3 cr**  
This course gives students an introduction to literature by African American writers representing multiple experiences and historical periods. The students will study various genres and will analyze the literary works in cultural and historical context through both discussion and written assignments.  
Prerequisite: Eligible for ENGC 1101 and READ 1106. MnTC Goals: 6, 7.

**ENGL 2133 Native American Literature 3 cr**  
This course gives students an introduction to literature by Native American writers representing various tribal cultures and historical periods. The students will study multiple genres and will analyze the literary works in cultural and historical context through both discussion and written assignments.  
Prerequisite: Eligible for ENGC 1101 and READ 1106. MnTC Goals: 6, 7.

**ENGL 2150 American Literature 1 4 cr**  
Students will read works by a variety of authors representing the diverse viewpoints and experiences of Americans before the modern era.  
Prerequisite: Eligible for ENGC 1101 and READ 1106. MnTC Goals: 6, 9.

**ENGL 2151 American Literature 2 4 cr**  
Students will read works by a variety of authors representing the diverse viewpoints and experiences of Americans during the modern era.  
Prerequisite: Eligible for ENGC 1101 and READ 1106. MnTC Goals: 6, 9.

**ENGL 2160 British Writers 1 4 cr**  
Students will read works written by a variety of authors from the Middle Ages through the 18th century.  
Prerequisite: Eligible for ENGC 1101 and READ 1106. MnTC Goals: 6.

**ENGL 2161 British Writers 2** **4 cr**  
Students will read works by a variety of authors of the 19th and 20th centuries.  
Prerequisite: Eligible for ENGC 1101 and READ 1106. MnTC  
Goals: 6.

**ENGL 2174 African Literature** **3 cr**  
Students will study a range of African Literature in English, exploring distinctive features of several African regions. Focusing mainly on fiction genres (novels, short stories, drama) and poetry, the instructor may also use some non-fiction, including memoir, critical essays, and contextual documents. As part of their study, students will analyze these texts within their cultural and historical contexts. The course will primarily focus on literature written during the modern period (1700 - present).  
Prerequisite: Eligible for ENGC 1101 and READ 1106. MnTC  
Goals: 6, 8.

**ENGL 2900 Topics in Literature** **1-4 cr**  
Examination of a special topic or field in literature. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.  
Prerequisite: Topic-dependent.

## ENGR - Engineering

**ENGR 1020 Introduction to Engineering Design** **4 cr**  
A lower division course for students in the engineering disciplines. This course will: develop skills used by practicing engineers; provide extensive exposure to visual, written and oral communication forms and to computer-based design tools; include substantial design projects, including prototype construction.  
Prerequisite: Eligible for MATH 1510.

**ENGR 1900 Topics in Engineering** **1-4 cr**  
An examination of a special topic in engineering; intended for all interested students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

**ENGR 2015 Linear Circuit Analysis** **4 cr**  
This course introduces linear circuit analysis with emphasis on audio applications and signals. Topics include: physical principles underlying circuit element models; resistive circuits; Kirchhoff's laws; independent and dependent sources; node-voltage and mesh-current methods; operational amplifiers; inductors and capacitors; and first- and second-order circuits. Laboratory includes experiments with simple circuits and audio electronics, and familiarization with measurement tools and equipment. Lecture 3 hours; lab 2 hours.  
Prerequisite: PHYS 1121 (C or higher) and PHYS 1122 (C or higher) or concurrent registration, and MATH 1520 (C or higher), MATH 2520 (C or higher) or concurrent registration, or consent of instructor.

**ENGR 2016 Steady-state Circuit Analysis** **1 cr**

This course introduces phasor- and frequency-domain techniques for steady-state circuit analysis. Topics include: complex numbers and phasors; complex power; an introduction to Fourier series; RLC circuits; and basic filters. Laboratory includes experiments with active audio filters.

**ENGR 2096 Internship in Engineering** **2-4 cr**  
This internship course explores careers and training in a supervised work setting and combines theory with field experience in Engineering. A student works 45 hours per credit at the internship site under the direction of the site supervisor and completes academic work in consultation with the faculty mentor. A student may choose to earn 2 to 4 credits.  
Prerequisite: Previous coursework in Engineering and consent of instructor and acceptance by internship program

**ENGR 2115 Introduction to Analog & Digital Electronics** **5 cr**  
This course introduces techniques for transient and switching circuit analysis. Topics include: MOSFETs as amplifiers and switches; a continuation of Fourier series; Laplace transform and applications; transfer functions and frequency response; relationship between Fourier and Laplace techniques; complete response of active, first- and second-order filters. Laboratory includes experiments with active electronic filters. Lecture 4 hours; lab 2 hours.  
Prerequisite: ENGR 2016 (C or higher), PHYS 1122 (C or higher), MATH 2520 (C or higher), and ENGC 1101 (C or higher), or instructor consent.

**ENGR 2231 Thermodynamics** **3 cr**  
This course will cover the conservation of mass and energy and entropy balance; the properties, equations of state, and the processes and cycles for reversible and irreversible thermodynamic systems; and modes of energy transfer. Thermodynamic principles will be applied to modern engineering systems.  
Prerequisite: CHEM 1061, PHYS 1121.

**ENGR 2235 Statics** **3 cr**  
This course covers free-body diagrams and the principles of statics. Applications to simple trusses, frames, and machines are covered. Distributed loads and internal loads in beams are introduced.  
Prerequisite: PHYS 1121 (C or higher) and MATH 1520 (C or higher).

**ENGR 2236 Dynamics** **3 cr**  
This course covers the kinematics and kinetics of particles; Newton's laws; energy and momentum methods; systems of particles; kinematics and kinetics of rigid bodies in the plane; planar linkages; and mechanical vibrations.  
Prerequisite: ENGR 2235 (C or higher) and MATH 2520 (C or higher) or concurrent registration.

**ENGR 2301 Introduction to Digital Logic Design A 2 cr**  
This is the first half of an introduction to digital logic design. It is recommended for mechanical, aerospace, computer, and electrical engineering students. Topics include Boolean algebra, logic gates, Karnaugh mapping, and analysis and design of combinational-logic circuits. This course meets the first half of the semester.  
Prerequisite: MATH 1510 (C or higher) or concurrent registration.

**ENGR 2302 Introduction to Digital Logic Design B 2 cr**  
This is the second half of an introduction to digital logic design. It is recommended for computer and electrical engineering students. Topics include: logic simplification, sequential logic, HDL modeling, and analysis and design of synchronous sequential logic circuits, VHDL modeling, and design of digital logic circuits. This course meets for the second half of the semester. Lecture 3 hours; lab 2 hours.  
Prerequisite: ENGR 2301 (C or higher).

**ENGR 2331 Deformable Body Mechanics 3 cr**  
This course is an introduction to the linear stress-strain behavior of engineering materials. Topics will include stresses due to uniaxial loading, bending and torsion, stress transformations, beam deflections, indeterminate structures, and column buckling.  
Prerequisite: ENGR 2235 (C or higher), MATH 1520 (C or higher), MATH 2520 (C or higher) or concurrent registration

**ENGR 2900 Topics in Engineering 1-4 cr**  
An examination of a special topic in engineering; intended for second-year students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

## ENGT-Engineering Technology

**ENGT 1014 Safety 2 cr**  
This course is designed to align with the Manufacturing Skill Standards Council's (MSSC) assessment and certification system for Safety. The course curriculum is based on federally-endorsed national standards for production workers. This course will introduce OSHA standards relating to personal protective equipment, Hazard Communication, tool safety, confined spaces, electrical safety, emergency responses, lockout/tagout, and others.

**ENGT 1018 Manufacturing Processes and Production 2 cr**  
This course is designed to prepare students for the Manufacturing Skill Standards Council's (MSSC) Manufacturing Processes and Production Certification Assessment. The course curriculum is based upon federally endorsed national standards for production workers. This course emphasizes Just-In-Time (JIT) manufacturing principles, basic supply chain management, communication skills, and customer service.

**ENGT 1022 Quality Practices & Measurement 2 cr**  
This course is designed to prepare students for the Manufacturing Skill Standards Council's (MSSC) Quality Certification Assessment. The course curriculum is based upon federally endorsed national standards for production workers. Emphasis is on continuous improvement concepts and how they relate to a quality management system. Students will be introduced to a quality management system and its components. These include corrective actions, preventative actions, control of documents, control of quality records, internal auditing of processes, and control of non-conforming product.

**ENGT 1026 Maintenance Awareness 2 cr**  
This course is designed to prepare students for the Manufacturing Skill Standards Council's (MSSC) Maintenance Awareness Certification Assessment. The course curriculum is based upon federally endorsed national standards for production workers. This course introduces the concepts of Total Productive Maintenance (TPM) and preventative maintenance. Students are introduced to lubrication, electricity, hydraulics, pneumatics, and power transmission systems.

**ENGT 1050 Bridging Engineering and Education 3 cr**  
This course is a hands-on engineering experience, intended for elementary education majors, which covers topics in science, engineering, and technology with an emphasis on understanding what engineers do and how they make a world of difference. Students will learn that with some creativity and knowledge of the engineering design process, everyone can engineer. Topics that may be covered include: weather, water, simple machines, sound, plants, energy, and electricity; with corresponding engineering fields of mechanical, environmental, industrial, acoustical, package, green, and electrical. The structure and philosophy of engineering curricular materials, engineering activities, and appropriate instructional strategies will be emphasized in this course. Students will be prepared to deliver the Minnesota engineering standards in elementary math and science classes.  
Prerequisite: Minimum of 6 credits in both college-level math and science or instructor approval.

**ENGT 1153 AC/DC Circuits 4 cr**  
A survey course designed to give understanding to the relationships of work, power, energy, and electrical charge as well as to the relationships of voltage, resistance, current, and capacitance. A laboratory experience includes analyzing basic series, parallel AC and DC circuits; identification and application of electronic components; gaining competence using electronic measuring instruments.  
Prerequisite: MATH 1100 (C or higher) or eligible for MATH 1500.

**ENGT 1180 Manufacturing Processes 2 cr**  
Manufacturing processes are technology-based operations which realize the transformation of various raw input materials into a physical product. This course provides an overview of the types of materials used to create products and the basic manufacturing processes involved in manipulating those materials. Other critical functions performed in a manufacturing environment will be discussed such as statistical process control, transportation, and packaging.  
Prerequisite: MATH 0700 or concurrent registration or eligible for MATH 1100 and eligible for ENGC 1101 and eligible for READ 1106.

**ENGT 1184 Fluid Mechanics 3 cr**  
This course addresses fundamental concepts in fluid mechanics and introduces algebraic-based methods for modeling the behavior of fluids under static and dynamic conditions. Applications of hydraulic and pneumatic systems illustrate the significance of fluid power technology integration in support of various engineering systems. Laboratory activities examine physical characteristics and properties of fluid systems, fluid flow, fluid power, energy storage in fluid systems and behavior of pneumatic and hydraulic systems.  
Prerequisite: MATH 1100 (C or higher) or eligible for MATH 1500.

**ENGT 1290 Measurement and Process Control 2 cr**  
Industrial manufacturers apply a variety of statistical-based techniques to more effectively address the quality of product design and production outcomes. This course examines how manufacturers make decisions about what product and process data to collect and how they assess the adequacy of the measurement system. Students will set up and interpret histograms and process control charts to identify chance or assignable variation in a collected data set. Students will run a design of experiments study to determine the impact key design and process parameters have on system performance.  
Prerequisite: Eligible for MATH 1100 and ENGC 1101 and READ 1106.

**ENGT 1511 Introduction to Engineering Technology (PLTW™) 3 cr**  
Introduction to Engineering Technology which is based on curriculum by Project Lead the Way (PLTW™) overviews the role of technology in society and provides an introduction to the use of certain engineering technologies. Course activities and projects include: creating simple control systems to experience fundamental concepts in automation and robotics; documenting simple engineering design and assembly concepts and creating rapid prototypes through the use of computer-aided-design (CAD) 3-D modeling software; and completing a focused research project related to the role of technology in society.  
Prerequisite: Eligible for MATH 1100 and ENGC 1101.

**ENGT 1512 Principles of Engineering (PLTW™) 3 cr**  
Principles of Engineering, which is based on curriculum developed by Project Lead the Way (PLTW) introduces several core engineering technology topics: the engineering design process; engineering foundation concepts in mechanics, thermodynamics, fluid systems, electrical systems, control systems; statics, strength of materials and material testing; and dynamics/kinematics. Students complete a variety of activities and projects to learn how engineers and technicians use math, science, and technology in the engineering problem-solving process.  
Prerequisite: ENGT 1511 or concurrent registration, MATH 1100 or concurrent registration, and eligible for ENGC 1101.

**ENGT 1513 Digital Electronics Technology (PLTW™) 3 cr**  
Digital Electronics which is based on curriculum developed by Project Lead the Way (PLTW) is an introduction to several foundation concepts in digital electronics design. Students complete a variety of activities and projects to discover how engineers and technicians use mathematics, science, and technology in an engineering problem-solving process to create and evaluate solutions for specified tasks.  
Prerequisite: ENGT 1511, ENGT 1153 and eligible for ENGC 1101.

**ENGT 1514 Computer Integrated Manufacturing (PLTW) 3 cr**  
Computer Integrated Manufacturing builds on computer solid modeling skills developed in Introduction to Engineering Design (ENGT 1511), a Project Lead the Way (PLTW) course taught in high schools. Students use Computer Numerical Control (CNC) equipment to produce actual models of their three-dimensional designs. Fundamental concepts of robotics used in automated manufacturing and design analysis are included.  
Prerequisite: ENGT 1511, eligible for MATH 1100 and ENGC 1101 or READ 1106.

**ENGT 1516 Biotechnical Engineering 3 cr**  
Introduction to the diverse fields of bio-chemistry, bio-engineering, and bio-medical device engineering through the integrated application of biology, physics, technology, and mathematics. Students complete projects related to the following topics: DNA modeling, pathogen identification, forensic science, bioreactions and bio-processing, orthopedics and cardiovascular devices. Lecture 2 hours; lab 2 hours.  
Prerequisite: Eligible for MATH 1100 or high school Algebra 2 (B or higher), and eligible for ENGC 1101 or READ 1106.

**ENGT 2188 Electronics and Automation 4 cr**  
This course provides an introduction to automation with a focus on the operation, maintenance, and troubleshooting of automated systems in industrial settings. An understanding of the essential mechanical, electrical, and software sub-system technologies integrated as a fully functional automated system is developed. A short unit on electronics provides foundation for learning the digital-based communication interfaces. The function of sensors, actuators, and controllers is addressed. Project work will provide hands-on opportunities to experience the characteristics and behaviors of automated systems.

Prerequisite: ENGC 1101, ENGT 1153.

## ENGW-Creative Writing

### **ENGW 1111 Introduction to Creative Writing 3 cr**

Students will study and write imaginatively in a variety of genres—play and screen writing, short fiction, poetry, and creative nonfiction as selected by the instructor. Students will also read and respond to imaginative writing and to student work in progress.

Prerequisite: ENGC 1101 Recommended: ENGC 1101 (C or higher).

MnTC Goals: 6.

### **ENGW 1900 Topics in Creative Writing 3 cr**

Examination of a special topic or field in creative writing. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum. Prerequisite: Topic-dependent.

### **ENGW 2112 Poetry Writing 3 cr**

This course focuses on the writing and study of contemporary poetry. Students will compose original poetry, respond to classmates, and be introduced to form and technique in poetry. Prerequisite: ENGC 1101 Recommended: ENGW 1111 and ENGL 1186.

MnTC Goals: 6.

### **ENGW 2113 Fiction Writing 3 cr**

This course focuses on the writing and study of contemporary fiction. Students will compose original fiction, respond to classmates, and be introduced to form and technique in fiction. Prerequisite: ENGC 1101 Recommended: ENGW 1111, ENGL 1188 and ENGL 1150.

MnTC Goals: 6.

### **ENGW 2114 Play and Screen Writing 3 cr**

This course focuses on the writing and study of contemporary drama. Students will compose original plays and/or screenplays, respond to classmates, and be introduced to form and technique in drama.

Prerequisite: ENGC 1101 Recommended: ENGW 1111 and ENGL 1187.

MnTC Goals: 6.

### **ENGW 2115 Memoir/Non-Fiction Writing 3 cr**

This course focuses on the writing and study of contemporary creative nonfiction, including the sub-genres of memoir and the critical essay. Students will compose original essays, respond to classmates, and be introduced to form and technique in creative nonfiction.

Prerequisite: ENGC 1101 Recommended: ENGW 1111. MnTC Goals: 6.

### **ENGW 2800 AFA Capstone 3 cr**

The Capstone course fulfills the Capstone requirement for the AFA in Creative Writing. In the course, students complete individualized creative writing projects, which may include fiction, drama, poetry, or creative nonfiction pieces, internships, or service learning projects.

Prerequisite: Acceptance into the AFA in Creative Writing program and successful completion of four required courses for the AFA in Creative Writing.

### **ENGW 2900 Topics in Creative Writing 3 cr**

Examination of a special topic or field in creative writing. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum. Prerequisite: Topic-dependent.

## EXSC-Exercise Science

### **EXSC 1000 Aspects of Fitness 1 cr**

Provides students the fundamental components and concepts of physical fitness and health. Students will also learn strategies to help them begin, design, and maintain an exercise program to keep them fit for life. This is not an activity course. This course will be designed strictly for students who are enrolled in the Online AA degree program.

### **EXSC 1102 Badminton 1 cr**

Course includes movement skills and techniques of badminton strokes. Positioning, strategies, and rules for singles and doubles play. A lifetime fitness activity.

### **EXSC 1103 Bowling 1 cr**

Develop bowling proficiency through mental concentration, physical skill practice, and knowledge of rules and techniques. Approach and delivery styles as well as scoring. A lifetime fitness activity. Additional fee for this course.

### **EXSC 1104 Boot Camp I 1 cr**

This course includes training principles and suggested programs and work outs for a boot camp style workout. It also includes techniques to improve and progress to a higher level of aerobic capacity, as well as focus on the benefits of strength and flexibility programs related to fitness. Speed, agility, and plyometrics will also be utilized to a certain extent.

### **EXSC 1105 Fitness Yoga 1 cr**

Students will learn safe and effective fitness yoga maneuvers and how to apply them to a physically challenging workout. This course is designed to increase muscle strength and endurance along with flexibility.

### **EXSC 1112 Tennis 1 cr**

Includes movement skills and techniques of basic tennis strokes. Positioning and strategies for singles and doubles play; rules and etiquette. A lifetime fitness activity.

**EXSC 1116 Volleyball 1 cr**  
Offensive and defensive skills of the game as well as strategy and rules. Designed to help beginning and intermediate players learn and appreciate the physical as well as mental aspects of the game. A lifetime fitness activity.

**EXSC 1118 Soccer 1 cr**  
Includes offensive and defensive skills of the game as well as strategy and rules. Designed to help beginning and intermediate players learn and appreciate the physical as well as mental aspects of the game. A lifetime fitness activity.

**EXSC 1128 Team Sports and Exercise 3 cr**  
This course provides students with valuable fitness, wellness, and exercise information through lectures, assignments, and labs. Students will also engage in a variety of activities, exercise, and team sports throughout the semester for a complete wellness experience.  
Recommended: Eligible for READ 1106 and ENGC 0900.

**EXSC 1129 Fitness for Life 1 2 cr**  
This course involves cardiovascular and strength enhancement through participation in a personalized exercise program. Selected strength training and cardiovascular equipment will be used. Assessment of current level of fitness helps students evaluate present status and set goals. Post fitness testing shows improvement and areas needing continued emphasis. Proper nutrition, weight management, healthy lifestyle information is presented. Appropriate for all ages and fitness levels.

**EXSC 1130 Fitness Walking 1 cr**  
Students will learn how to implement healthy lifestyle choices using fitness and nutritional concepts. Course includes an emphasis on a fitness walking program to strengthen cardiovascular system and improve muscular strength and flexibility. A lifetime fitness activity.

**EXSC 1140 Pickleball 1 cr**  
This is a beginning pickleball course in which students will develop basic knowledge and skills to play the sport of pickleball. Technical skills include forehand and backhand groundstrokes, volleys, serves, lobs, overheads, dinks, and proper footwork. Students will also learn the fundamental rules, basic strategies, and court positioning for singles and doubles play.

**EXSC 1151 Rock Climbing 2 cr**  
Climbing equipment, types of climbs, terminology, knots, anchors, belaying, free climbing, aid climbing, and rappelling. Individuals will assess their abilities and limitations as they relate to climbing activities. Strong emphasis on safety. Appropriate for beginners as well as experienced climbers. Additional fee for this course.  
Recommended: Eligible for ENGC 0900 and READ 0960.

**EXSC 1153 Backpacking and Wilderness Preservation 3 cr**  
Hiking equipment and clothing, minimum impact techniques, fires, water treatment, food preparation, area and route selection, map use, injury prevention, and treatment. Strong emphasis on ecology, wildlife and environmental concerns, and preservation. A camping trip is required. Additional fee for this course.

**EXSC 1200 Beginning Weight Training 1 cr**  
Provides basic weight training instruction, safe and effective equipment utilization, and basic program design techniques to reach personal strength goals. Students will create and participate in a personalized strength training program. Additional fee for this course.

**EXSC 1400 Studio Cycling 1 cr**  
Involves continuous aerobic activity on studio cycling bikes. Students will learn proper body positions; participate in basic and rhythmic drills; power pacing workouts and safe cool-down techniques, with an emphasis on cardio-respiratory training improvements. Additional fee for this course.

**EXSC 1500 Hiking 1 cr**  
Involves cardio-respiratory activity in a variety of outdoor settings within the metro area. Students will learn to select proper clothing, footwear, and snowshoe equipment; participate in outdoor training techniques; utilize map reading skills; practice minimum impact principles; recognize symptoms, treatment and prevention techniques for frost bite, hypothermia, dehydration, and heat exhaustion.

**EXSC 1900 Topics in Exercise Science 1-4 cr**  
Skill development in various special areas of exercise science; intended for all students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.  
Prerequisite: Topic-dependent.

**EXSC 2253 Advanced Backpacking and Outdoor Leadership 2 cr**  
Provides an understanding of trip leadership in a wilderness backpacking setting. A review of backpacking skills including: equipment selection, food selection, cooking skills, and appropriate clothing selection will complement additional trip planning skills. Good judgment is the underlying educational objective of this course, which is measured by practical decision-making and problem-solving activities both in the classroom and during field experiences. Backpacking trip required. Additional fee for this course.  
Prerequisite: EXSC 1153.

**EXSC 2300 Introduction to Exercise Science 3 cr**  
This course provides an introduction to the science of human movement in a lecture format. An overview of exercise physiology, sport and exercise psychology, biomechanics, motor behavior, sociocultural aspects of sport and exercise, sport nutrition, and other related topics will be addressed. Career opportunities related to the field of Kinesiology will be explored.

**EXSC 2305 Exercise Physiology 3 cr**

This course introduces students to the scientific basis of exercise and/or athletic performance. Specifically, students will study the human body's physiological adaptation to external stressors such as work, exercise and environmental conditions. This information will be directly related to the basis of health and fitness conditioning for athletes, non-athletes and special populations, and to a greater understanding of athletic performance limitations.

**EXSC 2310 Foundations of Personal Training 3 cr**

This capstone class is a lecture-based, preparatory course for becoming a NSCA or ACSM Certified Personal Trainer which demands a strong academic foundation in kinesiology for applying exercise concepts. The rigorous, comprehensive approach familiarizes students with all aspects of client exercise and personal training through the developmental curriculum designed by the National Strength and Conditioning Association (NSCA) or American College of Sports Medicine (ACSM).

**EXSC 2315 Fitness Assessment and Exercise Prescription 3 cr**

This course presents the policies, procedures, and physiological basis for exercise testing and exercise prescription as applied to apparently healthy and special populations. The course will provide the student with practical experience with various forms of exercise testing as well as demonstrate how to utilize the data generated from exercise testing to produce a safe and effective exercise prescription designed around the goals of the exercising individual. The material covered in this course is appropriate for individuals desiring work in cardiac rehabilitation, fitness centers, coaching, health care settings, or any other related exercise setting in which exercise is a commonly applied modality.  
Prerequisite: EXSC 2310

**EXSC 2330 Applications of Personal Training 2 cr**

This course will expose students to the practical application and responsibilities of personal training. Students will perform assessments on individuals for fitness programs, prepare and execute fitness programs, adapt and adjust fitness program specifics to meet the changing fitness and health needs of the client.  
Prerequisite: EXSC 2300 and EXSC 2305 and EXSC 2310

**EXSC 2900 Topics in Exercise Science 1-4 cr**

Skill development in various special areas of exercise science; intended for second-year students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

## FREN-French

**FREN 1100 Beginning French 1 5 cr**

In this course students develop competencies in speaking, listening, reading, and writing in French. Verb forms studied include the present and compound past tenses of regular and irregular verbs. Culture is an integral part of the course and is incorporated through the analysis of film, music, traditions, and daily life in the francophone world.  
MnTC Goals: 8.

**FREN 1101 Introduction to Interpreting and Translation 2 cr**

Introduction to Interpreting and Translation introduces students to the career competencies, ethics and major theories related to the fields of interpreting and translation. Through readings by experts in the field, case studies, and professional profiles, students will learn about the fields of interpreting and translation and exercise key skills required to work in these professions. Taught in English. Cross-Listed as: CHIN 1101, INDS 1101, GERM 1101, JAPN 1101, SPAN 1101.

**FREN 1111 French Culture and Civilization 3 cr**

This course acquaints students with aspects of the culture and civilization of French-speaking peoples. Course topics will be selected from among the areas of the arts, literature, and history to allow students to gain an awareness of cultural, social, religious, and linguistic aspects of the target culture. Students will develop an understanding of the responsibility world citizens share for their common global future by comparing and contrasting their own culture with that of French-speaking peoples. Taught in English.  
MnTC Goals: 6, 8.

**FREN 1200 Beginning French 2 5 cr**

This course is a continuation of the listening, reading, speaking, and writing competencies developed in FREN 1100. Verb forms studied include the imperfect, future, and conditional tenses. Students further explore cultural differences helping them develop a deeper understanding of the francophone world and a greater cultural perspective.  
Recommended: FREN 1100.  
MnTC Goals: 8.

**FREN 2100 Intermediate French 1 5 cr**

Students continue the development and strengthening of the four communication skills: listening, speaking, reading, and writing. Cultural and literary materials are used to develop an appreciation for the arts, history, culture and literature of French-speaking peoples and to create an awareness of cultural, social, and linguistic differences and similarities. Major grammar focus includes regular and irregular present tense, compound past and imperfect forms. Cultural topics include immigration and changing French identity. The course has an important online component and relies on the use of short films to introduce cultural and grammatical topics.

Recommended: FREN 1200.

MnTC Goals: 6, 8.

**FREN 2200 Intermediate French 2 5 cr**

Students continue the development and strengthening of the four communication skills: listening, speaking, reading, and writing. Cultural and literary materials are used to develop an appreciation for the arts, history, culture, and literature of French-speaking peoples and create an awareness of cultural, social, and linguistic differences and similarities. Major grammar focus includes the subjunctive, future, conditional verb forms. The course has an important online component and relies on the use of short films to introduce cultural and grammatical topics.

Recommended: FREN 2100.

MnTC Goals: 6, 8.

**FREN 2210 Advanced Communication Skills 3 cr**

Students continue the development and strengthening of oral and written proficiency acquired in previous courses. This course is strongly recommended for those students who have taken two years of language at the community college level or who have acquired knowledge through other coursework. Oral and written assignments may be based on cultural and/or literary materials presented in class.

## FSCI-Food Science

**FSCI 2100 Introduction to Food Science 3 cr**

Introduction to the composition and the chemical and physical properties of foods, and the interaction, reaction, and evaluation of foods due to formulation, processing, and preparation.

Prerequisite: CHEM 1062 or HLTH 1107.

## GEOG-Geography

**GEOG 1050 Maps and Mapping 3 cr**

This course is an introduction to maps emphasizing how maps reflect and shape our understanding of the world. Course topics include basic principles of map communication, spatial data, mapping technology and cartographic techniques.

MnTC Goals: 5.

**GEOG 1101 Earth's Natural Environments 4 cr**

This course in Physical Geography studies Earth's physical environment, its systems, and the energy that drives them. Students explore interactions between the atmosphere, water, rocks, ice, human activity and other life. Laboratory assignments provide application of scientific method to these concepts.

MnTC Goals: 3, 10.

**GEOG 1102 Human Geography 3 cr**

This course explores human populations, their cultural landscapes, economic and political interactions and relationships with the physical environment.

MnTC Goals: 5, 8.

**GEOG 1104 Resources, Society and Environment 3 cr**

This is a study of human-environmental interactions. Students investigate perspectives on economic, social and political processes and their relations to natural resources, sustainability and global change.

MnTC Goals: 5, 10.

**GEOG 1121 World Regional Geography 3 cr**

This course is a regional survey of the human and physical landscapes of major world regions. For each region, culture, population dynamics, development, global interdependence, and human-environmental relationships are studied.

MnTC Goals: 5, 8.

**GEOG 1123 Geography of Minnesota 3 cr**

Students examine Minnesota's natural environments and the way of life of the state's people, with a focus on the relationship between human activities and the environment.

MnTC Goals: 5, 10.

**GEOG 1124 Geography of Latin America 3 cr**

In this course students discover how environments, cultures, politics, colonialism, and economies produce dynamic human landscapes from Rio Grande to Tierra del Fuego.

MnTC Goals: 5, 8.

**GEOG 1125 Geography of the United States and Canada 3 cr**

Students analyze the peoples and environments of the United States and Canada with special emphasis on human diversity and environmental and resource problems.

MnTC Goals: 7, 10.

**GEOG 1130 Climate Change: Science, Human Impacts and Adaptations 3 cr**

This course investigates the evidence for past and present climate change, and what this implies for the future of the planet and society. At the end of this course, students will understand key principles of climate science, as well as identify and address human impacts and misconceptions. Students should also be able to contribute meaningfully to conversations about climate change and peoples' responsibility for ensuring a global future. Cross-Listed as: GEOL 1130. MnTC Goals: 3, 8.

**GEOG 1170 Cities 3 cr**

This is an examination of cities as social, political, and economic landscapes, emphasizing relationships and interactions among diverse people and places at neighborhood, metropolitan, and regional scales of analysis. MnTC Goals: 7, 9.

**GEOG 1172 Introductory Meteorology 4 cr**

An examination of atmospheric structure and processes, including temperature patterns, heating and cooling of the earth, moisture and humidity, winds, weather map interpretation, and the role of humans in atmospheric modification. Laboratory assignments provide applications of these concepts. MnTC Goals: 3, 10.

**GEOG 1900 Topics in Geography 1-4 cr**

An examination of a special topic in geography; intended for all interested students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum. Prerequisite: Topic-dependent.

**GEOG 2096 Internship in Geography 2-4 cr**

This internship course explores careers and training in a supervised work setting and combines theory with field experience. Students spend approximately 2.5 hours per week, per credit on the job, complete academic work, and meet with faculty throughout the semester. Students may earn 2 to 4 credits per semester, with a maximum of 8 credits in any one discipline. Prerequisite: Previous coursework in Geography and consent of instructor and the Center for Experiential Education.

**GEOG 2900 Topics in Geography 1-4 cr**

An examination of a special topic in geography; intended for second-year students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum. Prerequisite: Topic-dependent.

## GEOL-Geology

**GEOL 1050 Earth History 4 cr**

This course provides interpretations of the evolution of our planet and its natural systems, including the scientific basis of these interpretations as well as the controversies faced as these developing interpretations have challenged existing social and religious standards. The interplay of scientific advancement and societal norms are probed in order to appreciate the broader context of our understanding of Earth's evolution. Lab activities demonstrate current application of the scientific method to questions of Earth's history. MnTC Goals: 3, 9.

**GEOL 1101 The Dynamic Earth 4 cr**

This course is an introduction to materials and structure of the earth and processes acting internally and externally to change it. It includes identification of This course is an introduction to materials and structure of the earth and processes acting internally and externally to change it. It includes identification of common rocks and minerals, as well as other laboratory activities. MnTC Goals: 3, 10.

**GEOL 1110 Environmental Geology 3 cr**

This course investigates the relationship between people and the environment, focusing on the distribution and use of geologic resources, natural hazard and their effects on human activity, and human impacts on the physical environment. MnTC Goals: 3, 10.

**GEOL 1111 Environmental Geology Laboratory 1 cr**

This class is an optional "add-on" lab for Environmental Geology (Geology 1110) only for students who are concurrently or previously enrolled in Geology 1110 and wish to have Geology 1110 count for a Goal 3 lab science requirement. Prerequisite: GEOL 1110 or concurrent registration. MnTC Goals: 3, 10.

**GEOL 1120 Oceanography 3 cr**

This course investigates the relationship between the physical, chemical, and biological characteristics of oceans, focusing on evolution of the oceans, biotic environments, dynamics of water movement, and the effect ocean processes have on humankind. MnTC Goals: 3, 10.

**GEOL 1130 Climate Change: Science, Human Impacts and Adaptations 3 cr**

This course investigates the evidence for past and present climate change, and what this implies for the future of the planet and society. At the end of this course, students will understand key principles of climate science, as well as identify and address human impacts and misconceptions. Students should also be able to contribute meaningfully to conversations about climate change and peoples' responsibility for ensuring a global future. Cross-Listed as: GEOG 1130. MnTC Goals: 3, 8.

**GEOL 1900 Topics in Geology 1-4 cr**

Examination of a special topic in geology; intended for all interested students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.  
Prerequisite: Topic-dependent.

**GEOL 2096 Internship in Geology 2-4 cr**

This internship course explores careers and training in a supervised work setting and combines theory with field experience. Students spend approximately 2.5 hours per week, per credit on the job, complete academic work, and meet with faculty throughout the semester. Students may earn 2 to 4 credits per semester, with a maximum of 8 credits in any one discipline.  
Prerequisite: Previous coursework in Geology and consent of instructor and the Center for Experiential Education.

**GEOL 2900 Topics in Geology 1-4 cr**

Examination of a special topic in geology; intended for second-year students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.  
Prerequisite: Topic-dependent.

## GERM-German

**GERM 1100 Beginning German 1 5 cr**

This course introduces critical differences and similarities between German and English while students develop competency in speaking, listening, reading, and writing. Aspects of German culture are also frequently introduced in class, which help students acquire cultural sensitivity toward the German-speaking world as part of increased global understanding.  
MnTC Goals: 8.

**GERM 1101 Introduction to Interpreting and Translation 2 cr**

Introduction to Interpreting and Translation introduces students to the career competencies, ethics and major theories related to the fields of interpreting and translation. Through readings by experts in the field, case studies, and professional profiles, students will learn about the fields of interpreting and translation and exercise key skills required to work in these professions. Taught in English. Cross-Listed as: CHIN 1101, FREN 1101, INDS 1101, JAPN 1101, SPAN 1101.

**GERM 1111 German Culture and Civilization 3 cr**

This course acquaints students with aspects of the culture and civilization of the German-speaking peoples. Course topics will be selected from among the areas of the arts, literature, and history to allow students to gain an awareness of cultural, social, religious, and linguistic aspects of the target culture. Students will develop an understanding of the responsibility world citizens share for their common global future by comparing and contrasting their own culture with that of German-speaking peoples. Taught in English.  
MnTC Goals: 6, 8.

**GERM 1200 Beginning German 2 5 cr**

This course is a continuation of the listening, reading, speaking, and writing competencies developed in GERM 1100. Students further explore cultural differences helping them develop a deeper understanding of the world and a greater cultural perspective.  
Recommended: GERM 1100.  
MnTC Goals: 8.

**GERM 2100 Intermediate German 1 5 cr**

Students continue the development and strengthening of the four communication skills: listening, speaking, reading, and writing. Cultural and literary materials are used to develop an appreciation for the arts, history, culture, and literature of German-speaking peoples and create an awareness of cultural, social, and linguistic differences and similarities.  
Recommended: GERM 1200.  
MnTC Goals: 6, 8.

**GERM 2200 Intermediate German 2 5 cr**

Students continue the development and strengthening of the four communication skills: listening, speaking, reading, and writing. Cultural and literary materials are used to develop an appreciation for the arts, history, culture, and literature of German-speaking peoples and create an awareness of cultural, social, and linguistic differences and similarities.  
Recommended: GERM 2100.  
MnTC Goals: 6, 8.

**GERM 2210 Advanced Communication Skills 3 cr**

Students continue the development and strengthening of oral and written proficiency acquired in previous courses. This course is strongly recommended for those students who have taken two years of language at the community college level, or who have acquired equivalent knowledge through other courses. Oral and written assignments may be based on cultural and/or literary materials presented in class.

## HCCC-Health Care Core Curriculum

**HCCC 1000 Health Career Exploration 0 cr**

This module provides information about the different types of healthcare workers in various healthcare settings. Included are education and licensure/certification requirements, scope of work, types of interaction with clients, peer groups and team members, and the impact healthcare workers have meeting the healthcare needs of clients. Also included is information about selecting, entering, and advancing in a healthcare career.

**HCCC 1010 Behaviors for Success in Healthcare Settings .5 cr**

This module focuses on the requirements needed by healthcare workers to effectively work in a variety of healthcare settings. This includes: types of healthcare facilities and systems, applying for employment, accountability and responsibility, standards of dress, workplace behavior, approaches needed to assist clients, expectations of teams and team members, common healthcare facility policies and requirements, and selected medical and departmental abbreviations. Also included is discussion about how healthcare workers can impact the quality of healthcare and balance their work and personal life to maintain personal wellness.

**HCCC 1020 Communications in Healthcare Settings 1 cr**

This module emphasizes the importance of effective communication between and among healthcare workers and their clients. Included are verbal and non-verbal communication, listening skills, interpersonal communication, team communication, documentation and reporting, and the use of electronic communication devices in healthcare facilities. Focus is on the development of effective communication skills to support quality client care.

**HCCC 1030 Awareness and Sensitivity to Client Needs .5 cr**

This module presents challenges and issues related to the awareness and sensitivity needed to understand the healthcare needs of clients. Included is the impact disease has on individuals; the emotional, spiritual, and social needs of clients; as well as the type of care needed by different age groups. Also included is the process of death and dying and how that affects clients and their families.

**HCCC 1040 Respecting Client and Staff Diversity .5 cr**

This module provides a framework for dealing with diverse clients and staff. Included are belief systems, cultural practices and respect, and sensitivity to cultural and gender issues. Awareness and use of effective strategies to appropriately deal with client and staff diversity are emphasized.

**HCCC 1050 Healthcare Safety and Standard Precautions .5 cr**

This module focuses on the rules and standards related to regulatory policies required of healthcare facilities, as well as personal safety standards and requirements to work in healthcare settings. Included are the principles and standards of infection control, standard precautions, healthcare facility safety policies, strategies to ensure personal and client safety, and procedures to respond to emergencies.

**HCCC 1060 Legal Issues in Healthcare .5 cr**

This module focuses on the legal issues related to clients and healthcare workers. Areas such as healthcare laws, client rights and responsibilities, confidentiality, liability, documentation, and regulation are explored. The relationship between ethics and legal issues is discussed as well as the impact law and regulation have on healthcare systems.

**HCCC 1070 Healthcare Ethics .5 cr**

This module emphasizes the use of sound ethical practices in healthcare. Included are ethical practices and standards as they relate to the care of clients, and interactions with peers, colleagues, and team members. Ethical frameworks are provided for discussion on understanding the types of ethical challenges in healthcare and the difficult decisions that need to be made.

**HCCC 1074 Healthcare Core Total Curriculum 4 cr**

The Healthcare Core Curriculum was originally designed as a flexible, modular based curriculum that could be adapted to a variety of applications in work force development centers, high schools, colleges, and to meet specific workplace training needs. This course combines all of the modules of the Healthcare Core Curriculum theory content under one unified course identification to be used when all modules will be taught.

**HCCC 1080 Nursing Assistant Skill Set 2 cr**

This course is an introduction to basic nursing care skills and concepts necessary to prepare the student to be employed in a healthcare facility under direct supervision of a licensed nurse. Completion of this course will prepare the student to certify as a nursing assistant with the State of Minnesota.

Prerequisite: Prerequisites: HCCC 1000, HCCC 1010, HCCC 1020, HCCC 1030, HCCC 1040, HCCC 1050, HCCC 1060 and HCCC 1070.

## HCST-Health Care Systems Technology

**HCST 2100 Introduction to Health Information Technology 4 cr**

This course will develop an understanding of the role of Information Technology (IT) in the US healthcare system's drive to implement electronic health data exchange. It will provide students with an introduction to Health Information Technology (HIT), Electronic Health Records (EHR), and Health Information Exchange (HIE).

Prerequisite: HLTH 2010.

**HCST 2200 Privacy and Security in Health Information Technology 2 cr**

This course will develop an understanding of the need for privacy and security in the health care industry. This course will emphasize government mandated privacy and security requirements, the importance of compliance, and ways to implement privacy and security during software development.

Prerequisite: HCST 2100.

**HCST 2300 Health Care Systems Technology Capstone 4 cr**  
Designed to provide an opportunity to individually design and self-direct, with guidance from the assigned faculty, a course capstone project. The capstone course project involves identifying students' strengths and interests within the fields of study and workforce they are interested in exploring.  
Prerequisite: HCST 2100.

## HIST-History

**HIST 1101 History of World Civilizations 1 4 cr**  
The history of world civilizations from the ancient world to 1300 C.E. (Common Era), including: Western Asia and Egypt, Greco-Roman world, India, China, Japan, Southeast Asia, Africa, medieval Europe, Islamic world, and The Americas before Columbus' arrival. Thematically, the course begins from the earliest civilizations to the end of the conflict between Christians and Muslims known as the Crusades.  
MnTC Goals: 5, 8.

**HIST 1102 History of World Civilizations 2 4 cr**  
The history of world civilizations from 1300 C.E. (Common Era) to no later than 1 January, 2020. Topics will include colonialism and resistance to it, the age of revolutions, industrialization and its effects on people living in both imperialist and colonized societies, and the connection between industrialization and imperialism as causes of World War I, the rise of national liberation movements, decolonization, total war, holocausts, globalization, the Cold War, fundamentalism, late-capitalism and its cultures, and the rise of digital global technologies.  
MnTC Goals: 5, 8.

**HIST 1111 United States History 1 4 cr**  
The Age of Exploration, Colonial America, Revolutionary Era, The Early National Period, Reform and Expansion, the road to the Civil War, Civil War, and Reconstruction.  
MnTC Goals: 5, 7.

**HIST 1112 United States History 2 4 cr**  
The Civil War and Reconstruction, the New South and the New West, Industrialization, Populism and Progressivism, World War I, the Great Depression and the New Deal, World War II, Cold War America, and beyond.  
MnTC Goals: 5, 7.

**HIST 1131 Family: Sex/Gender/Power: Cross-Cultural, Historical Perspective 3 cr**  
A social history of the family. The course examines how social, political, economic, religious, and cultural changes have influenced the structure, function, and values of family. A comparative study of the American family will be made with other cultures.  
MnTC Goals: 5, 8.

**HIST 1133 Minnesota History 3 cr**  
This course focuses on the interrelationship between Minnesota's geophysical environment and socio-cultural development. Topics will include Native American culture, European settlement, immigration, economic and industrial development, political institutions, cultural legacy, ethnic heritage, and Minnesota's place in the global community.  
MnTC Goals: 5, 10.

**HIST 1900 Topics in History 1-3 cr**  
A one-semester special topics course in which students may engage in a study of a subject not regularly offered in the history program, or for international educational experience. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.  
Prerequisite: Topic-dependent.

**HIST 2096 Internship in History 2-4 cr**  
This internship course explores history careers and training in a supervised work setting and combines theory with field experience with an approved sponsoring organization. Students must complete 45 hours per credit on the job, additional academic work, and meet with faculty throughout the semester. Students may earn 2 to 4 credits.  
Prerequisite: Previous coursework in History and consent of instructor.

**HIST 2100 Black History and Civil Rights in the United States 3 cr**  
This course examines the centuries-long freedom and Black civil rights struggle in the United States. An examination of civil rights in United States history provides students with a unique opportunity to journey through critical moments in Black history. Topics of the course include but are not limited to: the experiences of Black people in the North American colonies, the middle passage, African slavery in the Atlantic World, Black lives in the founding era, 19th-century slavery, abolition, Reconstruction, Jim Crow, redlining, the Civil Rights Movement, the Black Power Movement, and the Black Lives Matter movement.  
Prerequisite: ENGC 0960 (C or higher) or ENGC 0900 and READ 0960 (C or higher) or placement into ENGC 1101.  
MnTC Goals: 5, 8.

**HIST 2111 Lesbian, Gay, Bisexual, and Transgender U.S. History 3 cr**  
Students deepen their understanding of the experiences of lesbian, gay, bisexual and transgender people in U.S. society and the historical roots within the United States of those who experience same-sex attraction and those who identify outside expectations for their perceived gender, understood now as lesbian, gay, bisexual and transgender. Students trace roots from the colonial era, when behavior rather than identity formed the common understanding of sexuality, through the 19th century when the concepts of hetero- and homosexuality were developed, into the 20th and 21st centuries, when a focus on particular social identities became a salient feature of U.S. society.

Prerequisite: Eligible for ENGC 1101 and READ 1106. MnTC Goals: 5, 7.

**HIST 2900 Topics in History 1-3 cr**

A one-semester special topics course in which students may engage in a study of a subject not regularly offered in the history program, or for international educational experience; intended for second-year students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

## HLTH-Health

**HLTH 1010 Medical Terminology 3 cr**

Comprehensive course designed for mastering the medical language used in all professions and industries related to health care. Course includes an introduction of body systems in relation to medical terminology. Utilization, understanding and pronunciation of medical terms are incorporated into this course.

**HLTH 1103 College First Aid and Adult CPR 2 cr**

This course provides a basic understanding of first aid, AED, and adult CPR principles, and covers fundamental skills necessary to sustain a life until Emergency Medical Services arrive at the scene. Students have the opportunity to earn CPR certification from the American Heart Association.

**HLTH 1104 Personal and Community Health 3 cr**

This course examines current health issues affecting the individual and community such as disease prevention, stress, nutrition, fitness, mental health, sexuality, and aging. Emphasis is placed on developing critical thinking skills to assist the student in creating a holistic plan for optimal personal and community health.

**HLTH 1106 Drug Use and Abuse 3 cr**

This course will examine the impact of mood-altering substances on the individual, family, and society. This includes an exploration of the interrelatedness of personal decisions regarding the use/non-use of mood-altering substances on politics, economics, and the various socio-cultural institutions.

**HLTH 1107 Principles of Nutrition 3 cr**

Emphasis on physiological function of nutrients in the human body, including digestion, absorption, and metabolism. Basic principles of nutrition are used to demonstrate and evaluate disease preventing diets that are determined by scientific criteria. Application of nutrition theories are illustrated by an in-depth dietary analysis utilizing databases, calculations, and scientific inquiry. Taught by registered dietitians.

Recommended: Eligible for READ 1106.

**HLTH 1112 CPR for the Professional Rescuer 1 cr**

This course is designed to teach the skills of CPR for victims of all ages, including ventilation with a barrier device, a bag-mask device, and oxygen, use of an automated external defibrillator (AED), and relief of foreign-body airway obstruction (FBAO). It is intended for participants who provide healthcare to patients in a wide variety of settings, including in-hospital and out-of-hospital. Meets admission requirements for the Dental Hygiene and Nursing programs at Normandale. This course provides an opportunity to earn the American Heart Association Basic Life Support (BLS) Certification.

**HLTH 1118 Stress Management 3 cr**

An exploration and celebration of the adaptive ability of human beings to create and overcome stress in our urban and technological society. This course uses a holistic approach in assisting the student to recognize personal stress levels, to develop strategies for managing stress, and to understand the relationships between complex cultural forces and personal responsibility in the 21st century.

**HLTH 1160 Theory and Practice of T'ai Chi Ch'uan 1 2 cr**

Introduces the theory, applications, and postures of T'ai Chi. Emphasis is on incorporating the balance, flexibility, relaxation, and muscular strengthening concepts of T'ai Chi into a lifestyle which benefits body, mind, and spirit.

**HLTH 1170 Introduction and Exploration into Integrative/Holistic Health Modalities 3 cr**

This course is an overview of the theories and practice of integrative/Holistic health modalities including Qigong. Students will study theories, examine various integrative/holistic health and qigong practices, learn experientially how to influence their own energy, as well as how to facilitate self-discovery within others. This course is an exploratory class for students who want to continue their education in holistic health or have already taken Stress Management.

**HLTH 1900 Topics in Health 1-4 cr**

Skill development in various special areas of health; intended for all students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

**HLTH 2010 Healthcare in the US 3 cr**

Students will understand the history, organization, influences, and delivery of healthcare in the US and abroad. A focus will be on analyzing the factors that have shaped our healthcare system compared to the other parts of the globe. The course will cover types of healthcare institutions, functions of hospitals, and other facilities; accountability in healthcare, hierarchy of the healthcare system, organizational structure, and the role of government in healthcare.

Recommended: Eligible for ENGC 1101 and READ 1106.

**HLTH 2011 Introduction to Public Health 3 cr**

A foundation course that introduces students to the concept, history, and practice of public health. The course examines the environmental, social, political, and behavioral determinants of health and disease from a population perspective. It also looks at options for intervening to maintain the public's health with the help of healthcare, public health, environmental health, and safety systems as well as laws and taxation. Emphasis is on developing critical thinking skills to assist the student in creating a holistic plan for optimal personal and community health.

**HLTH 2012 Public Health Advocacy and Leadership 3 cr**

This course analyzes the discipline and leadership in Public and Community Health Education. Students will explore and practice behavior change and leadership models, theories, ethical factors, advocacy, and outreach in health education.

**HLTH 2096 Internship in Health 2-4 cr**

Student, who are enrolled in an internship within the Health Department, will guide the content of their own learning experience at the internship site, by developing learning objectives with the employer/internship site and faculty member at Normandale Community College. These objectives will be related to the skills that will be needed to approach real world work experiences, situations, decision making, interpersonal communication skills, and actively participate in organizational internal and external activities.

Prerequisite: Complete at least one course in HLTH and consent of instructor.

**HLTH 2105 Women's Health 3 cr**

This course examines critical issues in women's health. Topics will include biological, cultural, global, psychological, historical, and political areas that shape and define women's health and healthcare choices. We will explore behaviors which promote or compromise women's health and the philosophy of an integrative approach to optimal health.

Recommended: Eligible for ENGC 1101 and READ 1106.

**HLTH 2110 Sexuality and Health 3 cr**

The objective of this course is to provide students an introduction to health topics related to sexuality. It is based on present scientific analysis of sexuality and how it functions. It offers an overview of different aspects of sexuality including theoretical perspectives on sexuality, sexual development (anatomy), pregnancy and childbirth, contraception & abortion, sexuality and life cycle (childhood to adulthood), gender & sexuality, sexual orientation, sexual behaviors, sexual coercion, and sexually transmitted infections. This course examines how different dimensions of wellness influence our sexual health and behavior. The course is taught in an interdisciplinary manner that includes theories and research on biological, sociological, cognitive, and emotional aspects of sexuality.

**HLTH 2160 Theory and Practice of T'ai Chi Ch'uan 2 2 cr**

This course is a continuation of HLTH 1160, Theory and Practice of T'ai Chi Ch'uan 1. It is designed for the student desiring to deepen his/her understanding and practice of T'ai Chi through additional readings and work with beginning students. In addition to further study of the subject matter from HLTH 1160, instruction in advanced standing forms; Qigong, push hands and other T'ai Chi forms will be taught. Each student will be assigned a small group of beginning students as part of the Service-Learning component of the class.

Prerequisite: HLTH 1160.

**HLTH 2209 Emergency Medical Responder 3 cr**

This course provides a more in-depth examination of the techniques and procedures necessary in handling the physical and emotional needs of the injured, or the suddenly taken ill person until more advanced medical help arrives. Legal and ethical issues, treatment for shock, respiratory and circulatory emergencies, spinal immobilization, fractures, special populations, poisoning, temperature emergencies, childbirth, and rescue skills. A Minnesota EMS Regulatory Board approved Emergency Medical Responder certificate is available upon successful completion of course objectives.

**HLTH 2900 Topics in Health 1-4 cr**

Skill development in various special areas of health; intended for second-year students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

## HSER-Health and Human Services

**HSER 1100 Current Issues in Health and Human Services 2 cr**

This course is an overview of the Health and Human Services field. Topics discussed include the history of human/social services/public health in the United States and globally. Topics include poverty, barriers to service, social policy, public health, welfare systems, and future trends in the field.

**HSER 1200 Multicultural Aspects in Health and Human Services 2 cr**

In this course, students examine the multicultural models related to the health and human services field. Students explore their own cultural identities, values, and experiences and understand how they impact their professional role in Health and Human Services. The knowledge and skills health and human service workers need to possess in order to provide competent and ethical services for the clients and populations they serve are also examined.

## HSMA-Hospitality Management

**HSMA 1103 Introduction to Hospitality and Tourism Management 4 cr**

This introductory course provides a portal to the dynamic field of hospitality, travel, and tourism industry. It provides students with a comprehensive overview of hospitality and tourism management including hotels, restaurants, food service, marketing, service companies, as well as the functional areas of hotel operations.

**HSMA 1143 Principles of Food Production and Sanitation 4 cr**

Students are given hands-on laboratory experiences in all major areas of food production. Lectures allow students to bridge the gap of food production with operating profitable food service and restaurant entities.

**HSMA 1162 Hotel/Lodging Management and Operations 4 cr**

This course examines the theoretical applications of all revenue center operations including yield management and other vital hotel functions, with emphasis on the control function of management.

**HSMA 1170 Introduction to Club Management 4 cr**

Introduction to club management provides a unique perspective on all types of club management including spa, fitness, athletic and city; unique discussion and case study provide the student with the keys to successful leadership development complemented with relationship marketing skills, manufacturing successful club managers.

**HSMA 1900 Topics in Hospitality Management 1-3 cr**

An examination of a special topic in hospitality management; intended for all interested students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.  
Prerequisite: Topic-dependent.

**HSMA 2096 Internship in Hospitality Management 4 cr**

Student will develop the content of their learning experience by developing three to four learning objectives with the training sponsor and internship coordinator. These goals will be related to transferable skills in the hospitality and tourism industry. Other projects will be included to develop career search skills and/or knowledge of their career choice in the field of hospitality and tourism. Students should expect to work 45 hours per credit.  
Prerequisite: HSMA 1103 consent of instructor

**HSMA 2097 Senior Internship in Hospitality Management 4 cr**

This internship course explores a broader understanding of the hospitality and tourism environment through practical application. This second internship emphasizes supervisory and management skill development. Students must complete 180 hours on the job, additional academic work, and meet with a faculty member.  
Prerequisite: HSMA 1103, HSMA 2096, and consent of instructor

**HSMA 2100 Casino Management and Operations 4 cr**

To develop a working understanding of the principles of casino management and operational procedures necessary for state, federal, and Native American compliance (regulations and legal issues).

**HSMA 2125 Business Practices in the Global Market 3 cr**

Provides understanding and application into the complex global business arena. Global markets have created the need for companies to do business in every corner of the world. It is imperative that businesses conduct themselves in a professional, ethical, yet sensitive manner regarding regional customs, traditions, and religious practices. This course examines the need for professional business practices, ethics, protocol, etiquette, and professional and social behavior in all settings of business, national and international.

Prerequisite: At least one course in BUSN or HSMA.

**HSMA 2144 Food/Beverage Management and Cost Control 4 cr**

A working understanding and application of the principles of food, beverage, labor, cost control, and management functions.

**HSMA 2150 Revenue Management In Hospitality and Tourism 4 cr**

This course provides a foundation for managing revenues and costs in the hospitality and tourism industry. Students will learn the historical development of yield management (YM) and its formation into modern day revenue management (RM). The course will rely upon cases and articles to analyze trends and develop effective revenue management strategies in the accommodations, food and beverage, attractions and transportation sectors of the hospitality and tourism industry.

**HSMA 2172 Hospitality Sales and Marketing Management 4 cr**

Organization and functioning of marketing and sales department; the need for sales planning through analysis of product, competitors, and market. In addition to sales planning and analysis, students will work with industry experts selling the hospitality product.  
Recommended: Computer skills and a strong interest in hotel management.

**HSMA 2173 Convention and Meeting Planning Management 4 cr**

An overview of successful convention and meeting planning management including all services, execution, and follow-up.

**HSMA 2900 Topics in Hospitality Management 1-3 cr**

An examination of a special topic in hospitality management; intended for second-year students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.  
Prerequisite: Topic-dependent.

## INDS-Interdisciplinary Studies

**INDS 1101 Introduction to Interpreting and Translation 2 cr**

Introduction to Interpreting and Translation (INDS 1101) introduces students to the career competencies, ethics and major theories related to the fields of interpreting and translation. Through readings by experts in the field, case studies, and professional profiles, students will learn about the fields of interpreting and translation and exercise key skills required to work in these professions.

Cross-Listed as: CHIN 1101, FREN 1101, GERM 1101, JAPN 1101, SPAN 1101.

**INDS 1600 Leadership Development Studies 3 cr**

This honors-level course will provide a basic understanding of the concept of leadership and foster the development of leadership skills. This is a humanities-based course which integrates classical and contemporary readings, as well as relevant films. The eleven-unit curriculum has been developed through a Kellogg Foundation Leadership Grant as part of the Phi Theta Kappa Leadership Development Program and is used nationally in academic settings and the business world. The course begins with considering a personal leadership philosophy and proceeds through such areas as vision, goals, ethics, conflict management, team building, and leading by serving.

MnTC Goals: 9.

**INDS 1900 Topics in Interdisciplinary Studies 1-3 cr**

Examination of a special topic in interdisciplinary studies. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum. Prerequisite: Topic-dependent.

**INDS 2500 Honors Capstone 3 cr**

In the Honors Capstone course, students will propose, develop, and complete a research project in their major or chosen discipline, and document and present their research to the college community.

Prerequisite: Admission into the Honors Program and successful completion of at least 9 honors credits.

**INDS 2900 Topics in Interdisciplinary Studies 1-3 cr**

Examination of a special topic in interdisciplinary studies. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum. Prerequisite: Topic-dependent.

## JAPN-Japanese

**JAPN 1100 Beginning Japanese 1 5 cr**

This course introduces critical differences and similarities between Japanese and English while students develop competency in speaking, listening, reading, and writing. Aspects of Japanese culture are also frequently introduced in class, which help students develop cultural sensitivity toward the Japanese-speaking world as part of increased global understanding.

MnTC Goals: 8.

**JAPN 1101 Introduction to Interpreting and Translation 2 cr**

Introduction to Interpreting and Translation introduces students to the career competencies, ethics and major theories related to the fields of interpreting and translation. Through readings by experts in the field, case studies, and professional profiles, students will learn about the fields of interpreting and translation and exercise key skills required to work in these professions. Taught in English.

Cross-Listed as: CHIN 1101, FREN 1101, GERM 1101, INDS 1101, SPAN 1101.

**JAPN 1111 Japanese Culture and Civilization 3 cr**

This course acquaints students with aspects of the culture and civilization of the Japanese-speaking peoples. Course topics will be selected from among the areas of the arts, literature, and history to allow students to gain an awareness of cultural, social, religious, and linguistic aspects of the target culture. Students will develop an understanding of the responsibility world citizens share for their common global future by comparing and contrasting their own culture with that of Japanese-speaking peoples. Taught in English.

MnTC Goals: 6, 8.

**JAPN 1200 Beginning Japanese 2 5 cr**

This course is a continuation of the listening, reading, speaking, and writing competencies developed in JAPN 1100. Students further explore cultural differences helping them develop a deeper understanding of the world and a greater cultural perspective.

Recommended: JAPN 1100.

MnTC Goals: 8.

**JAPN 2100 Intermediate Japanese 1 5 cr**

Students continue the development and strengthening of the four communication skills: listening, speaking, reading, and writing. Cultural and literary materials are used to develop an appreciation for the arts, history, culture, and literature of Japanese-speaking peoples and create an awareness of cultural, social, and linguistic differences and similarities. Major grammar focus includes a review of the forms, formation, and uses of the "ta" and "nai" forms.

Recommended: JAPN 1200.

MnTC Goals: 6, 8.

**JAPN 2200 Intermediate Japanese 2 5 cr**

Students continue the development and strengthening of the four communication skills: listening, speaking, reading, and writing. Cultural and literary materials are used to develop an appreciation for the arts, history, culture, and literature of Japanese-speaking peoples and create an awareness of cultural, social, and linguistic differences and similarities. Major grammar focus includes the forms called "plain forms" for complete phrases and sentences.

Recommended: JAPN 2100.

MnTC Goals: 6, 8.

## MATH-Mathematics

### **MATH 0601 Pre-College Math 1 3 cr**

MATH 0601 offers a complete review of pre-college level mathematics. Topics include linear equations and inequalities, graphs of linear equations, exponents and polynomials, linear, quadratic, exponential and logarithmic functions, problem solving and systems of equations, rational and radical expressions and equations. The number of new topics that each student will study and the number of courses that each student will need in the MATH 0601, 0602, 0603 set will vary based on the results of their initial assessment and the sequence of mathematics courses that the student intends to pursue. Eligibility for a subsequent mathematics course is determined by a specific level of mastery of the topics in MATH 0601. Students completing MATH 0601 who have achieved eligibility for their intended sequence of math courses do not need MATH 0602 or MATH 0603. MATH 0601 serves as a preparation for MATH 0630, 0700, 0990, 1020, 1050, 1080 or 1100 based on the number of learning objectives mastered  
Prerequisite: Placement into MATH 0601.

### **MATH 0602 Pre-College Math 2 3 cr**

MATH 0602 is a continuation of Pre-college Mathematics from MATH 0601 for students who have yet to master the learning objectives required for their intended sequence of math courses. Topics are the same as those listed for MATH 0601 which include linear equations and inequalities, graphs of linear equations, exponents and polynomials, linear, quadratic, exponential and logarithmic functions, problem solving and systems of equations, rational and radical expressions and equations. Eligibility for a subsequent mathematics course is determined by a specific level of mastery of the topics. Students who achieve eligibility for their intended sequence of math courses after completing MATH 0602 do not need MATH 0603. MATH 0602 serves as a preparation for MATH 0630, 0700, 0990, 1020, 1050, 1080 or 1100 based on the number of learning objectives mastered.  
Prerequisite: MATH 0601.

### **MATH 0603 Pre-College Math 3 3 cr**

MATH 0603 is a continuation of pre-college mathematics from MATH 0602 for students who have yet to master the learning objectives required for their intended sequence of math courses. Topics are the same as those listed for MATH 0601 and MATH 0602 which include linear equations and inequalities, graphs of linear equations, exponents and polynomials, linear, quadratic, exponential and logarithmic functions, problem solving and systems of equations, rational and radical expressions and equations. Eligibility for a subsequent mathematics course is determined by a specific level of mastery of the topics. MATH 0603 serves as a preparation for MATH 0630, 0700, 0990, 1020, 1050, 1080 or 1100 based on the number of learning objectives mastered  
Prerequisite: MATH 0602.

### **MATH 0630 Survey of Algebra 3 cr**

Topics include linear and quadratic equations, graphs of linear equations, exponents and polynomials, linear and quadratic functions, introduction to exponential and logarithmic functions.  
Prerequisite: Eligible for MATH 0630.

### **MATH 0700 Intermediate Algebra 0 cr**

Proficiency course for Pre-College Math topics. Students cannot register for this course. Students who successfully demonstrate mastery of the learning objectives for Intermediate Algebra in MATH 0601, MATH 0602, or MATH 0603 will be given a grade of P on their transcript for MATH 0700. The purpose of this course is to state for other programs and institutions that a student has mastered this level of mathematics material which is equivalent to eligibility for MATH 1100 (College Algebra).  
Prerequisite: MATH 0601, MATH 0602 or MATH 0603.

### **MATH 0980 Math Skills for Statistics 2 cr**

This course is taught concurrently with MATH 1080 Introduction to Statistics and is designed to support students in completing the topics covered in both beginning algebra and college-level introductory statistics in one semester. MATH 1080 (4 credits) and the corequisite MATH 0980 (2 credits) are useful to students whose academic program is satisfied by an introductory statistics course, and MATH 0980 allows those students who are not eligible for MATH 1080 Statistics to complete a college-level statistics course in 1 semester. Math Skills for Statistics covers converting among fraction, decimal, and percent equivalencies; addition and subtraction of decimal numbers; rounding decimal numbers accurately; order and equivalence of rational numbers; understanding inequality symbols; understanding scientific notation; an introduction to probability; necessary topics from beginning algebra; and student success skills. Students must complete MATH 0980 and MATH 1080 concurrently.  
Prerequisite: MATH 0601, MATH 0602, or MATH 0603 with mastery of sufficient topics or placement into MATH 0980, MATH 0990, MATH 0630 or MATH 0601

### **MATH 0990 STATWAY Statistics 1 4 cr**

This course is the first in a two-semester sequence designed to guide students in completing the topics covered in both beginning algebra and college-level introductory statistics in one year. The two-semester sequence is useful to students whose academic program is satisfied by an introductory statistics course. STATWAY Statistics 1 covers sampling methods, descriptive statistics, graphing methods, linear and exponential models, and an introduction to probability as well as necessary topics from beginning algebra. The curriculum is based on student collaborative group learning. Students must commit to completing MATH 0990 and MATH 1090 as a required sequence of courses: MATH 0990 in one semester and MATH 1090 in a subsequent semester.  
Prerequisite: Eligible for MATH 0990.

**MATH 0991 Math Skills for College Algebra 2 cr**  
MATH 0991 Math Skills for College Algebra (2 credits) is taught concurrently with MATH 1100 College Algebra (4 credits). Together, the classes support students without MATH 1100 eligibility in completing the topics covered in both intermediate algebra and college algebra in one semester. Math Skills for College Algebra covers graphing and writing equations of lines; factoring and operations on polynomials; operations on rational expressions; exponent rules; simplifying radicals; calculator skills; and student success skills. Students must complete MATH 0991 and MATH 1100 concurrently (corequisites).  
Prerequisite: MATH 0630 (C/P or higher) or MATH 0601, MATH 0602, or MATH 0603 with mastery of sufficient topics or placement in MATH 0991, MATH 1020, MATH 1055 or MATH 1080.

**MATH 0995 Math Skills for Accelerated STATWAY 2 cr**  
This course is taught concurrently with MATH 1095 Statway Statistics Accelerated and is designed to support students in completing the topics covered in both beginning algebra and college-level introductory statistics in one semester. MATH 1095 (4 credits) and the co-requisite MATH 0995 (2 credits) are useful to students whose academic program is satisfied by an introductory statistics course, and MATH 0995 allows those students who are not eligible for MATH 1080 Statistics to complete a college-level statistics course in 1 semester. Math Skills for Accelerated Statway covers sampling methods; descriptive statistics; converting among fraction, decimal, and percent equivalencies; addition and subtraction of decimal numbers; rounding decimal numbers accurately; order and equivalence of rational numbers; understanding inequality symbols; understanding scientific notation; an introduction to probability; necessary topics from beginning algebra; and student success skills. The curriculum is based on student collaborative group learning. Students must complete MATH 0995 and MATH 1095 concurrently.  
Prerequisite: Eligible for MATH 0990. Corequisite: MATH 1095.

**MATH 1020 Math Trek: Mathematics for Liberal Arts 3 cr**  
The purpose of this introductory course is to develop an understanding of the nature of mathematics, and an awareness of its role in society. Through a selection of topics the course will develop problem-solving techniques, an appreciation for mathematics and the relationship of mathematics to other disciplines. Topics may include voting systems, financial mathematics, environmental mathematics, or logic and problem solving. This course is an alternative for students whose program does not require College Algebra (Math 1100) and it satisfies Goal 4.  
Prerequisite: Eligible for MATH 1080 or MATH 0630 (C or higher) or the equivalent in MATH 0601, 0602, 0603.  
MnTC Goals: 4.

**MATH 1055 Elements of Mathematics 1 4 cr**  
As part of a two-course sequence, this course focuses on counting and numbers, operations, fractions, decimals, ratio and proportion, number theory, and algebra. Emphasis on mathematical reasoning, estimation, and problem solving.  
Prerequisite: Eligible for MATH 1080 or MATH 0630 with a grade of C or higher or the equivalent in MATH 0601, 0602, 0603.  
MnTC Goals: 4.

**MATH 1065 Elements of Mathematics 2 4 cr**  
As part of a two-course sequence, this course focuses on measurement, geometry, probability, data and statistics. Emphasis on mathematical reasoning, estimation, and problem solving.  
Recommended: MATH 1055.  
MnTC Goals: 4.

**MATH 1080 Introduction to Statistics 4 cr**  
Concepts and application of descriptive and inferential statistics. Measures of central tendency and variation: z-scores and percentiles, normal distribution, and central limit theorem. Estimation, hypothesis testing, t and z tests, chi-square tests, analysis of variance (ANOVA), and linear regression.  
Prerequisite: MATH 0630 (C- or higher) or MATH 0980 (C- or higher); or MATH 0601, 0602, or 0603 with mastery of sufficient topics; or placement into MATH 1080  
MnTC Goals: 4.

**MATH 1090 STATWAY Statistics 2 4 cr**  
This course is the second in a two-semester sequence designed to guide students in completing the topics covered in both beginning algebra and college-level introductory statistics in one year. The two-semester sequence is useful to students whose academic program is satisfied by an introductory statistics course. STATWAY Statistics 2 covers sampling distributions, Central Limit Theorems, confidence intervals, and hypothesis testing for population proportions, population means, and means of paired differences. Chi-square tests for one- and two-way tables and ANOVA methods are also covered, as well as necessary topics from beginning algebra. The curriculum is based on student collaborative group learning. Students must commit to completing MATH 0990 and MATH 1090 as a required sequence of courses: MATH 0990 in one semester and MATH 1090 in a subsequent semester.  
Prerequisite: MATH 0990  
MnTC Goals: 4.

**MATH 1095 STATWAY Statistics: Accelerated 4 cr**  
This course is an accelerated version of the Statway Statistics 1 and 2 sequence (MATH 0990 and 1090) and is taken simultaneously with the corequisite MATH 0995. Along with MATH 0995, it is designed to guide students in completing the topics covered in both beginning algebra and college-level introductory statistics in one semester. MATH 1095 (4 credits) and the corequisite MATH 0995 (2 credits) are useful to students whose academic program is satisfied by an introductory statistics course, and the corequisite course allows those students who do not place at the MATH 1080 eligibility level to complete a college-level statistics course in 1 semester. Statway Statistics: Accelerated covers sampling distributions, Central Limit Theorems, confidence intervals, and hypothesis testing for population proportions, population means, and means of paired differences. Chi-square tests for one and two-way tables are also covered, as well as necessary topics from beginning algebra. Students must complete MATH 0995 AND MATH 1095 in the same semester. MATH 1095 with MATH 0995 is equivalent to MATH 1090. Prerequisite: Eligible for MATH 0990. MnTC Goals: 4.

**MATH 1100 College Algebra 4 cr**  
This is a college-level algebra course that emphasizes properties of functions and their graphs. Linear, quadratic, polynomial, rational, exponential and logarithmic functions are covered. Other topics include: solving equations and inequalities, and systems of equations and inequalities. This course also includes a basic introduction to right triangle trigonometry. Prerequisite: MATH 0700 (C or higher) or MATH 0991 (C or higher) or MATH 0601, MATH 0602, or MATH 0603 with mastery of sufficient topics or placement into MATH 1100. MnTC Goals: 4.

**MATH 1150 Trigonometry 4 cr**  
This course, together with MATH 1100, is intended to prepare students for a multiple-term calculus sequence. It includes a thorough treatment of trigonometric functions. Other topics include polar coordinates and equations, complex numbers, DeMoivre's Theorem, vectors and their applications, the conic sections, parametric equations, sequences, and series. You may not receive credit for both MATH 1150 and MATH 1500. Prerequisite: MATH 1100 (C or higher) MnTC Goals: 4.

**MATH 1400 Survey of Calculus 4 cr**  
Concepts and techniques of differential and integral calculus for those who do not need the comprehensive calculus sequence (MATH 1510-1520). Principal applications from business, technology, social science, and statistics. Prerequisite: MATH 1100 (C or higher) or eligible for MATH 1500. MnTC Goals: 4.

**MATH 1500 Pre-Calculus 5 cr**  
This course is intended to prepare students for a multiple-term calculus sequence. This is an accelerated treatment of all elementary functions from MATH 1100, followed by a thorough treatment of trigonometric functions. Other topics include polar coordinates and equations, complex numbers, DeMoivre's Theorem, vectors and their applications, the conic sections, and parametric equations. You may not receive credit for both MATH 1500 and MATH 1150. Prerequisite: MATH 1100 (C or higher) or eligible for MATH 1500. MnTC Goals: 4.

**MATH 1510 Calculus 1 5 cr**  
Topics include functions, limits, derivatives, and an introduction to integration. Applications include but are not limited to science, engineering, economics, and ecology. Prerequisite: MATH 1150 (C or higher), MATH 1500 (C or higher) or eligible for MATH 1510. MnTC Goals: 4.

**MATH 1520 Calculus 2 5 cr**  
Continued development of the properties and applications of integration. Topics include infinite sequences and series, introduction to differential equations, calculus of polar coordinates, and parametric equations. Applications include but are not limited to science, engineering, economics, and ecology. Prerequisite: MATH 1510 (C or higher). MnTC Goals: 4.

**MATH 1900 Topics in Mathematics 1-3 cr**  
An examination of a special topic in mathematics; intended for all interested students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum. Prerequisite: Topic-dependent.

**MATH 2011 Discrete Structures of Computer Science 4 cr**  
Concepts fundamental to the analysis of algorithms. Topics include logic, sets, methods of proof including mathematical induction, combinatorics, relations, solution of recurrence relations, graphs and trees. Prerequisite: MATH 1510. Cross-Listed as: CSCI 2011. MnTC Goals: 4.

**MATH 2033 Elementary Computational Linear Algebra 4 cr**  
Matrices and linear transformations, basic theory, linear vector spaces, inner product spaces. Systems of linear equations, Eigenvalues, and singular values. Algorithms and computational matrix methods using MATLAB. Use of matrix methods to solve a variety of computer science problems. Prerequisite: MATH 1510. Cross-Listed as: CSCI 2033.

**MATH 2080 Statistical Modeling 3 cr**

This course provides an introduction to statistical model building including simple linear regression, non-linear models, logistic regression, and multiple regression models. Optionally, an instructor may include an introduction to artificial neural net models. Examples of modeling problems will be used for a variety of disciplines and thus the course should be useful to students interested in physical sciences, biology, economics, finance, and data science.

Prerequisite: MATH 1080 or MATH 1090.

MnTC Goals: 4.

**MATH 2400 Probability and Statistics with Calculus 4 cr**

Descriptive statistics, elementary probability and probability distributions, sampling and the elements of statistical inference including point/interval estimation, and hypothesis tests.

Prerequisite: MATH 1520 (C or higher).

MnTC Goals: 4.

**MATH 2510 Calculus 3: Multivariable Calculus 5 cr**

Multivariable functions, three-dimensional analytic geometry, vectors, partial derivatives, optimization, multiple integrals, curves and surfaces, vector fields, divergence, curl, line and surface integrals, Green's Theorem, Stokes' Theorem, and the Divergence Theorem. Applications include but are not limited to science, engineering, economics, and ecology.

Prerequisite: MATH 1520 (C or higher).

MnTC Goals: 4.

**MATH 2520 Calculus 4: Differential Equations with Linear Algebra 5 cr**

Matrices and systems, vector spaces, subspaces, linear independence, basis, dimension, linear transformations, eigenvectors, first and second order differential equations, Euler's method, phase plane analysis of linear and nonlinear systems, extensive modeling. Possible topics from numerical methods: Laplace Transforms, power series solutions, or partial differential equations. Applications include but are not limited to science, engineering, economics, and ecology.

Prerequisite: MATH 1520 (C or higher).

MnTC Goals: 4.

**MATH 2700 Foundations of Mathematics and Logic: Writing Intensive 4 cr**

This course will be useful to all students pursuing advanced mathematics at four-year institutions, including but not limited to those intending majors in mathematics or mathematics education. Topics include basic logic, techniques of mathematical proof, set theory, relations and functions, sequences and series, and basic number theory. The course may include additional topics at the discretion of the instructor. Writing is an important part of this course and will be comprehensively integrated into the course and will be a significant part of the course work and course grade. Writing proofs will be explained and practiced in the course and some assignments will be refined through revisions.

Prerequisite: MATH 1520.

MnTC Goals: 4.

**MATH 2900 Topics in Mathematics 1-4 cr**

An examination of a special topic in mathematics; intended for second-year students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

**MUSC-Music****MUSC 1100 Individualized Music Instruction 2 cr**

Individualized music instruction for woodwinds, brass, percussion, piano, guitar, strings, and voice. The course is open to piano, voice and guitar students with no previous background. Woodwinds, brass, percussion and strings require some previous experience playing and reading music. There is an additional fee for this course. May be repeated for a maximum of 4 credits.

Prerequisite: Prior instruction is not required for piano, voice, or guitar. Woodwind, brass, strings and percussion must have prior experience with reading and playing music.

**MUSC 1113 Concert Choir 1 cr**

Studies and prepares for public performance the finest in choral literature of all musical periods and styles. Maximum of 4 credits.

**MUSC 1116 Concert Band 1 cr**

Rehearsals and performances covering standard band literature. Maximum of 4 credits.

Prerequisite: Ability to read music.

**MUSC 1118 Orchestra 1 cr**

Rehearsals and performances of orchestral music of many traditions and styles. String students may audition to perform with the Bloomington Symphony Orchestra. Maximum of 4 credits.

Prerequisite: Audition and consent of applied music coordinator.

**MUSC 1120 Fundamentals of Music 3 cr**

This course introduces the fundamental materials of music: pitch, rhythm, melody, harmony, and timbre. Students will learn the notation of pitch, rhythm, articulations, dynamics, and harmony. Students will analyze music and musical form common to various styles of music and create original musical compositions. Students will use music technology to demonstrate course objectives. This course assumes that students have no prior formal music training.

MnTC Goals: 6.

**MUSC 1121 Introduction to World Music 3 cr**

This course will survey the study of world music within religious, cultural, and historical contexts.

MnTC Goals: 6, 8.

**MUSC 1122 Intro to Music 3 cr**  
Develops an understanding and enjoyment of music. Includes a study of great music from 1600 to the present. Emphasis on developing listening skills supplemented by historical background. Open to all students wishing to increase their appreciation and understanding of music.  
Recommended: Eligible for ENGC 1101 and READ 1106. MnTC Goals: 6.

**MUSC 1123 Jazz History 3 cr**  
An introductory course in jazz history and appreciation. Traces the historical development of jazz music from pre-Civil war through current styles and trends. Emphasis is placed on developing intelligent and perceptive listening skills. Detailed analysis of successfully recorded examples of jazz and improvisation.  
Recommended: Eligible for ENGC 1101 and READ 1106. MnTC Goals: 6, 7.

**MUSC 1124 Rock & Roll History 3 cr**  
Rock & Roll History is a survey course that introduces the student to scholarly examination of the musical development of Rock and Roll by examining and identifying innovators, innovations, and fundamental musical characteristics from African roots through the post-twentieth century.  
Recommended: Eligible for ENGC 1101 and READ 0960. MnTC Goals: 6, 7.

**MUSC 1127 Class Piano: Non-Majors 2 cr**  
A beginning course for non-music majors with little or no keyboard background. Emphasis on basic functional skills, such as note reading, beginning chord knowledge, playing by ear and improvising, along with basic technique, elementary repertoire, and fundamental music theory. This course is not intended for students pursuing a degree in music.

**MUSC 1131 Music Theory 1 3 cr**  
These courses (MUSC 1131 and 1132) provide a study of the materials and structure of music including notation, intervals, scales, four voice chorale style, melodic form and structure, diatonic and secondary harmony, binary and ternary forms. These courses are open to students who desire a rigorous music course.  
Recommended: Eligible for ENGC 1101 and READ 1106. MnTC Goals: 6.

**MUSC 1132 Music Theory 2 3 cr**  
These courses (MUSC 1131 and 1132) provide a study of the materials and structure of music including notation, intervals, scales, four voice chorale style, melodic form and structure, diatonic and secondary harmony, binary and ternary forms. These courses are open to students who desire a rigorous music course.  
Prerequisite: MUSC 1131.  
MnTC Goals: 6.

**MUSC 1141 Vocal Ensemble 1 cr**  
Vocal ensemble performs repertoire ranging from early music to vocal jazz. May be repeated for a maximum of 4 credits.  
Prerequisite: instructor's permission.

[Type here]

**MUSC 1142 Guitar Ensemble 1 cr**  
Guitar duets, trios, and quartets perform music from all periods. Repertoire includes arrangements of vocal and string chamber ensembles, as well as music composed originally for the guitar ensemble. May be repeated for a maximum of 4 credits.  
Prerequisite: instructor's permission.

**MUSC 1143 Piano Ensemble 1 cr**  
Performance of four-hand piano repertoire of various style periods for one or two pianos. May be repeated for a maximum of 4 credits.  
Prerequisite: instructor's permission.

**MUSC 1144 Instrumental Ensemble 1 cr**  
Performance of chamber music: duos (sonatas), trios, quartets, quintets, and other ensemble combinations of wind, percussion, and string instruments. May be repeated for a maximum of 4 credits.  
Prerequisite: instructor's permission.

**MUSC 1145 Jazz Ensemble 1 cr**  
Instrumental jazz band; rehearses and performs a variety of jazz styles and idioms including: swing, funk, fusion, rock, hip-hop, and other current styles and trends. A historical emphasis on jazz music of the 20th and 21st centuries. An integral focus on improvisational skills and developing mature playing skills in all styles. Recommended prior experience reading music. Maximum of 4 credits.

**MUSC 1146 Jazz Combo 1 cr**  
Performance of jazz combo music: trios, quartets, and other ensemble combinations of wind and rhythm section instruments. Recommended previous performance experience. Maximum of 4 credits.

**MUSC 1151 Applied Music 1 2 cr**  
Individual music instruction, all instruments and voice, by arrangement with Applied Music instructors. Students are expected to have had prior individualized instruction. This course may be repeated for a maximum of 4 credits. There is an additional fee for this course.  
Prerequisite: Audition and consent of Applied Music Coordinator.  
Corequisite: MUSC 1152.

**MUSC 1152 Performance Class 0 cr**  
Instrumental or vocal performance, performance etiquette, stage management, written program design and research applications for music students. Student will provide his/her own instrument, with the exception of piano. This course is offered P/NC only.

**MUSC 1156 Guitar 1: Class Lessons 2 cr**  
With your own guitar, learn the basics of guitar technique, which will lead to any style of performance. Meant for the beginner, this class progresses quickly beyond the basics into what you need to know for going into more advanced levels.

**MUSC 1157 Class Piano 1 2 cr**  
Development of keyboard skills in sight reading, harmonization, improvisation, technique, memorization, scales, chord progressions, and transposition. These courses (MUSC 1157 and 1158), are intended for music majors and minors, but are also open to other serious students who desire a rigorous music course.

**MUSC 1158 Class Piano 2 2 cr**  
Development of keyboard skills in sight reading, harmonization, improvisation, technique, memorization, scales, chord progressions and transposition. These courses (MUSC 1157 and 1158) are intended for music majors and minors, but are also open to other serious students who desire a rigorous music course.  
Prerequisite: MUSC 1157.

**MUSC 1159 Piano Proficiency 0 cr**  
Presentation of keyboard skills to a Music Department faculty jury. The exam includes proficiency with major and minor scales, chords, arpeggios, sight reading, open score reading, harmonization, transposition, improvisation, and performance of intermediate piano repertoire from memory. This course is offered P/NC only.

**MUSC 1161 Voice Class 2 cr**  
This course introduces the basic principles of vocal technique: voice production, breathing, tone development, diction and pronunciation. It includes a study of vocal literature from various styles: classic, folk, Broadway. It is open to all students wishing to explore their vocal skills.

**MUSC 1166 Guitar 2: Class Lessons 2 cr**  
Class Lessons is a continuation of the skills developed in Guitar I, MUSC 1156. This course introduces chord progressions in several keys, right hand finger picking patterns, sight reading in higher positions, harmonization, transposition, movable scales, application of music theory to the fingerboard, and introduction to instrument literature. Students provide their own acoustic guitar (preferably a nylon string guitar).  
Recommended: MUSC 1156.

**MUSC 1170 Jazz Improvisation 1 2 cr**  
This course provides students with the skills necessary to create music with self-expression in jazz styles. The course includes a practical application of scales, arpeggios, and melodic lines to the student's instrument. Transcribing solos from recordings by famous jazz artists and independent study with tutorial computer programs are required. Listening and performing in class are major components of the course.  
Prerequisite: Instructor permission required. The student will need the ability to perform all major scales and arpeggios on their instrument. Percussionists will perform primarily on mallet instruments. Students must have an understanding of music notation and previous experience playing an instrument.

**MUSC 1175 Introduction to Finale: Music Notation Software 1 cr**  
This course gives students a basic working knowledge of the notational music software 'Finale'. Materials are presented in a small lab setting. Participants will have access to a computer workstation for hands-on learning and assignment preparation.  
Prerequisite: Ability to read music.

**MUSC 1176 Intro to Music Tech 1 2 cr**  
This course is intended for students interested in learning about music software applications. Topics include music notation, introduction to sequencing, tools for enhancement of practice of music skills, introduction to recording and audio editing, and other MIDI applications.  
Recommended: Must be able to read printed music or have completed MUSC 1100, MUSC 1120, MUSC 1131, MUSC 1151.

**MUSC 1181 Ear Training 1 2 cr**  
This course provides training in reading at sight and in aural recognition of sound patterns through interval and rhythm reading, keyboard, dictation, and sight singing. The course is intended for music majors and minors, but also is open to other serious students who desire a rigorous music course.

**MUSC 1182 Ear Training 2 2 cr**  
This course provides training in reading at sight and in aural recognition of sound patterns through interval and rhythm reading, keyboard, dictation, and sight singing. The course is intended for music majors and minors but also is open to other serious students who desire a rigorous music course.  
Prerequisite: MUSC 1181.

**MUSC 1190 Diction for Singers 1 2 cr**  
Diction for Singers I is a study of the phonetic sounds of the English and Italian languages to promote the ability to sing in those languages. This course covers the use of the International Phonetic Alphabet (IPA) in English and Italian, differences in pronunciation in spoken and sung English, and the pronunciation of sung Italian. This course is intended for students studying vocal performance, choral conducting and collaborative pianists. A permit to register is required from the instructor.

**MUSC 1191 Diction for Singers 2 2 cr**  
Diction for Singers II is a study of the phonetic sounds of the German and French languages to promote the ability to sing in those languages. This course covers the use of the International Phonetic Alphabet (IPA) in German and French, and the pronunciation of sung German and French. This course is intended for students studying voice, choral conducting and collaborative pianists. A permit to register is required from the instructor.  
Prerequisite: MUSC 1190.

**MUSC 1900 Topics in Music 1-4 cr**  
Examination of a special topic in music such as theatre orchestra and musical theatre singing. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.  
Prerequisite: Topic-dependent.

**MUSC 2231 Music Theory 3 3 cr**  
These courses (MUSC 2231 and MUSC 2232) continue the study of Music Theory 1 and 2. They include the study of augmented sixth, Neapolitan sixth, ninth, eleventh and thirteenth chords, two voice counterpoint, fugue, sonata allegro, rondo and variation forms, 19th and 20th century tonal and non-tonal formal styles.  
Prerequisite: MUSC 1132 or instructor's permission.  
MnTC Goals: 6.

**MUSC 2232 Music Theory 4 3 cr**  
These courses (MUSC 2231 and 2232) continue the study of Music Theory 1 and 2. They include the study of augmented sixth, Neapolitan sixth, ninth, eleventh and thirteenth chords, two voice counterpoint, fugue, sonata allegro, rondo and variation forms, 19th and 20th century tonal and non-tonal formal styles.  
Prerequisite: MUSC 2231.  
MnTC Goals: 6.

**MUSC 2245 Music History 1 3 cr**  
History of Western music: a study of the composers, styles, and social contexts of Medieval, Renaissance and Baroque music from 800 to 1750.  
MnTC Goals: 6, 8.

**MUSC 2246 Music History 2 3 cr**  
History of Western music: a study of the composers, styles, and social contexts of Classic and Romantic music from 1750 to the present.  
MnTC Goals: 6, 8.

**MUSC 2251 Applied Music 2 2 cr**  
Individual music instruction directed toward preparation of the thirty-minute Sophomore Recital or transfer audition. This course is intended for Associate of Fine Arts in Music candidates, but is open to all students who complete a successful audition and have completed 4 credits of MUSC 1151: Applied Music 1. This course may be repeated for a maximum of 4 credits. There is an additional fee for this course.  
Prerequisite: Two semesters of MUSC 1151 and successful audition.

**MUSC 2252 Sophomore Recital 0 cr**  
One half-hour recital at sophomore repertoire level. Application of performance skills, performance etiquette, and written program notes. Private instructor may request a pre-recital hearing.  
Prerequisite: 8 credits of MUSC 1151 4 semesters of MUSC 1152 and audition and consent of Applied Music Coordinator.

**MUSC 2270 Jazz Improvisation 2 2 cr**  
This course is the second in a two-part sequence. Jazz Improvisation II provides students with the skills necessary to create music with self-expression in advanced jazz styles. The course includes continued practical application of scales, arpeggios, and melodic lines to the student's instrument. Transcribing and analyzing solos from recordings by famous jazz artists and independent study with tutorial computer programs are required. Listening and performing in class are major components of the course.  
Prerequisite: MUSC 1170.

**MUSC 2276 Intro to Music Tech 2 2 cr**  
This course builds upon the foundation of MUSC 1176 and is intended for students interested in further, more advanced study of music software applications. Topics include music notation, exploration of sequencing, tools for enhancement of practice of music skills, exploration of recording and audio editing, and other MIDI applications.  
Recommended: MUSC 1176 or instructor's permission.

**MUSC 2281 Ear Training 3 2 cr**  
These courses (MUSC 2281 and 2282) continue MUSC 1182 with further study of interval and rhythm reading, sight singing, keyboard, and dictation with emphasis on 19th and 20th century materials.  
Prerequisite: MUSC 1182.

**MUSC 2282 Ear Training 4 2 cr**  
These courses (MUSC 2281 and 2282) continue MUSC 1182 with further study of interval and rhythm reading, sight singing, keyboard, and dictation with emphasis on nineteenth and twentieth century materials.  
Prerequisite: MUSC 2281.

**MUSC 2900 Topics in Music 1-4 cr**  
Examination of a special topic in music. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.  
Prerequisite: Topic-dependent.

## NCC-NCC All-College

**NCC 1000 Paths to College Success 1 cr**  
This course focuses on skills and strategies needed for a successful start in college. It is designed for all new students who place into READ 0860, READ 0960, ENGC 0800, or ENGC 0900.  
Prerequisite: Eligible for READ 0860 or higher, and eligible for ENGC 0800 or higher, or consent of instructor.

## NURS-Nursing

### **NURS 1000 Role of the Professional Nurse 2 cr**

This course introduces the student to the role of the professional nurse within a culturally competent, equitable, inclusive framework. Professional nursing includes learning about professional identity inclusive of self-care, fundamental concepts of nursing practice, regulatory frameworks, determinants of health, as well as holistic person-centered care practices across the lifespan. Students will learn principles of communication, evidence-based practice, and clinical judgment that guides quality, safe care within the context of the holistic nursing process. Dosage calculation will be introduced.

Prerequisite: Acceptance into the nursing program

### **NURS 1020 Transition to the Role of the Professional Nurse 2 cr**

This course is designed to expand the knowledge and skills of the LPN as they transition to the professional role within nursing. Emphasis is placed on health promotion through the lifespan and incorporates theories related to evidence-based practice, quality and safety, communication, collaboration, clinical decision-making/reasoning, informatics, assessment, caring, and health-illness continuum.

Prerequisite: Unencumbered practical nursing licensure, admittance to the nursing program with advanced standing as an LPN

### **NURS 1050 Foundations of Health Assessment 2 cr**

This course introduces the student to the components of the comprehensive nursing health assessment across the lifespan. Students will begin to develop therapeutic communication and basic assessment skills. Students will be introduced to the concept of informatics, how to integrate nursing, computer, and information sciences to manage data.

Prerequisite: Acceptance into the nursing program

### **NURS 1057 Nursing Assistant Certificate 4 cr**

The Nursing Assistant Certificate course prepares the student to provide physical nursing care to individuals in long-term care facilities, hospitals, or board and care homes. Students learn how to measure vital signs and assist individuals with physical needs such as personal hygiene, elimination, mobility, exercise, and nutrition. This course also includes information on emotional, spiritual, and psychosocial needs, and basic training in behavior management for persons with dementia. Students participate on campus in lecture and by practicing in the lab. Students apply what they have learned in class to residents in a long-term care facility during 24 hours of clinical participation at the end of the course. Attendance is MANDATORY, per Department of Health regulations. Students successfully completing this course are ready to take the Pearson VUE Nursing Assistant Competency Test. After passing this test students can be placed on the Minnesota Department of Health Nursing Assistant Registry. Weekly average of 2 hours lecture/3 hours lab/3 hours clinical.

### **NURS 1060 Nursing Assistant/Home Health Aide 4 cr**

The Nursing Assistant/Home Health Aide Certificate course prepares the student to provide physical nursing care to individuals in long term care facilities, hospitals, board and care homes, and in the client's own home. Students learn how to measure vital signs, assist individuals with physical needs such as personal hygiene, elimination, mobility, exercise and nutrition. This course also includes information on emotional, spiritual and psychosocial needs, and basic training in behavior management for persons with dementia. Attendance is mandatory, per Minnesota Department of Health regulations. Students successfully completing this course are eligible to take the Pearson VUE Nursing Assistant/Home Health Aide Competency Test. After passing this test students can be placed on the Minnesota Department of Health Nursing Assistant/Home Health Aide Registry. Lecture 2 hours/Lab 4 hours. Clinical 24 hours at the end of the course.

### **NURS 1070 Foundations of Health Assessment Clinical 1 1 cr**

This course introduces the student to experiential learning in the role of the nurse that enables the student to apply the components of therapeutic communication and basic assessment skills across the lifespan. Students will also learn to use technology appropriately within various information and computer applications designed for documentation of data.

Prerequisite: Acceptance into the nursing program

### **NURS 1100 Health Promotion 2 cr**

This course focuses on holistic health promotion across the lifespan. Emphasis is placed on holistic health care practices, education of self-care management including practicing self-care. This course will assist the student to develop their role as an ethical member of the multi-disciplinary healthcare team. The student will incorporate physiological and psychosocial concepts within the framework of the nursing process and clinical judgment. Students will access research evidence to guide safe preventative care. Populations studied will include adults and older adults.

Prerequisite: NURS 1000, NURS 1050, NURS 1070, or NURS 1020

### **NURS 1120 Health Promotion Clinical 2 3 cr**

This course focuses on experiential learning that enables the student to apply holistic health care practices including education of self-care management. The student will incorporate communication techniques giving and receiving feedback about performance and use reflective thinking about their practice. The student will apply physiological and psychosocial concepts within the framework of the nursing process assisting in the development of clinical judgment. Students will apply research evidence to guide safe preventative care. Populations studied will include adults and older adults. Prerequisite: NURS 1000, NURS 1050, NURS 1070, or NURS 1020.

**NURS 1150 Parent Child Nursing 2 cr**  
This course focuses on concepts related to the nursing care of the childbearing family and the childrearing family from infancy to adolescence. Emphasis is placed on understanding and application of maternal child health knowledge and pediatric growth and development theory through an integrative, holistic, safe, equitable lens of care. Prerequisite: NURS 1000, NURS 1050, NURS 1070, or NURS 1020.

**NURS 1160 Parent Child Nursing Clinical 3 1 cr**  
This course introduces the student to experiential learning that enables the student to develop their role as a member of the nursing profession in providing childbearing/childrearing family care. Emphasis is placed on application of knowledge and skills, clinical judgment, integrative holistic care, safety and quality of care, teaching and learning, and determinants of health affecting health equity.  
Prerequisite: NURS 1000, NURS 1050, NURS 1070, or NURS 1020.

**NURS 1900 Topics in Nursing 3 cr**  
Examination of a special topic in nursing; intended for nursing students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.  
Prerequisite: Topic-dependent.

**NURS 2000 Chronic and Palliative Care 4 cr**  
This course focuses on the nursing care of clients experiencing chronic illness and/or end of life. Ethical issues related to advocacy, self-determination, and autonomy are explored. Evidence-based practice is used to understand appropriately focused assessments and management of care of clients experiencing concurrent illnesses/comorbidities..  
Prerequisite: NURS 1100, NURS 1120, NURS 1150, NURS 1160

**NURS 2010 Chronic and Palliative Care Clinical 4 4 cr**  
This course focuses on the nursing care of clients experiencing chronic illness and/or end of life. Emphasis is placed on understanding the “lived experience” of clients and families. Ethical issues related to advocacy, self-determination, and autonomy are explored. Evidence-based practice is used to support appropriately focused assessments and management of care of clients experiencing concurrent illnesses/co-morbidities.  
Prerequisite: NURS 1100, NURS 1120, NURS 1150, NURS 1160

**NURS 2050 Pharmacology and the Role of the Professional Nurse 2 cr**  
This course introduces theoretical concepts that enable students to provide safe and effective care related to pharmaceuticals and natural products to diverse clients across the lifespan. A framework is presented for approaching the study of pharmacotherapeutics including pharmaceutical research and regulation, quality and safety, major drug classifications, and clinical management.  
Prerequisite: NURS 1100, NURS 1120, NURS 1150, NURS 1160

**NURS 2100 Acute and Complex Care 4 cr**  
This course focuses on the nursing care of clients experiencing acute disruptions of health. Emphasis is placed on understanding theory and skills required to provide nursing care to clients with complex and/or unstable conditions. Evidence-based practice is used to recognize and analyze cues, and effective, efficient care actions. Knowledge of life span, developmental factors, cultural variables and legal aspects of care guide the ethical decision making in delivery of care.  
Prerequisite: NURS 2000, NURS 2010, NURS 2050

**NURS 2110 Acute and Complex Care Clinical 5 4 cr**  
This course focuses on the nursing care of clients experiencing acute disruptions of health and/or end of life issues. Emphasis is placed on application of theory and skills required to provide nursing care to clients with complex and/or unstable conditions. Evidence-based practice is used to support appropriate focused assessments, and effective, efficient nursing interventions. Knowledge of lifespan, developmental factors, cultural variables and legal aspects of care guide the ethical decision making in delivery of care.  
Prerequisite: NURS 2000, NURS 2010, NURS 2050

**NURS 2200 Synthesis Theory and Experiential 6 3 cr**  
This synthesis course focuses on prioritization, delegation, and supervision of nursing care of clients across the lifespan. Emphasis is on planning, collaborating and coordinating care for individuals and groups across the care continuum. This synthesis course also focuses on the nursing care of communities and populations. Emphasis is placed on identifying skills and planning actionable holistic nursing interventions for the community, inclusive of lifespan, cultural variables, health equity, and determinants of health.  
Prerequisite: NURS 2000, NURS 2010, NURS 2050

**NURS 2700 Health Promotion and the Role of the Professional Nurse 9 cr**  
This course introduces the student to the role of the professional nurse. The emphasis on health promotion across the lifespan includes learning about self-health, as well as holistic client health practices. Students learn to access and apply research evidence to guide safe preventative care. The student will incorporate communication and growth and development theory in a caring and culturally sensitive manner. The student will work as an ethical member of multi-disciplinary teams giving and receiving feedback about performance and use reflective thinking about their practice. Within the context of the nursing process, populations studied will include children, adults, older adults and the family experiencing a normal pregnancy.  
Prerequisite: Acceptance into Nursing Program.

**NURS 2720 Transition to the Role of the Professional Nurse 4 cr**

This course is designed to expand the knowledge and skills of the LPN as they transition to the professional role within nursing. Emphasis is placed on health promotion through the lifespan and incorporates theories related to evidence-based practice, quality and safety, communication, collaboration, clinical decision-making/reasoning, informatics, assessment, caring, and health-illness continuum.

Prerequisite: Acceptance into Nursing Program. Offered: Fall, Spring.

**NURS 2750 Nutrition and the Role of the Professional Nurse 2 cr**

This course introduces the student to the role of the nurse in promoting and supporting nutritional health. Emphasis is on the role nutrition plays in health promotion/prevention of illness, recovery from acute illness and/or management of chronic illness. Students learn to access evidence to support healthy nutritional choices that reduce risk factors for disease and/or illness across the lifespan. Students explore how culture, ethnicity, socio-economic status, nutritional trends and controversies, and integrative therapies influence the nutritional health of the client. Prerequisite: Acceptance into Nursing Program.

**NURS 2800 Chronic and Palliative Care 7 cr**

This course focuses on the nursing care of clients experiencing chronic illness and/or end of life. Emphasis is placed on understanding the "lived experience" of clients and families. Ethical issues related to advocacy, self-determination, and autonomy are explored. Evidence-based practice is used to support appropriate focused assessments and management of care of clients experiencing concurrent illnesses/co-morbidities. Prerequisite: NURS 2700 or NURS 2720 (C or higher) and NURS 2750 (C or higher).

**NURS 2820 Pharmacology and the Role of the Professional Nurse 3 cr**

This course introduces theoretical concepts that enable students to provide safe and effective care related to pharmaceuticals and natural products to diverse clients across the lifespan. A framework is presented for approaching the study of pharmacotherapeutics including pharmaceutical research and regulation, quality and safety, major drug classifications, and clinical management.

Prerequisite: NURS 2700 or NURS 2720 (C or higher) and NURS 2750 (C or higher).

**NURS 2850 Applied Pathophysiology for Nursing I 2 cr**

This course introduces a holistic perspective of pathophysiological processes and the disruption in normal body function. Emphasis will be on objective and subjective manifestations of common chronic health problems resulting from environmental, genetic, and stress-related maladaptations to provide a foundation for nursing care. This course complements selected topics addressed in Chronicity and End of Life to provide a comprehensive understanding of disease processes.

Prerequisite: NURS 2700 or NURS 2720 (C or higher) and NURS 2750 (C or higher).

**NURS 2910 Acute and Complex Care 7 cr**

This course focuses on the nursing care of clients experiencing acute disruptions of health and/or end of life issues. Emphasis is placed on understanding and application of theory and skills required to provide nursing care to clients with complex and/or unstable conditions. Evidence-based practice is used to support appropriate focused assessments and effective, efficient nursing interventions. Knowledge of life span, developmental factors, cultural variables and legal aspects of care guide the ethical decision making in delivery of care.

Prerequisite: NURS 2800, NURS 2820 and NURS 2850 (C or higher).

**NURS 2920 Applied Pathophysiology for Nursing 2 2 cr**

This course will facilitate ongoing critical thinking and analysis of pathophysiological concepts. Emphasis will be on interpretation and prioritization of data resulting from environmental, genetic, and stress-related maladaptations. This course complements the selected topics addressed in Acute and Complex Care to provide a comprehensive understanding of disease processes.

Prerequisite: NURS 2800 and NURS 2850 (C or higher).

**NURS 2950 Nursing Leadership 1 3 cr**

This course focuses on prioritization, delegation, and supervision of nursing care of clients across the lifespan. Health care policy, finance, and regulatory environment issues are analyzed. Emphasis is on planning, collaborating and coordinating care for individuals and groups across the care continuum.

Prerequisite: NURS 2800, NURS 2820 and NURS 2850 (C or higher).

## PHIL-Philosophy

### **PHIL 1101 Introduction to Philosophy 3 cr**

An introduction to the study of philosophy, with emphasis on developing skills in philosophical modes of inquiry and analysis. Major content areas include epistemology, metaphysics, and value theory, and may also include topics in political philosophy, philosophy of science, philosophy of mind, philosophy of law, philosophy of religion, and philosophy of language. Readings will include both historical and contemporary texts.

Recommended: Eligible for READ 1106.

MnTC Goals: 6.

### **PHIL 1102 Logic 3 cr**

This course is the study of the deductive analysis of arguments using the tools of contemporary symbolic logic. The course includes the examination of basic logical concepts (logical form, validity, logical truth, consistency), symbolization of arguments expressed in natural language, truth tables, formal proofs or truth trees, and elementary quantification theory.

Prerequisite: Eligible for READ 1106.

MnTC Goals: 4.

### **PHIL 1103 Ethics 3 cr**

This course is an introduction to the philosophical study of morality. It will examine several important ethical theories concerning virtue and vice, the nature of right action, standards of value, and conceptions of the good life. Contemporary moral issues will be critically examined in light of these theories; topics may include marriage equality, animal rights, torture, euthanasia, freedom of speech, punishment and the death penalty, globalization and justice, and other issues. The course may also include topics in metaethics, such as ethical relativism. This course will help students to think analytically about the moral judgments we are tempted to make, with the goal of developing well-reasoned positions on important moral issues of personal and/or social concern.

Recommended: Eligible for READ 1106.

MnTC Goals: 6, 9.

### **PHIL 1105 Philosophy of Religion 3 cr**

Content will include both classic and contemporary philosophy of religion material including but not limited to: Proofs for the existence of divine beings or God; analysis of the types of proof including mystical experiences, faith, or rational acceptance for religious and spiritual belief; Eastern philosophy from the scriptures of Daoism, Confucianism, Buddhism, and Hinduism; Indigenous religious and mythic traditional understanding of human nature, society and cosmic structure. Course will also evaluate alternatives to religious or spiritual beliefs including criticisms of them from perspectives of secular humanism, atheism, agnosticism and contemporary issues associated with our beliefs in modern life.

MnTC Goals: 6, 8.

### **PHIL 1140 Environmental Ethics 3 cr**

Do animals have rights? Do we have moral obligations to preserve endangered species? What is sustainable development and do we have an ethical obligation to promote it? Do people, including future generations, have a right to environmental protection? What is environmental racism? Do we have a duty to preserve biodiversity? Does nature have value, and if so, what kind of value? These are just a few of the questions addressed in environmental ethics. Environmental ethics is the study of the moral relationship between humans and the rest of nature. In this course, we will examine various efforts to understand the nature and extent of our duties to the nonhuman world. After a general introduction to a few major ethical theories and concepts in moral philosophy, we will investigate a variety of environmental issues through the lens of these theories and concepts. At the same time, we will critically reflect on the shortcomings of traditional moral theories and investigate new concepts, theories, and perspectives as ways of understanding the moral relationship between humans and nature.

Recommended: Eligible for READ:

MnTC Goals: 9, 10.

### **PHIL 1150 Introduction to World Religions 3 cr**

A comparative course which examines the fundamental beliefs, practices, and traditions of world religious traditions. The origins, major figures, sacred scriptures and creeds will be reviewed and compared. Topics may include justification for beliefs, cosmology, practices of the faithful, and the role of women, artistic expression, and contemporary issues. Major religious traditions including Hinduism, Buddhism, Daoism, Confucianism, Judaism, Christianity, and Islam will be studied. Additionally, alternative spirituality, paganism, Egyptian religions, Native American traditions, atheism, secularism and other religious movements may be covered.

Prerequisite: Eligible for READ 1106.

MnTC Goals: 6, 8.

### **PHIL 1160 Philosophy of Art 3 cr**

The study of the nature of art, the character of our experience of works of art, and standards for the interpretation and evaluation of works of art. May include examination of the nature of beauty, culturally bounded conceptions of art, the nature of artistic expressiveness and imagination, and the possibility that there are objective criteria for the evaluation of works of art. Readings will be primarily contemporary.

Prerequisite: Eligible for ENG 1101 and READ 1106. MnTC

Goals: 6.

**PHIL 1170 Business Ethics 3 cr**  
Should companies that employ sweatshop labor be boycotted? Who should take responsibility for the financial crisis of 2008? Is bribery morally acceptable if everyone is doing it? Is corporate downsizing morally wrong? Do corporations have any social responsibilities other than maximizing profits? Is capitalism an unjust economic system? These are just a few of the questions addressed in business ethics. In this course, we will examine various efforts to understand the ethical dimensions of capitalism and the conduct of business in society. After an introduction to several major ethical theories and concepts in moral philosophy, we will investigate a variety of ethical issues that arise in the conduct of business.  
Recommended: Eligible for READ 0960.  
MnTC Goals: 6, 9.

**PHIL 1180 Biomedical Ethics 3 cr**  
Should physician-assisted suicide be legalized? Is there a right to health care? Should genetic technologies be used for enhancing human capabilities? What ethical ideals ought to govern the patient-provider relationship? These are just a few of the questions addressed in biomedical ethics. Biomedical ethics is the study of the ethical issues that arise in the practice of medicine and health care. In this course, we will begin by examining several major ethical theories, including critiques of these theories that have led to alternative approaches to ethical decision-making. We will then investigate a range of specific ethical issues through the lens of these theories and approaches.  
MnTC Goals: 6, 9.

**PHIL 1190 Ethics for the Digital Age 3 cr**  
Big data and information technology impact all areas of life. Rapid advances in technologies such as AI and machine learning, as well as the evermore sophisticated advances in the collection, analysis, and use of data, have created opportunities for individual and social good. But ethical frameworks for assessing the impacts of these advances lag behind. Does the use of predictive analytics in health care, employment, and policing reinforce or reduce bias and discrimination? Is privacy dead – and should we care? Are algorithms morally neutral? Should big tech be regulated? Does Facebook cause more harm than good? These are some of the questions we will address as we explore the ethical implications of data and information technology. Through understanding theories and concepts in moral philosophy, we will learn how to reason about and critically assess ethical issues in data and information technology.  
MnTC Goals: 6, 9.

**PHIL 1900 Topics in Philosophy 1-4 cr**  
Examination of a special topic in philosophy; intended for all students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.  
Prerequisite: Topic-dependent.

**PHIL 2900 Topics in Philosophy 1-4 cr**  
Examination of a special topic in philosophy; intended for second-year students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.  
Prerequisite: Topic-dependent.

## PHYS-Physics

**PHYS 1001 Energy, Climate & Physics in Society 3 cr**  
This course covers topics in physics with an emphasis on conceptual understanding of physics principles and the technology applications related to current issues, including the sources and uses of energy, climate change, and the ethical dimensions of technological choices. This course will give students the solid foundation in physics they need to be critically thinking, scientifically literate citizens able to distinguish scientifically sound, evidence-based technological decisions from those that are not. Topics may include energy production and conservation, radioactivity and nuclear weapons, transportation options, various consequences of climate change, and invisible light. The personal, political, and ethical dimensions of technological choices will be a significant emphasis in this course. Lecture 3 hours; lab 0 hours.  
MnTC Goals: 3, 9.

**PHYS 1002 Energy, Climate & Physics in Society Laboratory 1 cr**  
This is an optional laboratory course for students who are concurrently enrolled in PHYS 1001 or who have previously completed PHYS 1001 (C or higher). The combination of PHYS 1001 and PHYS 1002 satisfies the MnTC Goal 3 laboratory science requirement.  
Prerequisite: PHYS 1001 (C or higher) or concurrent enrollment.  
MnTC Goals: 3.

**PHYS 1104 Survey of Astronomy 3 cr**  
A one-semester survey course focusing on scales and structures of the universe, observable motions of the sun, moon, and stars, patterns within the solar system, life cycles of stars, evolution of the universe. Additional topics may include telescopes and light, planetary science, extrasolar planet discovery, and space exploration. This course is not a prequel to PHYS 1114.  
MnTC Goals: 3.

**PHYS 1110 College Physics 1 4 cr**  
This is the first semester of a two-semester sequence of non-calculus, introductory physics. This course uses College Algebra. Topics include kinematics, dynamics, gravitation, momentum, energy, heat, and fluids. Lecture 3 hours; lab 2 hours.  
Prerequisite: MATH 1100 (C or higher).  
MnTC Goals: 3.

**PHYS 1111 College Physics 2 4 cr**

This course is a continuation of PHYS 1110. This course uses College Algebra. Topics include oscillations and waves, electricity, magnetism, electromagnetic waves, and optics. Lecture 3 hours; lab 2 hours.

Prerequisite: PHYS 1110 (C or higher) and MATH 1100 (C or higher).

MnTC Goals: 3.

**PHYS 1114 Introductory Astronomy 4 cr**

A one-semester introductory course in astronomy covering the tools and methods of astronomy and the physics of the solar system, stars, galaxies, and the universe. This course requires a background in intermediate algebra. Laboratory includes tools and methods of astronomy; data collection and analysis; and observations (when feasible). Lecture 3 hours; lab 2 hours. This course is not a sequel to PHYS 1104.

Prerequisite: Eligible for MATH 1100.

MnTC Goals: 3.

**PHYS 1121 Physics 1 for Scientists and Engineers 5 cr**

This is the first semester of a two-semester sequence of calculus-based introductory physics. This course uses calculus. Topics include kinematics, dynamics, rotational motion, gravitation, conservation laws of momentum and energy, thermal physics, and periodic motion. Optional topics include fluids and thermodynamics. This course meets requirements for students majoring in engineering, mathematics, computer science, or the sciences. Lecture 4 hours; lab 2 hours.

Prerequisite: MATH 1510 (C or higher), MATH 1520 (C or higher) or concurrent registration, and eligible for READ 1106.

MnTC Goals: 3.

**PHYS 1122 Physics 2 for Scientists and Engineers 5 cr**

This course is a continuation of PHYS 1121. This course uses calculus. Topics include wave phenomena, electricity, magnetism, an introduction to Maxwell's equations, electromagnetic waves, and optics. This course meets requirements for students majoring in engineering, mathematics, computer science, or the sciences. Lecture 4 hours; lab 2 hours.

Prerequisite: PHYS 1121 (C or higher) and MATH 1520 (C or higher). Recommended: MATH 2510 or concurrent registration (preferred) or MATH 2520 (C or higher) or concurrent registration.

MnTC Goals: 3.

**PHYS 1201 Physics 1 with Biomedical Applications 4 cr**

This is the first semester of a two-semester sequence in introductory physics. This course uses the basic concepts of calculus such as the derivative and simple integration. The course covers topics from kinematics, dynamics, torque, energy, fluids, and thermal physics. This course relates fundamental concepts of physics to biomedical applications; it meets requirements for students majoring in the biological sciences and is appropriate for students who plan to enter the health professions. Lecture 3 hours; lab 2 hours.

Prerequisite: MATH 1400 (C or higher) or MATH 1510 (C or higher).

MnTC Goals: 3.

**PHYS 1202 Physics 2 with Biomedical Applications 4 cr**

This course is continuation of PHYS 1201. This course uses the basic concepts of calculus such as the derivative and simple integration. The course covers topics from waves, electricity, simple DC circuits, magnetism, atomic structure and spectra, and the physics of medical imaging. This course relates fundamental concepts of physics to biomedical applications; it meets requirements for students majoring in the biological sciences and is appropriate for students who plan to enter the health professions. Lecture 3 hours; lab 2 hours.

Prerequisite: PHYS 1201 (C or higher), and MATH 1400 (C or higher) or MATH 1510 (C or higher).

MnTC Goals: 3.

**PHYS 1900 Topics in Physics 1-4 cr**

An examination of a special topic in physics; intended for all interested students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

**PHYS 2250 Modern Physics 4 cr**

A one-semester introduction to the topics of modern physics including the special theory of relativity, solid state physics, and quantum theory. This course requires a background in calculus-based physics and differential equations. This course is generally required for electrical engineering, physics, and astronomy majors. Lecture 3 hours; lab 0 hours.

Prerequisite: PHYS 1121, PHYS 1122 and MATH 2510

Recommended: MATH 2520.

MnTC Goals: 3.

**PHYS 2900 Topics in Physics 1-4 cr**

An examination of a special topic in physics; intended for all interested students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

## POLS-Political Science

**POLS 1130 Introduction to U.S. Politics 3 cr**

Considers fundamentals of U.S. politics including constitutional principles, organization of government, basic freedoms, civil liberties, civil rights, political cultures, parties and interest groups, campaigns and elections, and national controversies.

MnTC Goals: 5, 9.

**POLS 1132 Introduction to Comparative Politics 3 cr**

Compares political and economic systems, political and economic conditions, and political and economic policies of diverse countries and regions around the world. Comparisons and contrasts will consider governments, cultures, patterns of political and economic development, as well as political values, processes, and institutions. Includes comparisons, where apt, with United States. Analyses will include statistical, historical, and forecast data, as well as theoretical perspectives.

MnTC Goals: 5, 8.

**POLS 1133 Middle East Politics 3 cr**

Explores the historical background and current dynamics of Middle Eastern politics, including the causes and consequences of political, economic, social, cultural, military, ethnic, nationalist, and religious conditions. Central concerns include post-colonial experiences, political and economic development, political change and stability, democracy and autocracy, corruption, regional conflicts, foreign policies, and current and enduring challenges.

MnTC Goals: 5, 8.

**POLS 1135 Introduction to Political Ideas 3 cr**

Explores political ideas, ideologies, and movements by considering popular culture (including novels, movies, music, and articles), "classics", and primary sources. Topics may include enduring and current controversies concerning justice, power, violence, authority, freedom, government, the state, democracy, capitalism, economic prosperity, security, equality, inequality, corruption, terror, nationalism, and "the good life" in a political community.

MnTC Goals: 5, 9.

**POLS 1150 Introduction to World Politics and Globalization 3 cr**

Develops a global perspective by exploring diverse global issues such as security, human rights, environment, economic development, foreign policies, character of globalization, interactions of nation-states and other actors, origins and effects of global capitalism, and changing effects on global affairs of technological innovations, international organizations, multinational corporations, social movements and groups, and ideologies. Course provides tools for interpreting and evaluating global politics, and it furnishes background to pursue additional courses in World Politics.

MnTC Goals: 5, 8.

**POLS 1152 Model United Nations 3 cr**

Introduces students to the workings of the world's most important international organization - the United Nations (UN) - and to the practice of negotiation and diplomacy. Course emphasizes understanding current global issues and offers direct experience in the practice of politics. Course also improves students' ability in the "civic arts" of negotiation, advocacy, public presentations, and policy analysis. All students in the class will prepare for and participate in the Arrowhead Model United Nations conference held each April.

[Type here]

MnTC Goals: 5, 9.

**POLS 1195 Conflict and Negotiation 3 cr**

Politics is conflict over values, ideas, and resources. Political Science is, in part, the study of conflict and conflict management. This course introduces students to perspectives on power and conflict and to diverse strategies for resolving conflict in various political, legal, social and cultural settings. This course develops expertise, confidence, and skills for managing, transforming, and engaging conflict constructively, primarily through negotiation and mediation. Students reflect on their own style of conflict management and dispute resolution and on the roles of power, conflict, and negotiation at the individual, group, organizational, state, and system levels. The course is extremely hands-on and interactive. Extensive, frequent role plays and simulations demonstrate course themes and provide opportunities to practice managing conflict, resolving disputes, negotiating, and mediating.

MnTC Goals: 5, 7.

**POLS 1900 Topics in Political Science 1-4 cr**

Examines specific topics in politics and public policy; intended for all students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

**POLS 2096 Internship in Political Science 2-4 cr**

Student will explore careers in political science through partnership with a sponsoring organization, putting into practice skills learned in political science courses. Students must complete 45 hours per credit on the job, additional academic work, and meet with a faculty member. Students may earn 2 to 4 credits. Prerequisite: Previous coursework in Political Science and consent of instructor

**POLS 2250 Constitutional Law 3 cr**

Explores the U.S. Constitution and Bill of Rights as elements of national government and criminal justice. Addresses equal protection, due process, First Amendment, search and seizure, rights of the accused, rights of prisoners, presidential authority, and historic Supreme Court cases. Course includes debates and mock trials.

MnTC Goals: 5, 9.

**POLS 2900 Topics in Political Science 1-4 cr**

Examines specific topics in politics and public policy; intended for second-year students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

## PSYC-Psychology

### **PSYC 1050 Introduction to Human Development 3 cr**

This course is an introduction of the major concepts, developmental theories, modern-day explanatory systems, and research related to human development through the lifespan from the prenatal period to the end of life. An overview of both typical and atypical developmental processes is presented following the biopsychosocial model for each of life's stages. A basic understanding of transitions and adaptations across the lifespan and the associated factors are explored within a healthcare setting.

MnTC Goals: 5

### **PSYC 1100 Psychology in Modern Life 3 cr**

Psychology in Modern Life is designed to translate psychology into applications to everyday life. Examples of life situations addressed include topics such as stress management, health behaviors, behavior in groups, interpersonal relationships and psychological health. The course has an empirical focus, which means that we will apply data collected via the scientific method to matters of living, and develop our critical thinking skills in order to evaluate claims about healthy living made by sources from within and outside the psychological community.

MnTC Goals: 5.

### **PSYC 1108 Psychology of Death and Dying 3 cr**

This course is an introduction to the historical and socio-cultural forces which shape our understanding of death and dying. The changing nature of the dying patient's situation, critical issues in end-of-life care, ceremonies and rites enacted at the time of death, legal considerations, bereavement, grief, and mourning are introduced with a lifespan and cross-cultural perspective.

MnTC Goals: 7, 9.

### **PSYC 1109 Child and Adolescent Development 3 cr**

This course focuses on the physical, cognitive, and psychosocial areas of development from conception through adolescence. Relevant theories, research, methods and issues are addressed. An interactionist approach regarding the influence of both heredity and environment is emphasized.

MnTC Goals: 5.

### **PSYC 1110 Introduction to Psychology 4 cr**

This course is an introduction to the scientific study of behavior and mental processes. It prepares students for pursuing more advanced coursework in Psychology and provides a basic understanding of Psychology for those entering other fields. The course introduces the questions, methods, findings, and limitations of the Psychology discipline.

MnTC Goals: 5.

### **PSYC 1140 Psychology of Gender 3 cr**

This course is an exploration of gender as a central organizing feature of human behavior and an overall picture of gender from a psychological perspective. Students will examine various theoretical models of male and female development from a psychological perspective.

MnTC Goals: 5, 7.

### **PSYC 1220 Psychology of Adulthood and Aging 3 cr**

This course is an exploration of the physical, cognitive, and psychological factors associated with aging. The primary focus of the class is on older adulthood; however, information concerning all years of adult development will be presented within a developmental framework. The course is also concerned with individual differences among older adults, the promotion of optimal functioning through the aging process, and death and dying.

MnTC Goals: 5, 7.

### **PSYC 1900 Topics in Psychology 1-4 cr**

Examination of a special topic in psychology; intended for all students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

### **PSYC 2100 Statistics for the Behavioral Sciences 4 cr**

This course introduces statistical analysis and research designs used in the behavioral sciences. In it, students use statistical software (e.g., SPSS) to conduct descriptive and inferential data analyses. They choose and apply statistical procedures to help answer psychological and behavioral scientific research questions, and gain an introduction to commonly used research methods. In order to see how statistical methods and findings are reported in behavioral science research, students read, interpret, evaluate, and write APA-style Results sections.

Prerequisite: PSYC 1110 and completion of one of the following: MATH 1080, MATH 1090, MATH 1095, MATH 1100 or math placement higher than MATH 1100.

MnTC Goals: 5.

### **PSYC 2200 Abnormal Psychology 3 cr**

This course is a survey of the scientific study of psychological disorders such as obsessive-compulsive disorder, depression, bipolar disorder, and schizophrenia. Topics include how people are diagnosed, possible causes of disorders, and research on the treatment of disorders.

Prerequisite: PSYC 1110.

MnTC Goals: 5, 7.

### **PSYC 2210 Developmental Psychology: Life Span 4 cr**

Developmental Psychology is the exploration of child, adolescent, and adult development beginning with conception and continuing through death. Emphasis is placed on the theoretical, experimental, and applied aspects of development. Physical, cognitive, and psychosocial realms of development will be investigated for each age range. Particular attention is given to the application of research and theory to current issues.

Prerequisite: PSYC 1110.

MnTC Goals: 5, 7.

**PSYC 2300 Psychology of Personality 3 cr**

This course introduces students to the scientific study of human personality with an emphasis on individual differences. Important theories and research studies of personality are discussed. Topics include personality traits; biological, psychological, and social-cultural influences on personality; and links between personality and everyday life.

Prerequisite: PSYC 1110.

MnTC Goals: 5.

**PSYC 2400 Psychology of Religion and Spirituality 3 cr**

This course introduces students to the psychology of religion and spirituality. Topics include how people know what they know about religious and spiritual phenomena; psychosocial characteristics of religious traditions; individual differences in religiousness and spirituality; stereotyping and prejudice perpetrated by, and directed toward, religious and non-religious groups; biological, psychological, and social/cultural influences on personal religiousness; religious and spiritual experiences such as awe; religion, spirituality, and health; religion and violence; mindfulness; forgiveness; compassion; and gratitude.

Prerequisite: PSYC 1110.

MnTC Goals: 5, 7.

**PSYC 2500 Biopsychology 3 cr**

Biopsychology provides an overview of neuroanatomy, basic principles of neural conduction, and basic techniques used in biopsychological investigations. It reviews current knowledge of the biological bases of human behavior and experience: sensation and perception, movement, cognition and language, attention, learning, memory, stress, wakefulness and sleep, psychiatric disorders. The course examines how important questions in psychology can be addressed with biological methods.

Prerequisite: PSYC 1110 or BIOL 1102.

MnTC Goals: 5.

**PSYC 2600 Introduction to Social Psychology 3 cr**

This course is an introduction to social psychology, which is the scientific study of how social contexts influence and shape individual behavior. Topics typically covered include the relation of self and culture, person perception, attitudes and their relation to behavior, attribution theory, persuasion, conformity and obedience, interpersonal attraction, prejudice and discrimination, aggression, group dynamics, and intergroup relations.

Multicultural factors may be explored within the context of several of the above-mentioned topic areas.

Prerequisite: PSYC 1110.

MnTC Goals: 5, 7.

**PSYC 2900 Topics in Psychology 1-4 cr**

Examination of a special topic in psychology; intended for second-year students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

## READ-Reading

**READ 0860 Reading Skills 4 cr**

This course offers preparation for reading college-level material. Topics include independent and self-regulated reading, the reading process, and reading engagement. A-F grading (option to choose P/NC grading).

Prerequisite: EAP 0855 (C/P or higher) or eligible for READ 0860.

**READ 0955 Fast Track Reading 6 cr**

This course combines topics from both the Reading Skills course as well as the Reading/Study Skills for College course in an accelerated, one-semester class that is designed to provide the reading and study skills necessary for success in college. It is designed to develop vocabulary, effective literal, inferential, and introductory critical reading comprehension in fiction and academic content areas with study strategies that are necessary for success in college. This course satisfies both the READ 0860 and READ 0960 requirements. P/NC grading (option to choose A-F grading).

Prerequisite: EAP 0855 (C/P or higher) or eligible for READ 0860.

Recommended: Accuplacer score between 50 and 59 and/or B or higher in EAP 0855.

**READ 0960 Reading/Study Skills for College 4 cr**

This course is designed to develop higher level reading strategies including critical and inferential reading comprehension and textual analysis while also emphasizing college study strategies within the scope of college-level reading materials and texts. A-F grading (option to choose P/NC grading).

Prerequisite: READ 0860 (C/P or higher) or eligible for READ 0960.

**READ 0961 Reading Strategies Review 1 cr**

This course is designed to assist students in reviewing effective reading strategies for college course work. Strategies include effective literal, inferential, and introductory critical reading comprehension. This course is intended for review of strategies in order to improve on the Accuplacer placement test. After successful completion of this course, students may retake the Accuplacer placement test. This course does not take the place of READ 0960 for placement. P/NC grading (option to choose A-F grading).

Prerequisite: Eligible for READ 0960.

**READ 1104 College Study Strategies 3 cr**  
This course is designed to assist students in developing effective study strategies for college coursework. Skills include goal setting, time management, organization, concentration, vocabulary acquisition, memory improvement, listening, note taking, test taking, test anxiety management, textbook processing, and keys to successful online learning.  
Prerequisite: Eligible for READ 1106.

**READ 1106 Critical Reading Skills 3 cr**  
This course is designed to help students learn and develop the critical reading and thinking skills needed in order to comprehend, analyze, and interpret college-level material. Students will be introduced to a variety of genres which may include poetry, fiction, nonfiction, essays, and textbook materials.  
Prerequisite: READ 0960 (C/P or higher) or eligible for READ 1106.

**READ 1110 Study and Thinking Skills in the Academic Disciplines 2 cr**  
This course is designed to help students acquire a repertoire of active study and thinking skills for use in academic disciplines.  
Prerequisite: READ 0860 (C/P or higher) or eligible for READ 0960.

**READ 1230 MTLE Reading Seminar 1 cr**  
This course is designed to assist students in reviewing effective reading and test taking strategies needed for passing the Minnesota Teacher Licensure Examination (MTLE). Reading strategies include effective literal, inferential, critical reading comprehension, and critical reasoning skills.

## SOC-Sociology

**SOC 1100 Modern US Society: Everyday Life in the United States of America 3 cr**  
This survey course provides valuable information about the United States social system, including U.S. values, mores, and the popular culture. The course highlights the principles and practices of the U.S. society and culture and analyzes the ways in which they manifest in everyday life. The course also focuses on the diversity and multicultural makeup of U.S. society.  
Prerequisite: MnTC Goals: 5, 7.

**SOC 1101 Cultural Diversity 3 cr**  
This course aims to promote understanding and appreciation of cultural diversity. Sociological and anthropological perspectives will be used to examine socio-cultural diversity, the challenges and opportunities it presents, and its importance in our dynamic contemporary world. The course also emphasizes processes such as workplace diversity and long-term trends in cultural pluralism, which are transforming our everyday experiences and identities.  
Cross-Listed as: ANTH 1101.  
MnTC Goals: 5, 8.

**SOC 1102 Love, Sex and Family 3 cr**  
This course explores the ways that families and intimate relationships shape and are shaped by societal contexts. Through studying love, sexuality, cohabitation, marriage, caregiving, gender roles and union dissolution, students learn about the diverse, complex, and changing nature of intimate connections and family lives.  
MnTC Goals: 5, 7.

**SOC 1103 Social Change in Action and Service Learning 3 cr**  
This course is designed to give students the opportunity to serve as volunteers in the community – an opportunity to study the social justice problems they are responding to with their volunteer efforts and to look at local and global social systems in which these problems exist. The course examines the roles of philanthropy and community service and explores alternative ways that society responds to community needs.  
Prerequisite: ENGC 0960 (C/P or higher) or ENGC 0900 and READ 0960 (C/P or higher) or completion or placement into ENGC 1101 (D or higher).  
MnTC Goals: 7, 9.

**SOC 1104 Introduction to Sociology 3 cr**  
This course introduces students to sociology's fundamental perspectives, methods and themes for the study of human social relations. Through a wide range of topics including socialization, social inequality, social institutions and social change, students explore the links between individual lives and societal contexts.  
MnTC Goals: 5, 9.

**SOC 1106 Social Problems 3 cr**  
This course is an overview of contemporary social problems in both the U. S. and around the world using various sociological perspectives, analytical insights, and methodologies. The course critically analyzes a range of social issues such as poverty and inequality, racism, sexism, family breakdown, education, crime and violence, political economy, unemployment, the environment, globalization, and militarism and terrorism, among other emerging structural and systemic processes affecting the survival of peoples nationally and globally.  
Prerequisite: ENGC 0960 (C or higher) or ENGC 0900 and READ 0960 (C or higher) or placement into ENGC 1101. MnTC Goals: 5, 8.

**SOC 1109 Wealth and Poverty 3 cr**  
Using a sociological perspective, this course explores the causes and consequences of inequality in the United States as well as in other countries across the globe. This course addresses the historical roots, sociological explanations and contemporary realities of inequality, and explores the effects of social stratification on individuals and groups within society.  
MnTC Goals: 5, 7.

**SOC 1115 Sociology of Sex and Gender Roles 3 cr**  
This course provides an in-depth examination of various gender identities within the US and abroad such as women, two-spirit people, transgender people, and men. The topics include: gender, human bodies and age; the idea of gender as performance; the intersections of gender with race, sexuality, economic privilege, religion, ableism and more. Students will examine contemporary theory and research in gender studies, which will reinforce compassion, listening, and greater knowledge that facilitates increased safety and peace.  
MnTC Goals: 5, 7.

**SOC 1116 Popular Culture & Media Sociology 3 cr**  
Using a sociological perspective, this course explores the diverse constructions of popular culture within the U.S. and selected parts of the world. An important component within this area of sociology addresses how mass media both reflect and influence popular cultural trends. This course is designed to increase students' abilities to understand, explain, and analyze popular culture via the lens of the sociological imagination, thus increasing their agency as social actors.  
MnTC Goals: 5, 9.

**SOC 1120 Introduction to Women's and Gender Studies 3 cr**  
This course investigates the evolving position of women in society and the role of gender in shaping opportunities and experiences. Through various cultural and theoretical perspectives, students analyze how women's rights and roles change and how gender influences power, status and meaning.  
Cross-Listed as: ANTH 1120 and WMST 1120.  
MnTC Goals: 5, 9.

**SOC 1121 Women Across Cultures 3 cr**  
This course focuses on the major institutions of family, education, economic, and political systems as they define, provide for, and frequently limit women. The course addresses women's issues throughout many cultures of the world and considers how women's gender intersects with race, religion, and sexual orientation.  
Cross-Listed as: ANTH 1121 and WMST 1121.  
MnTC Goals: 5, 8.

**SOC 1900 Topics in Sociology 3 cr**  
Examination of a special topic in sociology; intended for all interested students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.  
Prerequisite: Topic-dependent.

**SOC 2096 Internship in Sociology 2-4 cr**  
This internship course explores careers and training in a supervised work setting and combines theory with field experience related to sociology. Students must spend 45 hours per credit on the job, complete additional academic work, and meet regularly with faculty throughout the internship. Students may earn 2 to 4 credits.

Prerequisite: Previous coursework in Sociology and consent of instructor.

**SOC 2108 Social Psychology 3 cr**  
This course explores the classical issues of social psychology, including topics such as identity, conformity, obedience, aggression, alienation, communication, and prejudice. The course focuses on how individuals in society respond to and influence each other.  
MnTC Goals: 5, 7.

**SOC 2110 American Minority Relations 3 cr**  
This course examines intergroup relations in the U.S. focusing on majority-minority interactions, with the following emphases: race and ethnicity, prejudice and discrimination, inequality, assimilation and pluralism. Discussion topics may include global comparisons and/or analyses of status disadvantages pertaining to women, LGBTQIA+ and elderly people, as well as economically marginalized and disabled individuals.  
MnTC Goals: 5, 7.

**SOC 2112 Criminology 3 cr**  
An exploration of crime: the definitions of crime, the patterns that crimes follow, and the prevalence of certain types of crimes. Factors that cause crime and society's responses to crime are investigated.  
Prerequisite: SOC 1104.  
MnTC Goals: 5.

**SOC 2114 Families in Crisis 3 cr**  
This course explores theoretical perspectives in the sociology of families - including policy and diversity. Students apply theoretical perspectives on family violence, spouse and child abuse and neglect, elder care and abuse, and substance abuse. The course also covers the consequences for family functioning and the criminal justice system response.  
MnTC Goals: 5, 7.

**SOC 2125 Social Deviance 3 cr**  
This course is a sociological examination of significant rule-making and rule-breaking in society. The course surveys the following topics: explorations/explanations of non-conformity relevant to juvenile delinquency, crime, mental illness, substance abuse, and certain other non-normative lifestyles.  
MnTC Goals: 5, 9.

**SOC 2130 Introduction to Criminal Justice 3 cr**  
This course provides an overview of the criminal justice system. Topics include the historical development of law enforcement as well as an exploration of the components of the criminal justice system and the functions, jurisdictions, and interrelationships of various law enforcement agencies with emphasis on the United States criminal justice system.  
MnTC Goals: 9.

**SOC 2131 Juvenile Justice 3 cr**

This course provides an overview of theories of delinquency and the Juvenile Justice System. Special emphasis will be on Minnesota Statutes, Rules of Juvenile Court, and Supreme Court cases which mandate how the Juvenile Justice System works in Minnesota. This course meets specific Minnesota Peace Officer Standards and Training (POST) Board learning objectives for pre-service law enforcement students to understand what police officers are mandated to do when juveniles are victims or offenders, and how those laws are different from the adult criminal justice system.

**SOC 2132 Police and Community 3 cr**

This course examines the interaction of peace officers with members/groups in the communities – focus on minority groups and the application of community oriented policing principles. This course meets specific Minnesota Peace Officer Standards and Training (POST) Board learning objectives (as listed in the outline) for pre-service law enforcement students including community oriented policing philosophy, crime prevention, cultural diversity, bias motivated crime and the proper police response, domestic abuse and assault state mandates, ethics, police professionalism, and the use of discretion by the police..

**SOC 2134 Corrections 3 cr**

This course is a sociological analysis of corrections and punishment in modern society. The course content explores the prison system, community-based corrections, and alternatives to incarceration.

**SOC 2900 Topics in Sociology 1-4 cr**

Examination of a special topic in sociology (e.g. Community Crime Prevention); intended for second-year students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum. Prerequisite: Topic-dependent.

## SMLI-Somali

**SMLI 1100 Beginning Somali 1 5 cr**

This course provides an introduction to Somali language and culture. Students begin to develop competencies in speaking, listening, reading and writing. Culture is an integral part of the course and is incorporated through the analysis of simple texts, film, music, traditions, and daily life in the Somali-speaking world. The entire present tense is covered. MnTC Goals: 8.

**SMLI 1111 Somali Civilization and Culture 3 cr**

This course acquaints students with aspects of the culture and civilization of the Somali speaking peoples. Course topics will be selected from among the areas of the arts, literature, and history to allow students to gain an awareness of cultural, social, religious, and linguistic aspects of the target culture. Students will develop an understanding of the responsibility world citizens share for their common global future by comparing and contrasting their own culture with that of Somali-speaking peoples. Taught in English. MnTC Goals: 6, 8.

**SMLI 1200 Beginning Somali 2 5 cr**

This course provides a continuation of the listening, speaking, reading, and writing competencies developed in SMLI 1100. Students further explore cultural differences, helping them develop a deeper understanding of the world and a greater cultural perspective. The major grammatical focus is on the past and future tenses. Recommended: SMLI 1100. MnTC Goals: 8.

**SMLI 2100 Intermediate Somali 1 5 cr**

Students continue the development and strengthening of the four communication skills: listening, speaking, reading, and writing. Cultural and literary materials are used to develop an appreciation for the arts, history, culture, and literature of Somali-speaking peoples and create an awareness of cultural, social, and linguistic differences and similarities. Major grammar focus includes the present subjunctive, complex sentences, and the conditional and the future tenses. Recommended: SMLI 1200. MnTC Goals: 6, 8.

**SMLI 2200 Intermediate Somali 2 5 cr**

Students continue the development and strengthening of the four communication skills: listening, speaking, reading, and writing. Cultural and literary materials are used to develop an appreciation for the arts, history, culture, and literature of Somali-speaking peoples and create an awareness of cultural, social, and linguistic differences and similarities. Major grammar focus includes compound verb tenses, gerunds, and passive verbs. Recommended: SMLI 2100. MnTC Goals: 6, 8.

## SPAN-Spanish

### **SPAN 1100 Beginning Spanish 1** **5 cr**

This course introduces critical differences and similarities between Spanish and English while students develop competency in speaking, listening, reading, and writing. Aspects of Hispanic culture are also frequently introduced in class, which help students develop cultural sensitivity toward the Spanish-speaking world as part of increased global understanding. The entire present tense is covered, including all irregular verbs.

MnTC Goals: 8.

### **SPAN 1101 Introduction to Interpreting and Translation** **2 cr**

Introduction to Interpreting and Translation introduces students to the career competencies, ethics and major theories related to the fields of interpreting and translation. Through readings by experts in the field, case studies, and professional profiles, students will learn about the fields of interpreting and translation and exercise key skills required to work in these professions. Taught in English. Cross-Listed as: CHIN 1101, FREN 1101, GERM 1101, JAPN 1101, INDS 1101.

### **SPAN 1111 Spanish Culture and Civilization** **3 cr**

This course acquaints students with aspects of the culture and civilization of the Spanish-speaking peoples. Course topics will be selected from among the areas of the arts, literature, and history to allow students to gain an awareness of cultural, social, religious, and linguistic aspects of the target culture. Students will develop an understanding of the responsibility world citizens share for their common global future by comparing and contrasting their own culture with that of Spanish-speaking peoples. One course taught in English; one course taught in Spanish.

MnTC Goals: 6, 8.

### **SPAN 1120 Spanish for Educators 1** **3 cr**

Spanish for Educators 1 is the first of two courses designed for English-speaking educators and future educators who need to acquire vocabulary and develop basic Spanish skills in order to communicate with Spanish-speaking students and their parents on a variety of school-related topics. In addition, the course seeks to provide learners with an understanding of key concepts about Hispanic culture which influence interactions in educational settings.

Cross-Listed as: EDUC 1120.

### **SPAN 1200 Beginning Spanish 2** **5 cr**

This course is a continuation of the listening, reading, speaking, and writing competencies developed in SPAN 1100. Students further explore cultural differences helping them develop a deeper understanding of the world and a greater cultural perspective. All forms of the preterite and imperfect are covered.

Recommended: SPAN 1100.

MnTC Goals: 8.

### **SPAN 1220 Spanish for Educators 2** **3 cr**

Spanish for Educators 2 is the second of two courses designed for English-speaking educators who need to develop basic conversational Spanish skills in order to communicate with Spanish-speaking students and their parents on a wide variety of school-related topics. In this course, students will learn to construct sentences and questions using twelve "high-frequency" structures in Spanish, along with one hundred and twenty verbs relevant to educational settings. Students continue to develop vocabulary related to classroom and school settings. Situational dialogues and role-plays are an important part of this course.

Along with developing conversational skills, attention is given to further development of beginning listening, reading and writing skills. Cultural practices and perspectives are presented through the art and literature of the Spanish-speaking peoples. The cultural components in Spanish for Educators II are designed to encourage teachers to use authentic Hispanic art and literature in their own classrooms or school communities to raise awareness and understanding about the cultures of Spanish-speaking peoples in Minnesota and the United States.

Prerequisite: EDUC 1120. Cross-Listed as: EDUC 1220.

### **SPAN 2100 Intermediate Spanish 1** **5 cr**

Students continue the development and strengthening of the four communication skills: listening, speaking, reading, and writing. Cultural and literary materials are used to develop an appreciation for the arts, history, culture, and literature of Spanish-speaking peoples and create an awareness of cultural, social, and linguistic differences and similarities. Major grammar focus includes a review of the forms and uses of preterit and imperfect; formation and uses of the present subjunctive; and introduction to compound tenses.

Recommended: SPAN 1200.

MnTC Goals: 6, 8.

### **SPAN 2200 Intermediate Spanish 2** **5 cr**

Students continue to develop the four communication skills: listening, speaking, reading, and writing. Increased amounts of literary materials and cultural components are used to develop a broader understanding of and appreciation for the arts, history, politics, and culture of the Spanish-speaking world. Major grammar points include a comprehensive review of uses of the subjunctive (both present and imperfect) compound tenses.

Recommended: SPAN 2100.

MnTC Goals: 6, 8.

### **SPAN 2210 Advanced Communication Skills** **3 cr**

Students continue the development and strengthening of oral and written proficiency acquired in previous courses.

This course is strongly recommended for those students who have taken two years of language at the community college level, or who have acquired equivalent knowledge through other courses. Oral and written assignments may be based on cultural and/or literary materials presented in class. May be taken a second time for credit.

## THTR-Theatre

### **THTR 1101 Voice and Movement 3 cr**

This course introduces students to the fundamental interconnectedness of physical and vocal techniques that provide a basis for a career in the performing arts, as well as other fields in which public speaking and presenting is necessary for success. Theoretical approaches will include the work of both established theories as well as those that are new and emerging in the field. Through daily practice, students will develop a deeper and more personal understanding of their work as performers.

### **THTR 1111 Introduction to Cinema 3 cr**

Explores the development of film from aesthetic, historical, and cultural perspectives. Includes the work of past and present filmmakers in an attempt to analyze and evaluate the changing nature of film in every aspect. In addition, the course asks students to examine the profound personal impact that this medium has had their lives.

MnTC Goals: 6, 7.

### **THTR 1116 Introduction to Theatre 3 cr**

Become an educated spectator and explore the magic of theatre through viewing and reading plays, studying the richness and diversity of drama, and looking critically at the methods and styles of actors, directors, playwrights, and designers.

MnTC Goals: 6.

### **THTR 1117 Introduction to Television and Digital Media 3 cr**

This course explores the role of television and digital media from a variety of perspectives including television's early beginnings through today's digital media industry. Narrative structure will be explored through comparisons of live theatre and television/digital media. Through the examination and evaluation of different genres, styles, and production processes, students will explore the profound personal impact that television and digital media has in their lives.

MnTC Goals: 6, 7.

### **THTR 1118 Theatre in the Twin Cities 3 cr**

Students will experience and respond to several theatre productions and encounter a wide variety of styles, genres, and production forms from diverse cultural and ethnic traditions. Analyzes how theatre artists work and how their productions embody the playwright and director's intentions. Students become familiar with the artistic goals and methods of various Twin Cities theatres, and learn how to respond to theatre performance more knowledgeablely. There is an additional fee for this course.

MnTC Goals: 6, 7.

### **THTR 1120 Theatre Performance Practicum 1 cr**

This credit is earned through performance of a role in a Normandale main stage or faculty-approved theatrical production. Hours vary per week as determined by the rehearsal schedule for the production. Admission is by consent of the instructor and based on acquisition of the role through an audition process. The course may be repeated for a maximum of 4 total credits.

[Type here]

Prerequisite: Instructor's permission.

### **THTR 1122 Technical Theatre Practicum 1 cr**

The student will earn credit through participation as a construction or run crew member on a Normandale mainstage or faculty-approved theatrical production. Hours vary per week as determined by the build and run schedule for the production. This course may be repeated for a maximum of 4 credits.

### **THTR 1125 Drawing and Rendering 3 cr**

Introduction to the techniques and process of drafting and drawing for theatrical design including mechanical drawing, computer aided drafting, freehand rendering. This course will provide the skills and fundamental techniques needed in scenic, costume, and lighting design, and provide the foundation for THTR 2020 Basic Design and THTR 1145 Lighting and Sound.

MnTC Goals: 6.

### **THTR 1130 Costume Construction 3 cr**

Explore the basic theory and practice, the design purpose, tools, and methods of stage costuming to see how it enriches the meaning of the drama. Formulate criteria for interpreting designs and experience practical problem-solving through costume construction techniques for production. Costume shop hours required.

MnTC Goals: 6.

### **THTR 1135 Stage Makeup 2 cr**

Explore the basic theory and practice, the design purpose, tools, and methods of stage makeup to see how it enriches the meaning of the drama. Experience practical problem-solving by executing multiple designs and makeup applications.

### **THTR 1140 Stagecraft 3 cr**

Explore the basic theory and practice, the design purpose, tools, and methods of stagecraft to see how it enriches the meaning of the drama. Formulate criteria for interpreting designs and experience practical problem-solving through stage construction techniques for production. Shop hours required.

MnTC Goals: 6.

### **THTR 1145 Lighting and Sound 3 cr**

The purpose of this course is to provide an introduction to techniques and methods used to realize lighting and sound plots, with particular attention paid to the technical skills required to prepare, set, and run lighting and sound equipment in production.

MnTC Goals: 6.

### **THTR 1151 Acting 1 3 cr**

Physical, vocal and psychological process of acting. Exercises, games and discussion develop individual skills in the beginning actor/actress.

MnTC Goals: 6.

**THTR 1900 Topics in Theatre Studies 3 cr**  
Includes specialized courses that offer students the opportunity to explore areas of theatre and film through more in-depth study. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.  
Prerequisite: Topic-dependent.

**THTR 2020 Basic Design 3 cr**  
Introduction to the concepts, process, and practices common to the design of scenery, costume, and lighting. The study and application of the aesthetic principles and graphic skills involved in all areas of theatrical design. Development of the student's abilities in research methodology, mechanical drawing, freehand sketching and rendering as it applies to design for the theatre. Emphasis on design skills as a communication tool in the collaborative process of theatrical production.  
MnTC Goals: 6.

**THTR 2111 World Cinema 3 cr**  
This course explores influential and contemporary world films, movements, and filmmakers. Film aesthetics and dramatic elements will be discussed in terms of national identity, culture, and globalization. To appreciate how film can shape your understanding of the world, students will consider the historical, cultural, and socio-political circumstances of several global films.  
Prerequisite: THTR 1111.  
MnTC Goals: 6, 8.

**THTR 2150 Script Analysis 3 cr**  
Focus on analyzing play scripts with a view to discovering production and performance values and aesthetics. Intensive reading of a variety of plays from different periods and styles. Discussion of options for interpreting a script for performance. Critical analysis of structure, character, theme, dialogue, genre, and style, from the point of view of the actor, director, designer, or critic.  
MnTC Goals: 6.

**THTR 2151 Acting 2 3 cr**  
This class provides further exploration into the art of acting. Students will focus on physical and vocal technique, challenging scene work, increased emotional availability in characters, complex text and character analysis, and the collaborative rehearsal process.  
Prerequisite: THTR 1151.  
MnTC Goals: 6.

**THTR 2160 Audition Techniques 3 cr**  
Prepares the student in the techniques, opportunities, and procedures of auditioning, interviewing, and constructing resumes for advanced study or career placement. Students will develop a repertoire of audition pieces to increase their ability to perform with confidence on short notice.  
Prerequisite: THTR 1151.  
MnTC Goals: 6.

**THTR 2170 Musical Theatre Performance 3 cr**  
This course will teach students to build on basic acting technique through the styles and constructs of musical theatre and song. Students will learn to appreciate and understand the basic techniques and functions of acting, singing, and dance within the genre, and to hone their skills in resourcing and preparing musical theatre pieces that serve their individual artistry. Students who complete this course will obtain a basic understanding of vocal care and technique, and the professional, artistic, and physical skills required of the musical theatre actor. Students will examine and prepare a range of musical theatre pieces from the 1920s to contemporary repertoire, crafting a series of well-honed audition and performance pieces.  
Prerequisite: THTR 1151.  
MnTC Goals: 6.

**THTR 2520 Stage Management 3 cr**  
Explore the basic theory and practice, purpose, tools, and methods of stage management to demonstrate the vital role these personnel play in a theatrical production. Create the necessary paperwork required to effectively manage a production. Simulate real world situations in a classroom setting to better prepare the student for real world applications.  
MnTC Goals: 6.

**THTR 2550 Directing 1 3 cr**  
This course focuses on the art of play direction. Students will learn the fundamentals of interpretation, blocking and picturization, collaboration and communication, focus and composition, pace, rhythm, and tempo. The role and process of the director will be examined.  
Prerequisite: THTR 1151.  
MnTC Goals: 6.

## VACT-Vacuum Technology

**VACT 1010 Foundations of Vacuum Science 2 cr**  
Basic principles of chemistry, math, and physics are applied to the understanding of concepts needed to continue in courses of vacuum technology. Topics include atomic structure, states of matter, compounds, behavior of gases, scientific measurement and calculations, intermolecular forces, and Ohm's Law.  
Recommended: Eligible for MATH 0601.

**VACT 1292 Introduction to Vacuum Technology 2 cr**  
Vacuum-based systems are a critical enabling technology used in product development and manufacturing to produce many everyday goods such as digital electronic components, energy efficient glass, and metallised films used for food packaging. This course introduces the principal concepts associated with vacuum technology and the critical components of a vacuum system. Students work with a model vacuum system to complete activities intended to help them understand basic vacuum system functions and characteristic.

Prerequisite: VACT 1010 or CHEM 1061

**VACT 1293 Concepts of Rough Vacuum Systems 1 cr**

Vacuum technology is the field whereby very low-pressure environments are created, maintained and analyzed, such as those needed in the fields of semiconductor manufacturing, glass coating and research. This course will introduce concepts of gas behaviors and pressure measurement that apply to rough vacuum systems technology.

Prerequisite: VACT 1010 or CHEM 1061

**VACT 1294 Rough Vacuum Equipment 1 cr**

Vacuum technology is the field whereby very low-pressure environments are created, maintained and analyzed, such as those needed in the fields of semiconductor manufacturing, glass coating and research. VACT 1294 covers the pump-down performance of rough vacuum systems based on the process of positive displacement. System conductance and pump-down performance are affected by the selection of the specific vacuum hardware component types, such as pumps, pressure gauges, valves, and chambers.

Prerequisite: VACT 1293

**VACT 1295 Rough Vacuum Operations 1 cr**

Vacuum technology is the field whereby very low-pressure environments are created, maintained and analyzed, such as those needed in the fields of semiconductor manufacturing, glass coating and research. VACT 1295 covers topics needed to start work in a rough vacuum system including safety, troubleshooting and maintenance, processes conducted in vacuum systems, and the role of rough vacuum systems in high vacuum regimes.

Prerequisite: VACT 1294

**VACT 1300 Introduction to Vacuum System Automation 1 cr**

Understanding how vacuum systems are documented is key to operating, maintaining and troubleshooting that equipment. There are many types of documents that can be used to convey information about a vacuum system including installation and operation manuals, drawings, process diagrams and wiring schematics to name a few. This class will investigate the different types of documentation typically provided with a vacuum system, the type of information addressed in the documentation and how to interpret the information.

Prerequisite: VACT 1293

**VACT 1301 I/O for Vacuum System Automation 1 cr**

Complex automation systems are assemblies of many basic automation components called inputs and outputs (I/O). Communication between I/O components occurs using electrical signals. Remote I/O is used to gather these signals and make them available for programming system operations and/or visualization using a Human Machine Interface (HMI). In this class we will look at common I/O devices and how they can function together to make an automated vacuum system.

Prerequisite: VACT 1300

**VACT 2096 Internship in Vacuum Technology 2-4 cr**

This internship course explores careers and training in a supervised work setting. Combines theory with field experience. Students spend approximately 2.5 hours per week per credit on the job, complete academic work and meet with faculty. Students may earn 2 to 4 credits per semester, with a maximum of 8 credits in any one discipline.

Prerequisite: Previous coursework in Vacuum Technology and consent of instructor and the Center for Experiential Education.

**VACT 2290 High Vacuum Equipment 1 cr**

This course introduces the equipment necessary to operate in the high vacuum regime (approximately 10<sup>-3</sup>-10<sup>-6</sup> Torr), such as specialized pumps and vacuum hardware components. System conductance and pump-down performance are affected by the selection of the specific components and the underlying material properties.

Prerequisite: VACT 1295.

**VACT 2291 High Vacuum Measurement 1 cr**

Vacuum technology is the field whereby very low-pressure environments are created, maintained, and analyzed, such as those needed in the fields of semiconductor manufacturing, glass coating and research. VACT 2291 focuses on the design, methods and application of pressure measurement equipment used in high vacuum systems.

Prerequisite: VACT 2290.

**VACT 2292 High Vacuum Applications 1 cr**

Vacuum technology is the field whereby very low-pressure environments are created, maintained, and analyzed, such as those needed in the fields of semiconductor manufacturing, glass coating and research. VACT 2292 focuses on the application of high vacuum systems to practical manufacturing processes and extending the range of vacuum systems into the ultra-high vacuum regime.

Prerequisite: VACT 2291.

**VACT 2293 Vacuum Analysis and Troubleshooting 4 cr**

This course addresses advanced concepts related to the construction, operation, maintenance, and repair of vacuum-based systems technologies. An understanding of how materials, mechanical systems, and electrical sub-systems interact in a working vacuum system based on operating requirements is developed. Students work with a model vacuum system to complete a variety of lab activities intended to help them understand vacuum system operation and then simulate classic system problems and solutions.

Prerequisite: VACT 1292, ENGT 1153 or concurrent registration ENGT 1184 or concurrent registration CHEM 1020 (B or higher) or CHEM 1061, PHYS 1110 or concurrent registration.

**VACT 2294 Semiconductor Processing 4 cr**

Semiconductor processing refers to categories of manufacturing processes associated with fabricating an integrated circuit, a type of electrical component manufactured by the semiconductor industry. This course provides an overview explaining these special processes and how they are sequenced to produce the integrated circuit. Vacuum systems technology plays a critical role in making several of the underlying fabrication processes possible.

Prerequisite: VACT 2297 or concurrent registration.

**VACT 2297 Thin Film Deposition 3 cr**

Thin film deposition refers to techniques used to deposit layers of material on a surface ranging in layer thickness of a few nanometers ( $1 \times 10^{-9}$  m) up to a thickness of 1 micrometer ( $1 \times 10^{-6}$  m). This course provides an overview of the methods and the embedded vacuum-based technologies used to realize various material deposition processes. Students set up and run processes such as vacuum evaporation and sputtering to create a thin film and then examine characteristics of the layer produced.

Prerequisite: VACT 2293.

**VACT 2300 Materials Science for Thin Film Deposition 1 cr**

Thin film deposition is the process of applying thin solid film coatings to a substrate. To understand how deposition takes place and the resultant properties, a basic understanding of material science is required. This course will look at how chemical elements combine to make solid materials and how we can apply this knowledge to create thin films using physical vapor deposition techniques..

Prerequisite: VACT 1294

**VACT 2301 Thin Film Properties 1 1 cr**

Thin films have many desirable properties that can only be achieved through specialized material deposition processes. These properties can vary and are dependent on the many factors impacting the deposition process. In this course we explore mechanical, thermal and magnetic properties of materials. The physical vapor deposition process, a type of vacuum deposition method, is used to create different thin film samples which demonstrate these material properties. Characterization tools are used to measure the extent to which these material properties are present in the deposited material.

Prerequisite: VACT 2300.

**VACT 2302 Thin Film Properties 2 1 cr**

Thin films have many desirable properties that can only be achieved through specialized material deposition processes. These properties can vary and are dependent on the many factors impacting the deposition process. In this course we explore electrical and optical properties of materials. The physical vapor deposition process, a type of vacuum deposition method, is used to create different thin film samples which demonstrate these material properties. Characterization tools are used to measure the extent to which these material properties are present in the deposited material.

Prerequisite: VACT 2301.

## WMST - Women's Studies

**WMST 1120 Introduction to Women's and Gender Studies 3 cr**

This course investigates the evolving position of women in society and the role of gender in shaping opportunities and experiences. Through various cultural and theoretical perspectives, students analyze how women's rights and roles change and how gender influences power, status and meaning.

Cross-Listed as: ANTH 1120 and SOC 1120.

MnTC Goals: 5, 9.

**WMST 1121 Women Across Cultures 3 cr**

This course focuses on the major institutions of family, education, economic, and political systems as they define, provide for, and frequently limit women. The course addresses women's issues throughout many cultures of the world and considers how women's gender intersects with race, religion, and sexual orientation.

Cross-Listed as: ANTH 1121 and SOC 1121.

MnTC Goals: 5, 8.