NORTHEAST

2025-2026 ACADEMIC CATALOG

NORTHEAST COMMUNITY COLLEGE

LOCATION

The College's service area consists of 20 counties in Northeast Nebraska with a total population of approximately 160,000 residents. The area is nearly 200 miles in length and covers approximately 14,400 square miles. The main campus is located in Norfolk, Nebraska, which has a population of approximately 25,000.

DEGREES AND AWARDS

Associate of Applied Science / 2 years
Associate of Arts / 2 years
Associate of Science / 2 years
Associate in Nursing / 2 years
Diplomas / 1 year
Certificates / Less than 1 year

ACCREDITATION — INSTITUTIONAL

The Higher Learning Commission

ACCREDITATION — PROGRAMS

Associate Degree Nursing / Accreditation Commission for Education in Nursing
Automotive Technology / Automotive Service Excellence Education Foundation
Health Information Management Systems / Commission on Accreditation for Health Informatics and Information Management Education
Paramedicine / Commission on Accreditation of Allied Health Education Programs
Physical Therapist Assistant / Commission on Accreditation in Physical Therapy Education
Practical Nursing / Nebraska State Board of Nursing
Veterinary Technology / American Veterinary Medical Association

2023-24 ENROLLMENT DATA

Full-Time Equivalent (FTE) Students: **3,010**
Total Credit Enrollment: **6,827**
Total Non-credit Enrollment: **6,821**
Total Students: **13,648**

2023-24 FINANCIAL AID

Federal Programs / **$9,488,664**
State Programs / **$1,245,772**
Institutional Scholarships / **$1,181,206**
Northeast Community College Foundation Scholarships / **$749,370**
Private Scholarships / **$2,386,477**
Private Alternative Loans / **$132,712**
Agency Assistance and Reserves/Veteran Benefits / **$244,124**
Total Financial Aid / **$15,428,325**

POST GRADUATION STATISTICS (Year 2024 Graduates)

99% of Northeast graduates are employed or continuing their studies
Of those who entered employment, **91%** are employed in Nebraska. **59%** are employed in the 20-county service area
88% of Northeast graduates are employed in their field of study or a related field.

PRESIDENT'S MESSAGE

Greetings!

Welcome to Northeast Community College. The path to your future success begins with the first step and we are pleased you have chosen Northeast. Education is the great equalizer and a useful tool in raising everyone up. We are here to assist you.

At Northeast, we know that the starting point can be different for all students. You have chosen to invest in your future as part of our student-centered community. Our exceptional faculty and staff are here to help guide you.

You are about to step into a vibrant, challenging, fun environment where you will create lifelong friendships with fellow students and fine mentors in our faculty. Once a Northeast Hawk, you will always be a Hawk.

Success in college depends in part on taking personal responsibility for your own path. That includes setting goals, mindful planning and a commitment to put your best foot forward. Regardless of whether you plan to pursue an associate degree, a certificate, diploma or just take a few courses, our faculty and staff are focused on your success.

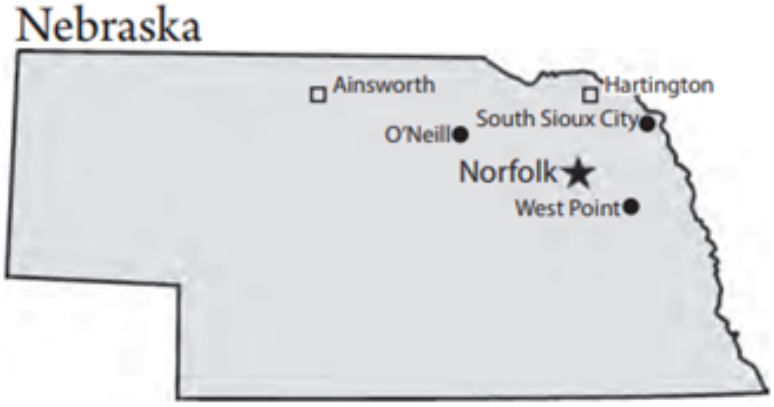
This catalog has been designed as a comprehensive guide for our students. It includes academic program information and descriptions of services that will assist you on your post-secondary journey. It provides an overview of resources, such as financial aid and career services, tutoring and other student services. It also features the academic calendar.

One of my highlights at Northeast is talking to students and getting to know their interests. I am in awe of all they are learning, and the training they are receiving for their future careers, whether that is continuing their education at a four-year institution or joining the workforce upon graduation.

We provide the resources to help you in and out of the classroom, to find your community, take care of your well-being and find a space to belong and learn. Thank you for choosing Northeast as together we move ONWARD AND UPWARD!

Leah Barrett, Ed. D
President

NORTHEAST COMMUNITY COLLEGE



WEBSITE: northeast.edu

NORFOLK
P.O. Box 469
801 East Benjamin Avenue
Norfolk, NE 68701-6831
Phone: (402) 844-7292
Vice President of Educational Services
(800) 348-9033

O'Neill Extended Campus
P.O. Box 269
505 East Highway 20
O'Neill, NE 68763-2314
Phone: (402) 336-3590
or (800) 421-6322

South Sioux City Extended Campus
P.O. Box 989
1001 College Way
South Sioux City, NE 68776-3934
Phone: (402) 241-6400
or (888) 698-6322

West Point Extended Campus
202 Anna Stalp Avenue
West Point, NE 68788-1960
Phone: (402) 372-2269
or (888) 794-6322

Ainsworth Regional Office
P.O. Box 54
1292 East 4th Street
Ainsworth, NE 69210-1225
Phone: (402) 844-7661
or (402) 387-2688 ext. 110

Hartington Regional Office
P.O. Box 578
107 West State Street
Hartington, NE 68739-2712
Phone: (402) 254-6224
or (402) 844-7660

NORFOLK CAMPUS TELEPHONE DIRECTORY

General Information: (402) 371-2020 | Toll Free: (800) 348-9033 | Fax: (402) 844-7400

Department/Office	
Academic Support Center	(402) 844-7125
Accounts Payable	(402) 844-7004
Admissions	(402) 844-7260
Admissions Fax	(402) 844-7396
ABE/ESL/GED	(402) 844-7255
Science, Technology, Agriculture and Math Division	(402) 844-7180
Allied Health Division	(402) 844-7334
Alumni	(402) 844-7065
Applied Technology Division	(402) 844-7216
Athletics	(402) 844-7271
Business and Humanities Division	(402) 844-7290
Career Services	(402) 844-7264
College Engagement	(402) 844-7733
Disability Services	(402) 844-7343
Early College	(402) 844-7118
Educational Services	(402) 844-7114
EMS Services	(402) 844-7720
Financial Aid	(402) 844-7285
Financial Aid Fax	(402) 844-7397
Food Service	(402) 844-7165
Foundation/Planned Giving	(402) 844-7056
Hawk Shop	(402) 844-7140
Health and Public Services Division	(402) 844-7325

Department/Office	
Human Resources	(402) 844-7043
Institutional Effectiveness	(402) 844-7237
KHWK Cable TV	(402) 844-7357
Library	(402) 844-7130
Lifelong Learning Center	(402) 844-7246
President/Board of Governors	(402) 844-7055
Public Relations	(402) 844-7063
Purchasing	(402) 844-7051
Registrar	(402) 844-7265
Registration Fax	(402) 844-7396
Residence Life	(402) 844-7150
Security	(402) 841-5163
Service Center	(402) 844-4357
Student Accounts	(402) 844-7001
Student Counselor	(402) 844-7277
Student Health	(402) 844-7176
Student Life	(402) 844-7722
Student Services	(402) 844-7272
Testing Center	(402) 844-7281
Theater Ticket Box Office	(402) 844-7360
TRIO Student Support Services	(402) 844-7736
Workforce Development	(402) 844-7235
Youth Apprenticeship	(402) 844-7121

TABLE OF CONTENTS

NORTHEAST COMMUNITY COLLEGE BOARD OF GOVERNORS

Del Ames
Neligh
District I

Donovan Ellis
Pierce
District I

Nicole Sedlacek
O'Neill
District II

Carol Sibbel
O'Neill
District II

Steven Anderson
Concord
District III

Pat Wojcik
South Sioux City
District III

Dr. Terry Nelson
West Point
District IV

Diane Davies
Pilger
District IV

Dirk Petersen
Norfolk
District V

Julie Robinson
Norfolk
District V

Jeffrey Scherer
Beemer
At Large

This publication should not be considered a contract between Northeast Community College and any prospective student. The College retains the right to make changes in calendar, programs, course offerings, policies, graduation requirements, tuition, fees, and refunds without notice.

Northeast Community College does not discriminate on the basis of race, color, gender, religion, national or ethnic origin, military Veteran status, political affiliation, marital or family status, age, disability, sexual orientation, gender expression or identity in education programs, admissions policies, employment policies, financial aid, or other College administered programs and activities. It is the intent of Northeast Community College to comply with both the letter and the spirit of the law in making certain discrimination does not exist in its policies, regulations, and operations. Inquiries may be addressed to the Northeast Compliance Officer for Title IX, ADA, Section 504; Associate Vice President of Human Resources, 801 East Benjamin Avenue, P.O. Box 469, Norfolk, NE 68702-0469; phone: (402) 844-7046; email: complianceofficer@northeast.edu; or mail: Office for Civil Rights, U.S. Department of Education, One Petticoat Lane, 1010 Walnut Street, 3rd Floor, Suite 320, Kansas City, MO 64106.

Northeast Community College takes reasonable measures to protect your personal information in accordance with all applicable federal, state, and local regulations.

2025-26 STUDENT CALENDAR

(ALL DATES ARE SUBJECT TO CHANGE)

FALL SEMESTER 2025

August 14	First year students move in
August 15	Fall New Student Orientation
August 17	Returning students move in
August 18	Classes begin: Tuition, fees, housing, and meal plans due
August 22	Last day to cancel or change a meal plan
September 1	Labor Day - College closed
September 26	Last day to withdraw from first eight-week classes
October 9	First eight-week classes end
October 10	Fall Break for students and faculty
October 13	Second eight-week classes begin
November 3	Registration for intersession and spring semester begin
November 7	Last day to withdraw from fall semester classes
November 26-28	Thanksgiving Break for students and faculty
November 27-28	Thanksgiving Break - College closed
November 19	Last day to withdraw from second eight-week classes
December 5	Semester ends: Residence Halls close at 5:00 p.m.

INTERSESSION 2025-26

December 8	Classes begin
Dec 24-Jan 2	College closed; no classes
December 22	Last day to withdraw from intersession classes
January 7	Intersession ends

SPRING SEMESTER 2026

January 11	Residence Halls open, new residents move in; Spring New Student Orientation
January 12	Classes begin: Tuition, fees, housing, and meal plans due
January 16	Last day to cancel or change a meal plan
February 20	Last day to withdraw from first eight-week classes
March 6	First eight-week classes end: Residence Halls close at 5:00 p.m.
March 9-13	Spring Break for students and faculty
March 16	Second eight-week classes begin
March 30	Registration for summer and fall semesters begin
April 3-6	Holiday Break for students and faculty – College closed
April 10	Last day to withdraw from spring semester classes
April 24	Last day to withdraw from second eight-week classes
May 6	Semester ends: Residence Halls close at 5:00 p.m., unless resident is participating in Commencement
May 8	Commencement

2025-26 STUDENT CALENDAR

August 2025

Su	Mo	Tu	We	Th	Fr	Sa
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

September 2025

Su	Mo	Tu	We	Th	Fr	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

October 2025

Su	Mo	Tu	We	Th	Fr	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

November 2025

Su	Mo	Tu	We	Th	Fr	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

December 2025

Su	Mo	Tu	We	Th	Fr	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

January 2026

Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

February 2026

Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28

March 2026

Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

April 2026

Su	Mo	Tu	We	Th	Fr	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

May 2026

Su	Mo	Tu	We	Th	Fr	Sa
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

June 2026

Su	Mo	Tu	We	Th	Fr	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

July 2026

Su	Mo	Tu	We	Th	Fr	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

August 2026

Su	Mo	Tu	We	Th	Fr	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

SUMMER TERM 2026

May 11	Summer term begins: Summer term tuition, fees, housing, and meals due

PRE-SUMMER SESSION 2026

May 11	Pre-Summer and Six Week Session begin Cooperative Internships begin
May 25	Memorial Day - College closed
May 29	Pre-Summer Session ends

JUNE SUMMER SESSION 2026

June 1	June Session begins
June 26	June Session ends

JULY SUMMER SESSION 2026

July 3	College closed
July 6	July Session begins
July 31	July Session ends

2026-27 STUDENT CALENDAR

(ALL DATES ARE SUBJECT TO CHANGE)

FALL SEMESTER 2026

August 13	First year students move in
August 14	Fall New Student Orientation
August 16	Returning students move in
August 17	Classes begin: Tuition, fees, housing, and meal plans due
August 21	Last day to cancel or change a meal plan
September 7	Labor Day - College closed
September 25	Last day to withdraw from first eight-week classes
October 8	First eight-week classes end
October 9	Fall Break for students and faculty
October 12	Second eight-week classes begin
November 2	Registration for intersession and spring semester begin
November 6	Last day to withdraw from fall semester classes
November 25-27	Thanksgiving Break for students and faculty
November 26-27	Thanksgiving Break - College closed
November 18	Last day to withdraw from second eight-week classes
December 4	Semester ends: Residence Halls close at 5:00 p.m.

INTERSESSION 2026-27

December 7	Classes begin
Dec 24-Jan 2	College closed; no classes
January 4	Last day to withdraw from intersession classes
January 8	Intersession ends

SPRING SEMESTER 2027

January 10	Residence Halls open, new residents move in; Spring New Student Orientation
January 11	Classes begin: Tuition, fees, housing, and meal plans due
January 15	Last day to cancel or change a meal plan
February 19	Last day to withdraw from first eight-week classes
March 5	First eight-week classes end: Residence Halls close at 5:00 p.m.
March 8-12	Spring Break for students and faculty
March 15	Second eight-week classes begin
March 26-29	Holiday Break for students and faculty – College closed
April 5	Registration for summer and fall semesters begin
April 9	Last day to withdraw from spring semester classes
April 23	Last day to withdraw from second eight-week classes
May 6	Semester ends: Residence Halls close at 5:00 p.m., unless resident is participating in Commencement
May 7	Commencement

2026-27 STUDENT CALENDAR

August 2026

Su	Mo	Tu	We	Th	Fr	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

September 2026

Su	Mo	Tu	We	Th	Fr	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

October 2026

Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

November 2026

Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

December 2026

Su	Mo	Tu	We	Th	Fr	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

January 2027

Su	Mo	Tu	We	Th	Fr	Sa
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

February 2027

Su	Mo	Tu	We	Th	Fr	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28						

March 2027

Su	Mo	Tu	We	Th	Fr	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

April 2027

Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

May 2027

Su	Mo	Tu	We	Th	Fr	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

June 2027

Su	Mo	Tu	We	Th	Fr	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

July 2027

Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

August 2027

Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

SUMMER TERM 2027

May 17	Summer term begins: Summer term tuition, fees, housing, and meals due

PRE-SUMMER SESSION 2027

May 17	Pre-Summer and Six Week Session begin Cooperative Internships begin
May 28	Pre-Summer Session ends
May 31	Memorial Day - College closed

JUNE SUMMER SESSION 2027

June 1	June Session begins
June 25	June Session ends

JULY SUMMER SESSION 2027

July 5	College closed
July 6	July Session begins
July 30	July Session ends

THE COLLEGE

Established by the State Legislature in 1973 as a comprehensive community college offering vocational/technical, liberal arts, college transfer, and continuing education, Northeast Community College is a two-year college located at the northeast edge of Norfolk, Nebraska. It serves residents of a 20-county area in northeast Nebraska. Northeast is the only community college in the state with one- and two-year vocational, liberal arts, and adult education programs all on one main campus. From the merger of two separate and distinct institutions—Northeastern Nebraska College and Northeast Nebraska Technical College—Northeast Community College has become a unique college with its own identity.

SERVICE AREA

According to 2020 census figures, approximately 156,040 persons live in small towns, villages, and rural areas within the College's 20-county service area. Agriculture and agribusiness are the principle industries in the area. Locally elected governing board members represent constituents in the area's five districts. See page three (3) for information on the Board of Governors.

ACCREDITATION

Northeast Community College is accredited by the Higher Learning Commission (hlcommission.org), an institutional accreditation agency recognized by the U.S. Department of Education. Northeast can award two-year Associate of Arts, Associate of Science, Associate of Applied Science, and Associate in Nursing degrees, one-year diplomas, and certificates. The Higher Learning Commission is located at 230 South LaSalle Street, Suite 7-500, Chicago, IL 60604. The office can be contacted by calling (800) 621-7440 or (312) 263-0456. The College is also approved by the Nebraska State Department of Education.

Northeast has three extended campuses and two regional offices to serve the needs of off-campus students in the 20-county service area. The three extended campuses are located in O'Neill, South Sioux City, and West Point. Regional offices are located in Ainsworth and Hartington.

MISSION

Northeast Community College is dedicated to the success of students and the region it serves.

VISION STATEMENT

Empower every person in our region to achieve their academic and workforce development goals.

PURPOSES

Our purposes as defined legislatively include:

- Applied technology and occupational education, and foundations education as necessary
- Transfer education, and foundational education as necessary
- Public service, including continuing education, economic and community development, business and industry training, and personal development
- Applied research

STRATEGIC PRIORITIES

- Student Pathways to Success
- Excellence and Innovation in Educational Programs
- Rewarding and Inspirational Place to Work
- Effective Resource Management

VALUES

Basic and fundamental beliefs which describe our motives behind purposeful action.

We champion student success

Create an inclusive and welcoming environment that provides multiple pathways and services to meet all students where they are and help them reach their educational goals

We practice continuous improvement

Use data informed approaches to increase effectiveness, efficiency, and satisfaction through assessment of processes, programs, and services

We are mindful stewards of resources

Focus on the efficient management of our funds, workforce, facilities, land, and technology

We build partnerships and collaborations

Leverage the skills and knowledge of our students, co-workers, and trusted partners to advance our mission

We aspire to create an inclusive, diverse culture

Foster a culture where every person is heard, engaged, and feels valued. Communicate with transparency, assume positive intent, and be open to different perspectives and ideas

TUITION AND FEES

The Board of Governors annually reviews and sets tuition and fee rates, which are subject to change. All tuition and fees must be paid by the first day of the semester. Classes beginning in the second eight-week period of the semester are also considered due the first day of the semester.

Any student who registers for a semester and later decides not to attend must notify the Admissions and Registration Office in writing or use My Northeast to withdraw from classes.

Tuition

Nebraska (NE) Resident Students:
(*hereafter referred to as Resident Students*)

- Each semester credit hour $110

Border States (IA/SD/WY/CO/KS/MO) Resident Students:

- Each semester credit hour $110

Non-resident Students:

- Each semester credit hour $153

Non-credit Continuing Education:

- Each contact hour $10

Fees

Student Services Fee: (*Paid each semester*)

- Each credit hour $5

Facility Fee: (*Paid each semester*)

- Each credit hour $9

Technology Fee: (*Paid each semester*)

- Each credit hour $7

Course Fee: (*Additional course fees may be assessed for programs with high material/equipment costs)*

Returned Check Charge $18
Late Payment Fee $50

Campus Housing Rates Per Semester

- Path Hall (4BR Suite) with 10 meals/week plan* $4,760
- Path Hall (2BR Suite) with 10 meals/week plan* $4,340
- Apartment with 10 meals/week plan* $4,340
- Burkhardt Hall with 10 meals/week plan* ... $4,160
- Simon Hall with 10 meals/week plan* $4,000
- Housing Administration Fee (*Non-refundable*) $175

**Includes basic cable television, wireless internet service, and all utilities.*

Meal Plans Per Semester

- $250 Express Card $250
- Commuter - Block 25 meals + $25 Flex Dollars ... $202
- Commuter - Block 50 meals + $50 Flex Dollars ... $391
- 10 meals/week + $100 Flex Dollars** $1,530
- Unlimited meals with $150 flex plan $2,185

***Minimum required plan for campus housing residents.*

Cost of Attendance (COA)

Federal law requires all schools to calculate an estimated average COA for one academic year. The COA is not the actual price a student will pay but an estimate of what it may cost. The COA below is based on a resident student attending college for one year, based on 30 credit hours. A students COA will be prorated based upon their enrollment status each semester.

- Tuition & Fees (2025-2026 rate) $3,930
- Loan Fees $17
- Books, Course Materials, Supplies, and Equipment ..... $1,356 *(estimate*)*
- Living Expenses - Housing and Food (on-campus housing) $10,211
- Travel $562
- Personal/Misc. $1,125
- **Total $17,201**

**Book, Course Materials, Supplies and Equipment will vary based on student program of study. Living Expenses is an average of the housing cost plus the Unlimited Meal plan and additional meals on the weekend to allow for three meals a day. Students may request an adjustment to their cost of attendance by submitting a Cost of Attendance Adjustment form.*

Tools and Uniforms

The following programs require tool kits and/or uniforms. Students who enroll in any of these programs are responsible for purchasing the required tools as specified by the program department. Cost of the tools ranges from $20-$10,000. For additional information, contact the Admissions and Registration Office.

Applied Technology Costs

Auto Body Repair ..... $6,000-$9,000
Automotive Technology ..... $4,000-$10,000
Automotive Light Service Certificate ..... $1,500-$4,000
Building Construction ..... $1,200-$1,500
Diesel Technology ..... $7,210-$8,710
Drafting $20
Electrical Construction and Control ..... $2,000-$3,000
Electromechanical $2,000
HVAC $2,500
Machining and Manufacturing Automation $1,000
Plumbing $1,000
Utility Line $2,450
Welding (includes SSC campus) ..... $900-$1,500
Wind Energy $360

Communication/Media Arts Costs

Graphic Design ..... $2,400-$5,000
Media Arts/Media Production Certificate $700

Physical Therapist Assistant/Nursing Costs

PN/ADN ..... $3,500-$5,150
Physical Therapist Assistant $590

Veterinary Technology Costs

Vet Tech $1,370

Residency Status

To be eligible for Nebraska or Border State Resident tuition at Northeast, students must establish residency according to Nebraska statutes. For more information, contact the Registrar.

Residency Definition, Guidelines, and Procedures

For the purpose of this procedure, the following definitions shall apply:

1. **Nebraska Resident Tuition** – the Nebraska resident tuition rate set by the Board of Governors applicable to the academic program in which an individual intends to enroll.
2. **Bordering State Resident Tuition** – the bordering state (Colorado, Iowa, Kansas, Missouri, South Dakota and Wyoming) resident tuition rate set by the Board of Governors applicable to the academic program in which an individual intends to enroll.
3. **Nonresident Tuition** – the nonresident tuition rate set by the Board of Governors applicable to the academic program in which an individual intends to enroll.
4. **Legal Age** – the age of majority (age 19) set by Nebraska state statute.
5. **Minor** – individuals who have not reached the age of majority.
6. **Emancipated Minor** – an individual who by virtue of marriage, financial status, or for other reasons has become independent of his or her parents or guardians.
7. **Established a Home** – an individual who is habitually present for a minimum period of one hundred eight days in Nebraska or a bordering state immediately prior to applying for resident status with the bona fide intention of making Nebraska or such bordering state his or her permanent residence. On-campus housing cannot be considered as a domicile or permanent residence for establishing residency.
8. **Lawful Permanent Resident** – an individual who is not a U.S. citizen who has been lawfully accorded the privilege of residing permanently in the United States as an immigrant in accordance with immigration laws.

Requirements for Residency

An individual will qualify as a resident of the State of Nebraska or bordering states for tuition purposes at Northeast Community College if they meet the standards set in any one of the following categories. Documented proof is required (*See documentation section*).

1. A person of legal age or an emancipated minor who has established a home in Nebraska or a bordering state.
2. A minor whose parent(s) or guardian has established a home in Nebraska or a bordering state. If a student has matriculated in any state postsecondary educational institution while their parent(s) or guardian(s) had an established home in this state and the parent(s) or guardian(s) ceases to reside in the state, the student will maintain their residency status.
3. A person of legal age and a dependent, for federal income tax purposes, of parent(s) or guardian who has established a home in Nebraska or a bordering state.
4. An individual who is married to a person who has established a home in Nebraska or bordering state and who has proof of residence in Nebraska or a bordering state. (*A copy of the marriage certificate must be provided in addition to documentation requirements in section 3.2*)
5. Lawful permanent residents or individuals who have been granted asylum or refugee status and who have established a home in Nebraska or a bordering state.
6. An individual who is a staff member or dependent of a staff member at the College.
7. An individual on active duty with the armed services of the United States and has been assigned a permanent duty station in Nebraska, or a dependent or spouse of such individual.
8. An individual who has served a period of not fewer than ninety (90) days in the active United States military and has been discharged within three (3) years of the initial enrollment date at the College, or the spouse or dependent of such individual, or an individual using military educational benefits under the Post 9/11 or Montgomery GI Bill®.
9. A student currently serving in the Nebraska National Guard.
10. A person who is qualified for a national service educational award or summer of service award from the National Service Trust of the United States.
11. For Nebraska resident tuition rate only: An individual who is a graduate of an accredited Nebraska high school and who meets the requirements of Nebraska law found in Neb. Rev. Stat. §85-502(9) or an individual who has previously been enrolled at the College as a Nebraska resident student.

Documentation

Individuals identified in sections 1 through 5 must provide at least three (3) of the following items. All documents must be dated at least one hundred eighty days prior to the first day of classes and must reflect the individual's name.

1. Record of Nebraska or bordering state voter registration;
2. Nebraska or bordering state income tax return for the most recent year;
3. Nebraska or bordering state driver's license;
4. Nebraska or bordering state vehicle registration;
5. Evidence of ownership of Nebraska or bordering state property;
6. Nebraska or bordering state housing rental agreement;
7. Nebraska or bordering state insurance policy;
8. Evidence that parent(s) as Nebraska or bordering state resident(s) claim(s) the student as a dependent; or
9. Other documentation as approved by the Registrar.

Application

Any student who has been classified as a nonresident for tuition purposes and believes that he or she may qualify as a Nebraska or bordering state resident must file a Request for Nebraska or Bordering State Residency Status form with the Registrar by the first day of the term for which the tuition fee was charged.

The Request for Nebraska or Bordering State Residency Status form, as well as further information regarding residency classification, is available from the Admissions & Registration Office.

It is the student's responsibility to initiate a change in residency status.

Appeals

An individual who believes that he or she has been incorrectly denied a Nebraska or bordering state residency determination may appeal the decision through the Vice President of Student Services.

STUDENT ACCOUNTS/PAYMENT PROCEDURES

Students may view their account balances in My Northeast. The student will log in using their Northeast email address and password to view and print their billing information.

All costs are paid one term at a time. Classes are not guaranteed until the student pays all tuition and fees or makes arrangements for payment. Nonpayment of tuition and fees by the due date may result in late payment fees and/or withdrawal from classes for the term.

Payment options are:

1. Students may pay in person in Norfolk at Student Accounts or use the drop box located at Student Accounts in Norfolk for payments made after hours.
2. Payments may be made online using a credit card (MasterCard, Visa, or Discover) or via telephone by contacting Student Accounts. Any credit card payment made via telephone will not be reflected on the student’s account until the next business day.
3. Students may send their payment by mail. Students who choose to mail their payment of tuition and fees should allow sufficient time for their payment to reach Student Accounts by the due date.
4. Northeast Community College will accept tuition assistance (sponsor) agreements in lieu of payments at the time of registration, but students will be responsible for all amounts owed if the sponsoring agency does not remit payment in full.

Students who have been approved for financial aid by the Financial Aid Office will see authorized aid on their statements. The student must complete a one-time direct master promissory note and direct loan entrance counseling at Northeast before loans are processed. If the tuition, fees, room, and board charges exceed the amount of any estimated aid, the balance is due immediately and payable no later than the first day of the term. If the estimated aid equals or exceeds the tuition and fee charges, the student will not be required to make a payment at that time. If there is a change in the student’s financial aid status, payment for any balance is due the first day of the term.

IMPORTANT NOTE: If the Northeast Community College Financial Aid Office has not received the required application documents early enough to complete the student’s financial aid award (tuition waiver, PELL, FSEOG, NOG, Direct Loans, scholarships, room, or board waiver), the student must be prepared to pay the balance due from other means by the

due date. Students should be prepared to pay for their textbooks and course materials. If a student is receiving more financial aid than is required to cover tuition, fees, and other institutional charges, the student may charge textbooks and course materials to the student's account through the first week of classes. Textbooks and course materials may not be charged to the student's account prior to the Monday before the first day of the semester and not after the first week of the semester.

All financial aid, scholarships, and loans which are ready for distribution will be credited to student accounts at the beginning of each term. Financial aid funds beyond tuition, fees, books, and room and board charges will be refunded to students within 14 days after the start of the semester. Financial Aid is disbursed on attending hours. This means if a student's classes do not begin on the first day of classes, their disbursement will be delayed until classes begin. This can impact the amount and timing of refund checks of excess aid.

Interest-Free Monthly Payment Plan

To help students meet their educational expenses, Northeast Community College offers Nelnet Campus Commerce as a convenient budget payment plan. This is not a loan program and there are no interest or finance charges. Students are charged a $30 non-refundable enrollment fee each semester they are enrolled in the program.

To budget and pay tuition and fees with the Nelnet Campus Commerce payment plan, students or parents/guardians may have payments transferred from a bank account or automatically charged to a credit card on the fifth day of each month.

Students may access Nelnet Campus Commerce information in their My Apps account or may contact the Student Accounts Office for more information about the Nelnet Campus Commerce payment plan.

REFUND SCHEDULE

Tuition and fees are refundable according to the following schedule:

Full-Term Classes

Weeks of Semester	Percent of Refund
First and Second Week	100%
Third and Fourth week	50%
After Fourth week	NO REFUND

Less Than Full-Term Classes

Classes more than one (1) week in length
Follow the same refund schedule as full-term class, adjusted accordingly for the length of the class.

Classes one (1) week or less in length
If dropped prior to the day the class begins, 100% refund; if dropped the day the class begins or later, no refund.

Summer Term Classes
Follow the same refund schedule as full-term class, adjusted accordingly for the length of the class.

Credit Courses

Once a term begins, the student must officially withdraw from a class or classes they are not attending by completing a Drop/Add Form or Withdrawal Form and submitting the completed Form to the Admissions and Registration Office. Depending on the length of the course, the student may be able to withdraw from courses online utilizing My Northeast. The date the Form is received by the Admissions and Registration Office, or the date the withdrawal is completed on My Northeast, is the date used to calculate the refund.

If a student has received financial aid, a tuition refund will be used to restore amounts to the aid programs involved. All educational costs incurred up to the time of withdrawal will be considered in determining any additional overpayment of aid. Financial aid repayment is established according to federal regulations pertaining to federal student aid.

Return of Funds Policy

Students receiving financial aid or military tuition assistance who withdraw or stop attending will, in most cases, be required to return a portion of funds received.

The Higher Education Act, as reauthorized and signed into law on October 7, 1998, established the Return of Title IV Funds Policy.

The concept behind the policy is that the college and the student are allowed to retain only the amount of Title IV (Federal) aid that is earned. If a student withdraws or stops attending classes, a portion of the aid received is considered to be unearned and must be returned to the Title IV programs from which it was received.

For Title IV purposes, the last date of attendance is one of the following:

- The date the formal withdrawal process begins,
- The date the student otherwise gives official notice of intent to withdraw (i.e., letter, phone call, e-mail, in-person),
- The mid-point of the term,
- Or the last documented date of attendance in an academically related activity.

Northeast uses the last documented date of attendance in an academically related activity. If a student attends through 60 percent of the term, all Title IV Aid is considered earned.

Definitions

Administrative Drop: A drop processed by the Admissions and Registration Office due to the student's failure to start a course. The Administrative Drop allows for a 100% refund of tuition and fees.

Official Withdrawal: Withdrawal from a course that was initiated by the student by completing the official withdrawal process. Student will receive a grade of W.

Unofficial Withdrawal: Withdrawal from a course initiated by the institution for a student who has stopped attendance. No refund is given. Students who stop attending a course will be unofficially withdrawn and given a grade of an Unearned F.

Federal Title IV Refund Calculation

The Financial Aid Office determines, based on the federally mandated formula, the amount of FSA/Title IV assistance a withdrawn student has earned, based on their determined withdrawal date.

The Return of Title IV Funding (R2T4) calculation policy is outlined below:

1. Following the determination of the last date of attendance, the school must calculate the number of days attended and the total number of days in the term; weekends count and any period of no classes that is five days in length or greater is excluded. Days attended are then divided by days in the term to calculate percentage completed. That percentage is multiplied by total aid for which the student is eligible to determine the amount of aid earned (*% completed x total aid = earned aid*). Total aid – earned aid = unearned aid (*aid to be returned*).
2. The school determines total institutional charges and multiplies that figure by the percentage of unearned aid (*100% - % completed = % unearned*). It makes no difference which type of resource actually paid the school bill; the law assumes that Title IV aid goes first to pay institutional charges. Institutional charges x % unearned = Amount returned by school (*up to amount indicated as unearned in Step 1*).

   The school must then return the amount of unearned aid up to the maximum received, to each of the Title IV programs in the following order:

   1. Direct Unsubsidized Loan
   2. Direct Subsidized Loan
   3. Federal PLUS Loan
   4. Federal PELL Grant
   5. Federal Supplemental Educational Opportunity Grant (FSEOG)
3. The school then calculates the amount for which the student is responsible by subtracting the amount returned by the school from the total amount which is unearned. That remaining amount is the student's share and is allocated in the same order as stated above.

   Total amount unearned
   – Amount returned by the school
   = Amount for which the student is responsible

   Once the school determines dollar amounts and which individual programs must be repaid, the student will be notified of any amounts they owe. Funds that must be returned by the student to the loan programs can be paid in full in accordance with normal loan repayment terms. For grant dollars that must be repaid, the amount due from a student is limited to the amount by which the original grant overpayment amount due from the student exceeds half of the total Title IV grant funds received by the student. A student has 45 days to make repayment and does not have to repay a grant overpayment of $50 or less. Unpaid balances will be turned over to the Department of Education for collection. Until overpayments are repaid or satisfactory arrangements to repay have been made, students will be ineligible for further Title IV aid.

   This policy is totally separate from the institutional refund policy. Unpaid balances due to Northeast that result from amounts returned to Title IV programs and other sources of aid will be charged back to the student. If a student does not begin attendance in all classes or ceases attendance during the 100% refund period, aid may have to be reduced to reflect appropriate status prior to calculating Return of Title IV Funds. Before withdrawing or stopping attendance in classes, the student should be aware of the proper procedure for withdrawing from classes and the consequences of either withdrawing or stopping attendance.

For Students Enrolled in Modules

A student is considered withdrawn if the student does not complete all the days in the payment period that the student was scheduled to attend. If a student withdraws from a course in a later module while still attending a current module, the student is not considered as withdrawn. However, a recalculation of aid based on the change in enrollment status may be required.

If a student provides written notice to the Financial Aid Office at the time of withdrawal from a current module that they plan to attend a later module in the same payment period, they are not considered

a withdrawal. If the student does not provide that written confirmation, the R2T4 recalculation of aid will be done. However, if the student does return in a later module in the same payment period, regardless of whether prior written confirmation was received, the R2T4 process will be reversed, and the student will be awarded the funds that they are eligible to receive at the time of return.

Post-Withdrawal Disbursement
If the student did not receive all the funds that were earned prior to withdrawing, a post withdrawal disbursement may be due. If the post-withdrawal disbursement results in the student's being eligible to receive either Direct Stafford Subsidized or Unsubsidized Loan proceeds, they will be contacted via US Mail by the Financial Aid Office. Written authorization from the student will be requested and is required before loan proceeds can be processed and disbursed to the student. Northeast will automatically use all or a portion of the post withdrawal disbursement of grant funds for any outstanding charges for tuition, fees, or room and board charges. Students will be notified of a post-withdrawal disbursement eligibility within 30 days of the date of withdrawal determination and Northeast will return any unearned funds within 45 days.

If a student remains enrolled only in non -Title IV-eligible courses
A student's schedule sometimes includes courses that the student is taking for credit and for which the student may not receive Title IV funds. If a student ceases attendance from all their Title IV eligible courses and remains enrolled in only non-Title IV- eligible courses the student is considered a withdrawal for Title IV purposes.

Any questions on Return to Title IV Funds may be addressed to the Director of Financial Aid. Questions regarding withdrawal should be addressed to the Admissions and Registration Office.

More Information: Financial Aid Office
finaid@northeast.edu
(402) 844-7285

UNEARNED MILITARY TUITION ASSISTANCE

Military Tuition Assistance (TA) is awarded to a student under the assumption that the student will attend the classes for which the assistance is awarded. When a student withdraws, officially or unofficially, the student may no longer be eligible for the full amount of TA funds originally awarded.

To comply with regulations set by the U.S. Department of Defense (DOD), at the point in which Northeast Community College deems the student as not attending, 100% of the awarded TA funds will be returned to the military service branch through 60% completion of the enrolled course. To determine the 60% completion date, the start and end date for each enrolled course may be found in the student's My Northeast account.

The return of awarded TA funds to the military service branch may result in a balance due on the student's account. However, students qualifying for the Student Military Leave and Readmission Procedure will not incur TA debt for administrative withdrawals related to active military service, as defined in the procedure.

FINANCIAL AID

The Northeast Community College Financial Aid Office works with students, parents, and counselors to determine eligibility for one or more types of assistance to help meet the costs of education when the student and family cannot contribute the full amount. Most students who receive financial aid qualify on the basis of need, however, some receive scholarships for academic or activity achievements.

Northeast Community College offers the following types of financial aid: Federal Pell Grants, Federal Supplemental Educational Opportunity Grants, Nebraska Opportunity Grants, Federal Work-Study, Direct Loans, Federal PLUS Loans, student emergency loans, part-time employment, and scholarships.

Students are encouraged to contact the Department of Vocational Rehabilitation Services, the Veterans Administration, the Bureau of Indian Affairs, or Workforce Development if potential eligibility exists.

FINANCIAL AID APPLICATION

Who is eligible to apply for Financial Aid?
All students in need of financial assistance or interested in scholarships are encouraged to apply for Financial Aid.

For federal programs the student must:

1. Enroll in an eligible program of study leading to a degree, diploma, or certificate.
2. Be a U.S. citizen or an eligible non-citizen.

3. A student must have completed one of the following: a high school diploma, GED, or homeschooling at the secondary level.
4. Not be in default on any loan previously received from any college nor owe an overpayment of Title IV Funds.
5. Acknowledge federal student aid will be used for costs of attendance at Northeast Community College.
6. Demonstrate financial need (except for Direct Unsubsidized and PLUS loans).
7. Maintain the standards of Satisfactory Academic Progress (SAP).

FEDERAL AND STATE AID APPLICATION PROCESS

1. Complete the Northeast Community College Application for Admission online (preferred method) at northeast.edu/admissions/application. Or complete a paper application and return it to:
   Admissions and Registration Office
   Northeast Community College
   P.O. Box 469
   Norfolk, NE 68702-0469.
2. To apply for federal financial aid, complete the Free Application for Federal Student Aid (FAFSA) online at studentaid.gov. **Northeast's school code is 002556**. The following information is needed to complete the FAFSA:
   a. A Federal Student Aid (FSA) ID username and password. This will be used to electronically sign the FAFSA. Parent contributors for dependent students will also need an FSA ID obtained at studentaid.gov.
   b. Federal tax returns and W-2s.
   c. Current net worth of assets including savings accounts, investments, businesses or farms, and any child support received in the last calendar year.
3. After the FAFSA has been submitted and processed, the student will receive a FAFSA Submission Summary with an official Student Aid Index (SAI). The SAI is used to determine Pell grant eligibility, as well as other types of federal student aid. Students should review the FAFSA Submission Summary to ensure no mistakes were made on the FAFSA form. Corrections to the FAFSA can be made electronically, if necessary. If Northeast was listed as a school on the FAFSA, the information will be received electronically by the Financial Aid office.
4. The official method of communication with the Financial Aid Office is email. The Financial Aid Office will send an email to the student's personal email address on file until the student is assigned a Northeast email address. If no personal email address is provided, the email will go to the student's email address provided on the FAFSA. Once a student is assigned a Northeast email address, all communication from the Financial Aid Office will be directed to the Northeast email and you will be directed to view your account on My Northeast. The student will be able to view any documents required prior to processing their financial aid award and they will be able to view their award once the file is complete.
5. Verification is the process used to confirm the information reported on the FAFSA is accurate. Applications are selected randomly by the central processor and may be selected by the school if the information indicates a possible error or conflicting information. Documentation required for the verification process must be submitted to the Financial Aid office. The student will not receive their financial aid offer until all requested information has been received. Students can easily complete verification forms and upload documents online from their phone, tablet, or computer. For more information on how to upload documents, please visit Student Forms on the Northeast website or in the student's My Apps account.
6. A student's financial need is determined by the following federal formula:

   Estimated Cost of Attendance
   – Student Aid Index
   = Financial Need

   Financial need can be met with various types of financial aid. The Pell Grant is determined first then any scholarships. Students will be considered for a federal supplemental grant, state grant, or Federal Work Study according to the institutional awarding policy.
7. An email will be sent out notifying the student that their financial aid award offer is available for viewing in My Northeast. Students can accept or decline components of their award offer. If a student is accepting Direct Loans and are a first-time borrower at Northeast, they will need to complete the following loan requirements: Loan Entrance Counseling and Master Promissory Note (MPN) on studentaid.gov.

Aid offers could be modified if the student is not enrolled full-time on the tenth day of classes. No adjustments will be made after that date unless the student receives additional outside aid, or the student does not begin attending all classes for which he or she is registered. See the Enrollment Status section under Satisfactory Academic Status for how student status is determined.

COLLEGE FINANCING PLAN

In addition to the award notification, the Financial Aid Office at Northeast, in cooperation with the U.S. Department of Education, has implemented the College Financing Plan. The College Financing Plan is a form that was designed by the federal government to create a standardized way for schools to communicate cost information to families while incorporating specific financial aid awards. It is designed to make it easier for families to do a side-by-side cost comparison for each of their selected schools. In addition, information on the school's default rate, graduation rates, median federal loan borrowing amounts, and repaying the loans is included. The Department of Education created the form to assist families in making an informed decision about how to pay for college.

A student may access their personalized College Financing Plan via their My Northeast account. Students will also need to view their award notification on their My Northeast account and accept/decline their financial aid.

SATISFACTORY ACADEMIC PROGRESS

Northeast Community College is required to establish minimum academic standards that students must meet to be eligible or maintain eligibility for federal, state, and institutional aid, including, but not limited to, grants, loans, Federal Work Study, institutional scholarships, and waivers. Northeast must notify students of this policy and monitor the progress of all students receiving financial aid to insure their continued compliance with the policy. Refer to College SAP Board Policy and Procedure AP 5130-0.

Students who are receiving financial aid, or seek to receive financial aid in the future, are required to meet these minimum academic standards. Failure to meet these standards means the student is no longer eligible to receive financial aid. It is the responsibility of all students receiving financial aid to familiarize themselves with the policy and to ensure that the standards are met.

Enrollment Status

Student status is based on the following (per semester):

- **Full-time (FT)**: Attempting 12 or more credits
- **Three-quarter time (TT)**: Attempting 9-11 credits
- **Half-time (HT)**: Attempting 6-8 credits
- **Less-than-half-time (LTHT)**: Attempting 5 or fewer credits

For financial aid awarding purposes, enrollment status is based on credit hours for which the student is enrolled as of the published date considered to be the tenth day of the term for most students. Financial aid will be adjusted to reflect less-than-full-time status if the student is not registered for at least 12 credits hours on that date. Financial aid will not be adjusted to reflect credit hours added after that date. Students who are registered for a class on the first day of the term but never begin attendance in that class cannot include that class in determining enrollment status for financial aid purposes. Aid will be adjusted if students are reported as a no show in their class(es).

Requirements

The following components are measured to determine whether the student is meeting Satisfactory Academic Progress (SAP) standards: Cumulative GPA, Pace Requirement, and Maximum Timeframe.

Grade Point Average (GPA)
Cumulative GPA: A student must maintain a cumulative GPA of at least 2.0.

Pace Requirement or Completion Ratio
The pace requirement or completion ratio component of the satisfactory academic progress policy measures the pace at which a student must progress through their program of study to ensure completion within the maximum timeframe permitted and provides for a measurement of the student's progress at the end of each evaluation. Pace or completion ratio is calculated by determining the cumulative number of credit hours the student has successfully completed divided by the number of cumulative credit hours the student has attempted. To meet the pace requirement, the student's completion ratio must be 67% or higher.

Attempted credits include any course taken for credit while attending Northeast. Credit hours transferred in from another institution are included in both attempted and completed credits. Successfully completed credit hours include letter grades of A+, A, B+, B, C+, C, D+, D, or P.

Credit hours that will not count as successfully completed include letter grades of F (Fail), UF (Unearned F), I (Incomplete), W (Withdrawal), AU (Audit), and credit by exam (i.e., CLEP).

Repeats of successfully completed credits will be considered in the hours attempted and may be used in determining enrollment status for financial aid purposes. Title IV funds can pay for repeat coursework previously taken in a program as long as it is not a result of more than one repetition of a previously passed course, or any repetition of a previously passed course due to the student failing other coursework.

Maximum Time Frame Measure
Rate of Program Completion (Maximum Time Frame): Students are expected to complete their program of study within a reasonable time. A student's maximum time frame is based on total credit hours attempted at Northeast plus any transfer credits accepted toward their program of study and the student's degree

objective. These limits apply regardless of whether the student has received federal funding. Students are eligible to receive aid for up to 150% of the published number of credit hours for a program of study (see program descriptions in the College Catalog).

Example: If a program of study requires 78 credit hours to graduate, the maximum credit limit a student could take and receive financial aid for would be 117 (78 x 150 percent). All credit hours attempted by the student (including foundational and ESL classes) are counted. Maximum time frame may be adjusted by the number of transitional or ESL credits taken.

At the end of each semester, the total number of attempted credit hours will be counted to see if the student has reached the maximum number of credit hours for their program of study. All credit hours are counted, including:

- Credit hours attempted in semesters you did not receive financial aid.
- Credit hours attempted prior to a change in your program of study. Students nearing maximum time frame due to a change in their program of study will be reviewed for an academic plan.
- Credit hours transferred from another institution into your program of study at Northeast.

Consequences

Financial Aid Warning

Financial Aid Warning status is assigned to a student who fails to meet one or more of the SAP measures indicated above at the conclusion of a payment period. During a warning semester, the student may still receive financial aid. The student's future financial aid eligibility is dependent upon how well the student does during the warning semester. If the student completes the warning semester, now has a cumulative GPA of 2.0 or higher, and the student is meeting the pace or completion ratio requirement, the student will be removed from financial aid warning status and restored to good standing. However, if the student again fails to meet one or both of those requirements, the student will be placed on financial aid suspension.

Financial Aid Suspension

A student will be placed on Financial Aid Suspension status if they fail to meet the academic progress requirements at the end of a financial aid warning semester.

Regaining Eligibility

A student whose financial aid eligibility has been suspended has two options for regaining eligibility:

1. A student may qualify for reinstatement of financial aid eligibility by enrolling at their own expense, bringing their cumulative GPA above 2.0, and bringing their pace or completion ratio requirement up to 67% to meet the minimum requirements of the satisfactory academic progress policy.
2. A student may appeal their financial aid suspension if extenuating circumstances (*i.e., death of a relative, injury or illness of the student, or other special circumstance*) exist. Appeals must be made in writing to the Director of Financial Aid and must include supporting documentation of the extenuating circumstances. In the appeal request, the student must provide information regarding why the student failed to make SAP and what has changed in the student's situation that would allow them to demonstrate satisfactory academic progress at the next evaluation.
3. If a student's appeal is granted, they will be placed on Financial Aid Probation. A student on Financial Aid Probation may receive aid (federal, state, or institutional) for one payment period. While on Financial Aid Suspension, the student must meet Northeast's standards of academic progress, or the requirements of an academic plan established on an individual student basis as a result of the appeal process. Denied appeals may be directed to the Vice President of Student Services in accordance with the Northeast Community College Policy for Student Grievance Procedure.

Additional Information

Foundational Classes: Students may receive financial aid for a maximum of 30 credits of transitional classes.

Incompletes: A student who is placed on warning or suspension because of incomplete credits may request that the Financial Aid Office review their status once the course has been completed.

Academic Amnesty: A student who applies for and receives Academic Amnesty to have credits attempted and grades earned in previous semesters excluded from the calculation of the student's GPA are not automatically returned to satisfactory standing. The federal student aid program regulations make no provision for the concept of academic amnesty or academic renewal. The Financial Aid Office must always include all courses, whenever taken, in evaluating a student's satisfactory academic progress.

Additional Degree: If a student has completed one program of study, they may qualify for federal, state, or institutional aid for one additional qualifying program of study. The student will be required to meet with the Financial Aid Office for a credit evaluation to determine eligibility. Students seeking a second degree will not be able to obtain aid for hours above 125% of the credit hours required for that second degree.

**Federal aid time limits may apply.*

Withdrawal from Northeast Community College: Students withdrawing during a semester will be placed on financial aid warning or suspension. Those students who received financial aid should be prepared to repay a portion of aid received according to federal regulations and the Northeast refund policy, which can be found in the College Catalog and financial aid brochure.

Evaluation Timeframe: Northeast Community College will evaluate a student's satisfactory academic progress at the end of each payment period; fall, spring, and summer. All summer sessions jointly are considered one term. A student placed on financial aid warning or suspension will be notified via U.S. mail to the current mailing or permanent address on record. It is the responsibility of the student to keep their address updated.

The complete standards of satisfactory academic progress can be located on the Northeast website, or they may be requested from the Financial Aid Office.

FEDERAL AND STATE PROGRAMS AT NORTHEAST COMMUNITY COLLEGE

Federal Pell Grant

The Federal Pell Grant assists undergraduate students who need financial help for their education and, like other grants, does not have to be repaid. Applicants must submit the Free Application for Federal Student Aid (FAFSA) to determine eligibility for the grant. The Pell Grant amounts awarded ranged from $740 to $7,395 in 2024-2025, if the student had eligibility. Duration of eligibility is the equivalent of 12 full-time semesters.

Federal Supplemental Educational Opportunity Grant (FSEOG)

The purpose of the Federal Supplemental Educational Opportunity Grant (FSEOG) Program is to provide additional grants to students who are Pell eligible and who demonstrate exceptional financial need.

Nebraska Opportunity Grant (NOG)

The Nebraska Opportunity Grant (NOG) is available to Pell eligible Nebraska residents who demonstrate substantial unmet need. NOGs are a combination of federal and state monies with most of the funding coming from the state.

Federal Work-Study (FWS)

The Federal Work-Study (FWS) program provides jobs for eligible students who show unmet need. Student workers are paid bi-weekly as hours are worked. Most FWS students are employed on campus and work an average of 8 to 10 hours per week at a salary of at least minimum wage. Some jobs are designated community service jobs as students are assisting individuals in the greater northeast Nebraska area. Northeast also provides FWS students for an off-campus reading tutors program for lower-elementary school children.

Loans

All loans must be repaid by the borrower and should be taken with extreme caution and forethought. Failure to repay a loan will negatively affect the student for years.

- A first-time borrower must complete a Master Promissory Note and loan entrance counseling at studentaid.gov.
- Students and parents who borrow PLUS loans have the option to complete the annual student loan acknowledgment to acknowledge they understand how much they owe and how much more they can borrow.
- Loans for the academic year will have two disbursements, one at the beginning of the fall semester and one at the beginning of the spring semester.
- Loans will be credited directly to the student's account. After the student's school expenses are covered, excess amounts will be returned to the student within fourteen days to be used for other costs of education.

Direct Subsidized Loan

To be eligible for the Direct Subsidized Loan, a student must show need and be enrolled at least half-time. The government subsidizes the loan by paying the interest for the student during periods of at least half-time enrollment. Freshmen (level one) students may be eligible for a maximum of $3,500 and sophomores (level two) may be able to borrow up to $4,500. Contact the Financial Aid Office for current interest rates.

Direct Unsubsidized Loan

The terms of the Direct Unsubsidized Loan are identical to those of the Direct Subsidized Loan with two exceptions – a student is not required to show need for the Direct Unsubsidized Loan and interest is the student's responsibility from the beginning. The government does not pay interest for the student. Subsidized loan eligibility reduces available unsubsidized limits. Dependent students may have up to $2,000 of additional eligibility above the $3,500 for level one students and $4,500 for level two students. Independent students may have up to $6,000 of additional eligibility above the $3,500 for level one students and $4,500 for level two students. Contact the Financial Aid Office for current interest rates.

Parent Loan for Undergraduate Students (PLUS)

The Parent Loan for Undergraduate Students (PLUS) is available to parents of dependent students to help meet remaining costs of education. Maximum eligibility is total cost of education minus financial aid. Contact the Financial Aid Office for current interest rates.

Scholarships

Northeast offers students several scholarships and performance grants established by the College, by the Northeast Community College Foundation, and by private organizations and individuals. Qualifications, deadlines, and amounts vary. When scholarships are need-based, the FAFSA on file will be used to assist the Scholarship Selection Committee in the selection of recipients. Department performance grants are awarded in limited numbers through the individual departments on campus. For a complete list of scholarships and details on the application process, contact the Financial Aid Office or visit the Northeast Community College website.

Short-Term Loans

Northeast provides short-term, interest-free loans to students with unexpected financial need. Contributors to this fund are Baker Memorial, Robert McMullen Memorial, Sears & Roebuck, and Eva Maas Memorial.

STUDENTS' RIGHTS AND RESPONSIBILITIES

Students have the right to know:

- What federal, state, and institutional financial assistance is available.
- Financial aid procedure and how aid is awarded.
- How and when financial aid is paid.
- The cost of attendance at Northeast.
- Comply with the Return of Title IV Funds policy for withdrawal.
- What portion of financial aid is from grant aid.
- What portion of financial aid is from a loan(s) and must be repaid. This includes interest rate, grace period, and terms of payback, including a sample repayment schedule.
- How much need has been met by the institution.
- The Satisfactory Academic Progress requirements for aid recipients.

Students are responsible for:

- Knowing and meeting financial aid deadlines.
- Providing all information/documentation requested by the Financial Aid Office.
- Reading and understanding all forms and correspondence pertaining to financial aid and keeping copies of these documents.
- Accepting responsibility for all agreements signed by the student.
- Reporting any drastic changes in financial circumstances (i.e., death of parent or spouse, divorce) that would change financial need.
- Returning all financial aid forms by the date requested.
- Knowing and complying with Northeast's refund policy and the Return of Title IV Funds policy.
- Notifying lenders if there is a change in name, address, or enrollment status.
- Complying with employment requirements for Federal Work-Study.
- Applying for financial aid as soon as October 1 for the upcoming academic year.
- Repaying all Direct Loans.
- Maintaining satisfactory academic progress at Northeast.

GENERAL ADMISSIONS GUIDELINES AND PROCEDURES

Northeast Community College (Northeast) does not charge an application fee.

Applications for Admission for degree-seeking students are accepted from students, age 18 and older, or those students who will receive their high school diploma or its recognized equivalent prior to their enrollment start date.

Admission to Northeast Community College does not guarantee admission to all courses or programs of study. Students may be required to take prerequisites and/or academic skills courses before enrolling in certain classes/programs of study. Program requirements are outlined on the Northeast website and in the College Catalog. Northeast may require a person to provide a medical statement from a physician for admission to a specific program or when it is otherwise in the best interest of the student and/or Northeast.

Northeast reserves the right to deny admission or continued enrollment to any student who may create an unreasonable risk of harm to the health, safety, welfare, or prosperity of Northeast, members of the Northeast community, or him/herself.

To receive Title IV funding (financial aid), a student must be qualified to study at the postsecondary level. A student qualifies if he/she has completed one of the following:

1. A high school diploma.
2. The recognized equivalent of a high school diploma, such as a general education development or GED certificate (*for more information contact the Director of Adult Education*).
3. Completion of home schooling at the secondary level.

The language of instruction at Northeast is English; therefore, students are required to have a certain level of English proficiency in order to be successful. Students whose native language is not English will be required to provide proof of English proficiency prior to enrolling in Northeast courses at the 1000 level or higher. Students must prove language proficiency in one of the following ways:

1. Submission of official TOEFL (*Test of English as a Foreign Language*) scores. The student's total score must be a minimum of the passing scores as listed in the College Catalog. **Northeast's institutional code for TOEFL is 6473.**
2. Submission of official IELTS (*International English Language Testing System*) scores. The student's total score must be a minimum of the passing scores as listed in the College Catalog.
3. Submission of an official transcript from an accredited U.S. educational institution verifying successful completion of a college English course, at the 1000 level or higher, with a grade of "C" or better.
4. Successful completion of a college approved placement exam with minimum sub-scores as listed in the College Catalog. A qualified writing sample may be requested.
5. Submission of official ACT scores with English Reading and Writing sub-scores as listed in the College Catalog. If submitted sub-scores are lower than what is stated in the College Catalog, a college approved placement exam will be administered.

APPLICATION PROCEDURES

Degree-Seeking Students

1. Submit the Application for Admission on the Northeast website.
2. Send all official high school transcripts, home school transcripts, and/or a GED certificate (*if applicable*) to the Admissions and Registration Office. Students who are still in high school should wait to send transcripts until after high school graduation. Previous college transcripts should also be sent to the Admissions and Registration Office.
3. Provide recent test scores for a college approved placement exam. Exceptions must be approved by the Executive Director of Student Success.
4. Complete a new student registration session. Information regarding registration will be sent from the Admissions and Registration Office.

Non-Degree Seeking Students

Students enrolling in classes for personal enrichment, or those not working toward a degree or certificate, are considered non-degree seeking students. Until a student is accepted into a degree-seeking program, no advisor will be assigned, no financial aid will be available, and no degree can be earned. Students are encouraged to request a meeting with an advisor at any time for assistance with educational planning or to become a degree-seeking student.

Non-degree seeking students must complete the standard Application for Admission on the Northeast website prior to enrollment. Prerequisite requirements may apply and will need to be met to enroll in certain courses.

Returning Students

Former Northeast Community College students who have not been enrolled for at least one year must complete a new Application for Admission on the

Northeast website to be eligible to register for classes. If it has been over one year since previous enrollment, students will follow the most current College Catalog.

Appeals

Appeals to the admissions process will be considered by the Vice President of Student Services in consultation with the appropriate Academic Dean. All appeals must be submitted in writing.

SPECIAL ADMISSIONS GUIDELINES AND PROCEDURES

Definitions:

Early College: A program through which students are dually enrolled in high school and Northeast, taking courses for college credit. A student is considered enrolled in high school if they are taking courses for dual credit or participating in high school activities or receiving services from the high school.

Early High School Graduate: A student who has completed all course requirements for high school prior to their class graduation date and/or the receipt of their high school diploma and is no longer enrolled in high school, participating in activities or receiving services from the high school.

Home School Student: Any student who elected to attend a non-accredited or non-approved state school while complying with the compulsory school attendance law.

International Student: Any student whose country of citizenship is outside the United States of America and who are able to study/live in the United States because they have been granted a visa to do so (i.e., F-1, R) and has been issued an I-20 by Northeast for study at the institution.

Early College Students

The Early College program provides the opportunity for students currently enrolled at a high school junior or senior level to enroll in college credit courses. Freshman and sophomore level students must have a recommendation from a high school representative and approval to enroll from the Registrar and appropriate Academic Dean.

Early College students must complete an Early College Application for Admission. This can be done on the Northeast website. If the student plans to take math and/or English courses, they must meet the placement requirements.

An Early College student who plans to attend Northeast Community College after high school graduation must submit an official Degree-seeking or Non-Degree seeking Application for Admission for the term they wish to enroll following their high school graduation.

The credits and grades earned as Early College students will become part of the student's permanent Northeast transcript.

Early High School Graduates

Early high school graduates who will not receive their high school diploma prior to their enrollment start date, and who are applying as a degree-seeking student, must be at least 16 years of age and provide the following:

1. An official transcript, a completed Special Admission: Early High School Graduate Form, and a completed Application for Admission indicating their intent to enroll in a program which leads to an associate degree (*certificate and diploma programs do not meet the criteria*).
2. Appeals to the admissions process will be considered by the Vice President of Student Services. All appeals must be submitted in writing.

Home School Students

Home school completers who are applying as a degree-seeking student must be at least 16 years of age. If applying prior to the age of 18, students must provide one of the following:

1. If state (where applicant has residency) law requires a home-schooled student to obtain a secondary school completion credential for home school (other than a high school diploma or its recognized equivalent), an official copy of that credential.
2. If state (*where applicant has residency*) law does not require a home-schooled student to obtain a secondary school completion credential for home school (*other than a high school diploma or its recognized equivalent*), an official transcript or the equivalent, signed by the student's parent or guardian, that lists the secondary school courses the student completed and documents the successful completion of a secondary school education in a home school setting.
3. Appeals to the admissions process will be considered by the Vice President of Student Services. All appeals must be submitted in writing.

International Students

International students applying to Northeast with the intention of obtaining a Certificate of Eligibility, (Form I-20), for the purpose of acquiring an F-1 visa, must be at least 16 years of age and complete all general and international student admission requirements. Only after the student meets these requirements will the Form I-20 be issued.

It is recommended that applicants residing in a foreign country initiate the application process six months prior to their anticipated enrollment date.

All completed application materials must be received by July 1st for those planning to enroll for the fall semester, and November 1st for students planning to enroll for the spring semester.

To meet all international student admissions requirements, international students should send the following to:

International Admissions
Admissions and Registration Office
P.O. Box 469
Norfolk, NE 68702-0469

1. Completed International Student Application for Admission.
2. Copy of valid passport.
3. Official copies of all high school and college academic records (*with English translations*).
4. An international applicant whose native language is not English must demonstrate English proficiency. Students may do this by submitting one of the following:
   a. An official Test of English as a Foreign Language (TOEFL) score report with a minimum of 500 on the written exam, 173 on the computer exam, or 61 on the TOEFL. **Northeast Community College's institutional code for TOEFL is 6473**.
   b. An official International English Language Testing System (IELTS) minimum score of 6.5.
   c. An official transcript from an accredited U.S. educational institution verifying successful completion of a college English course, at the 1000 level or higher, with a grade of "C" or better.
   d. An official ACT score report with an English subscore minimum of 18. If submitted English subscores are lower than 18, an additional placement exam will be administered.
   e. An official SAT score report with a verbal subscore minimum of 440. If submitted verbal subscore is lower than 440, an additional placement exam will be administered.
   f. Satisfactory completion of a Northeast's placement test for Language and Reading.
   g. Verification of successful completion of a U.S. English Language program.
   h. "TOEFL Waivers" will not be accepted. All test scores must be verifiable. Foreign students who are in the United States on another type of visa and wish to enroll in courses at Northeast must follow the English Proficiency Requirements. For further assistance, international students should contact the Director of Global Engagement.
5. Students must submit written verification of adequate financial resources, in American dollars, to fund the estimated cost to attend Northeast for the current academic year, as per financial aid calculations. Northeast has determined that adequate financial resources include, but shall not be limited to, sufficient funds over and above the cost to attend as per financial aid cost of attendance guidelines. Adequate financial resources include monies to provide for the student's everyday living needs and expenses while in the United States, and health insurance coverage with an insurance company licensed to do business in the United States.

   Appeals to the admissions process will be considered by the Vice President of Student Services. All appeals must be submitted in writing.
6. International students are required to have all tuition, fees, housing and meal plans paid in full by the first day of classes each semester. Balance details can be obtained by contacting Student Accounts.
7. International students shall be required to present proof of health insurance coverage prior to being officially enrolled and receiving an updated I-20. International students must provide such verification for each year of attendance at Northeast to the Director of Global Engagement.
   a. The health insurance coverage set forth above shall include coverages for medical expenses associated with accident, sickness, hospitalization, major medical procedures, and repatriation of remains. Coverages shall provide for the following minimum coverages:
      I. Medical benefits of at least $50,000 per accident or illness;
      II. A deductible (*the amount for which the student is responsible*) not to exceed $500 per accident or illness;
      III. Repatriation of remains coverage in the amount of $7,500; and
      IV. Expenses associated with medical evacuation of the student to their home country in the amount of $10,000. Northeast Community College does not have health insurance coverage for its students. Students are responsible for their own medical expenses.
8. Prior to enrollment, international students must complete an Orientation/Registration session and take a placement test (*if not already provided*).
9. Immigration laws require F-1 students to pursue a full course of study. At Northeast, this means maintaining a minimum of 12 credit hours per

semester in a program of study and making satisfactory progress toward degree completion.

10. International students present in the United States on temporary visas are considered nonresidents for purposes of tuition payments. Length of stay, payment of taxes, ownership of property, etc., do not imply legal residency.
11. International students who wish to transfer to Northeast from another U.S. institution must complete the appropriate transfer forms. Transfer forms can be requested from the Director of Global Engagement.
12. International applicants who are in the United States on another type of visa and wish to enroll in courses at Northeast must follow the English Proficiency Requirements. For further assistance, please contact the Director of Global Engagement.

HEALTH INFORMATION MANAGEMENT SYSTEMS (HIMS) PROGRAM APPLICANTS

In addition to the Northeast Community College application and admission, students must also apply to the Health Information Management Systems Program.

Applicants to the HIMS Program must:

1. Submit completed required application materials to the program for review:
   a. Professional resume,
   b. High school or college transcripts, if applicable,
   c. Application for Prior Learning Assessment, if applicable,
   d. Copy of Coding Certifications, if applicable.
2. **HIMS Program Requirements:**
   a. Students must earn a "C" grade or above in all HIMS coursework.
   b. In the event of course failure or withdrawal, the student will be allowed to repeat the course once to earn a qualifying grade.
   c. Criminal background check and drug screening.
   d. Documentation of immunization history.

NURSING PROGRAM APPLICANTS

All nursing program applicants must complete the following by February 1 (*of the year the student intends to start the nursing program. i.e., February 1, 2025, for the nursing cohort class that starts in August 2025*).

Applicants to the Nursing program must:

- Apply to Northeast Community College with a declared major of Pre-Professional Nursing (PRN) or Pre-Professional Nursing-UNMC Transfer (PRNT).
- Complete the online Nursing Program Application on the Northeast website.
- Complete the TEAS Version 7 exam (nursing entrance exam).
- Send official transcripts to Northeast Community College if the student has taken any classes at another college/university.

Northeast Nursing Program requirements:

- Meet with the Nursing Program Advisor or Nursing Program Director to complete a plan of study.
- Begin the pre-requisite coursework detailed in the required Nursing Program of Study. A minimum of a "C" must be achieved in each of the required courses, and the required science courses must be completed within the last seven years.
- Earn a cumulative GPA of at least 2.7 in the required science and general education courses.
- Successful completion of a Nurse Aide course and be listed on the Nebraska Nurse Aide Registry.
- Direct high school to nursing program admits must have a cumulative high school GPA of 3.5 with successful completion of the highest level of English, Math, and Science courses.
- LPN to ADN students are required to hold an encumbered LPN license from Nebraska or another compact state.

The Nursing Application materials will be updated each spring semester by March 30, and can be accessed on the Northeast website.

Both Practical Nursing (PN) and the Associate Degree in Nursing (ADN) programs have a limited number of applicants accepted for admission. It is possible that not all applicants will be admitted. Students are conditionally accepted into the nursing program based on scoring rubric for TEAS test scores, Science GPA, and general education GPA.

Conditional program admission is granted and contingent upon:

- Successful completion of Spring/Summer coursework with a grade of "C" or higher in required courses and a minimum overall and Science GPA of 2.7.

- Upon contingent acceptance, students will be provided information on obtaining/completing the following satisfactorily:
  - Criminal background check,
  - Drug test,
  - Physical examination,
  - Submission of required vaccinations and TB test,
  - Current Basic Life Support (BLS) for Health Care Providers CPR certification,
  - LPN to ADN students are required to hold an unencumbered LPN license from Nebraska or another compact state.

Nursing Program Grade and Graduation Requirements
Students enrolled in either Practical Nursing or Associate Degree Nursing coursework are held to program specific grading standards.

1. A "C" or higher in all general education coursework.
2. A "B" of higher and a minimum of an 80% test average in all nursing (NURS) coursework.
3. "P" or pass grade in select NURS coursework; the "P/F" grade is reserved for laboratory or clinical coursework only; a pass grade is determined by the instructor's evaluation of the student meeting specific course competencies and is equivalent to a "B" grade in theory or classroom courses.

A student is eligible to take the NCLEX-PN or NCLEX-RN exam upon satisfactory completion of the graduation requirements.

PHYSICAL THERAPIST ASSISTANT (PTA) APPLICANTS

In addition to the Northeast Community College application and admission process, students must also apply to the Physical Therapist Assistant (PTA) program.

Applicants to the PTA program must:

- Apply to Northeast Community College.
- Review the general education coursework in the required PTA Program of Study. A minimum of a "C+" must be achieved in each of those courses, and the required science classes must have been completed within the past five years.
- Earn a cumulative GPA of at least a 2.5 "C+" in the general education coursework detailed in the required PTA Program of Study **OR** earn a cumulative high school GPA of 3.0.

The PTA Application Packet is updated annually and can be accessed through the Northeast Community College website, or by email request to pta@northeast.edu. The application requirements must be completed, and materials returned or postmarked as instructed by the deadline.

Required application materials include:

- PTA Program Application for Admission Form
- PTA Job Shadowing Forms
- Professional resume and cover letter

Based on the scoring rubrics for GPA, Observation Forms, and Resume and Cover Letter, up to 35 students with the highest cumulative scores will be invited by the PTA Admissions Committee for an interview.

Up to 24 students are accepted into the program based on total points earned on GPA, observations, resume and cover letter, and interview.

Students of the PTA program will be required to complete and submit the following in order to participate in the clinical education component of the curriculum:

- Physical examination
- Required vaccinations
- Tuberculosis test
- Criminal background check
- Drug screen
- Current Basic Life Support (BLS) for Health Care Providers CPR certification.

UTILITY LINE APPLICANTS

Admission to the Utility Line program (*hereafter referred to as the program*) is contingent upon the applicant meeting the College mandatory placement test scores for reading, writing, and mathematics as required by the program (*see program of study*):

1. All students must have a valid CDL learner's permit, along with a valid driver's license, in their possession when classes begin. Students must maintain that valid CDL learner's permit and their driver's license until which time they are directed to obtain a class A or A/O CDL. Once a student obtains their class A or A/O CDL they must maintain that license throughout the remainder of their course of study, including the summer internship. Any student who loses their driver's license or CDL will be unable to continue any further in the program. Students wanting to re-enter the program must re-apply.

   Each student must provide a current driving record from the student's state of residence by the end of the second week of classes for each term in which they are enrolled, including summer internship. Nebraska resident students will have their records request sent to the Nebraska Department of Motor Vehicles by the program. Out-of-state students will be responsible

to secure their own drivers record in the allotted time. Failure to provide a current driver's record will result in the removal of that student from the program.

2. All students will be required to pass a medical examination and obtain a medical examiners certificate for drivers. Students are also required to be in a drug and alcohol testing program which consists of pre-admittance, random, post-accident, and reasonable suspicion testing. All examinations and testing will be provided by the program.
3. Any student who is unable to obtain a medical examiners certificate, fails a drug or alcohol test, refuses to take a drug or alcohol test, intentionally attempts to alter the outcome of any drug or alcohol test, or does not appear in the allotted time to take a drug or alcohol test will be unable to enter or continue in the program.

   Any student who has been removed from the program due to the drug or alcohol testing policies and wishes to re-enter the program must re-apply and will be required to provide evidence of successful completion of a substance abuse program from a substance abuse professional (SAP) prior to being re-admitted.
4. If a student has fulfilled all first semester requirements but does not complete all the second semester requirements they may re-enter the second semester the following January, if an opening exists.
5. For the safety of the students and to ensure the student's ability to perform the skills required, any student who does not meet all first or second semester requirements and sits out at least one semester must re-take UTIL 1030 and 1040 or UTIL 1140 and 1150, whichever is appropriate for the semester in which they are returning to regardless of prior grades received as well as any classes or labs that were not completed as required.
6. Students must either successfully complete their summer internship or have sufficient hours to be eligible for an incomplete grade prior to beginning their sophomore year. No student will be allowed to take sophomore classes or labs without either the successful completion of their summer internship or having been approved for and received an incomplete grade.
7. No student currently enrolled in utility line classes may place their name on the wait list. Students who wish to be placed on the wait list must first withdraw from all utility line classes or be granted permission from the division dean or their representative.
8. Any student re-applying for any reason will be either accepted or placed on the wait list in order by date that all admission requirements were submitted and complete.

ELECTROMECHANICAL TECHNOLOGY APPLICANTS

Admission to the Electromechanical Technology program is contingent upon the applicant meeting the College's mandatory placement test scores for reading, writing, and mathematics as required for the program (*see program page for scores*). Any student who does not meet minimum placement scores for all test areas will be admitted to the College but must successfully complete required transitional skills courses or attain required placement test scores to be admitted to the program.

VETERINARY TECHNOLOGY APPLICANTS

In addition to Northeast Community College application and admission, students must also apply to the Veterinary Technology Program.

Applicants to the Veterinary Technology Program must:

1. Submit completed required application materials to the program by October 1st. Materials include the following:
   a. Professional resume.
   b. Veterinary Technician observations (*See Veterinary Technology Program of Study*).
   c. Writing Assignment (*Covered at orientation for Pre-Veterinary Technology Students*).
2. Complete the coursework detailed in the required Program of Study with a minimum of a "C+" in all VTEC courses. (*See Veterinary Technology Program of Study*). Grades as of November 1st of the year of application will be used to tabulate GPA in the VTEC courses for a student's application.

Based on an evaluation score of the above criteria, the student may be invited in by the Veterinary Technology Admissions Committee for an interview.

Those students selected to continue in the Veterinary Technology Program must complete the following:

- Rabies vaccination (*This is mandatory for admission*)
- Proof of health insurance
- Criminal background check and drug screen
- Complete all veterinary technology courses with a minimum grade of "C+"

Veterinary Technology Program Grade Requirements

1. Students must earn a C+ or above in all VTEC coursework.

2. In the event of course failure or withdrawal, a student will be allowed to repeat the course to earn a qualifying grade. A course failure refers to any grade below the required "C+" and a withdrawal refers to dropping a course after the first two weeks of the semester. If a documented medical condition results in the dropping of a course after the first two weeks, it will not be counted as a failure.
3. A total of two course failures or withdrawals are allowed. Upon failure or withdrawal from the third course, students are dismissed from the program.

Incoming Transfer Students

For those students wanting to transfer into the program from another institution:

1. Must be transferring from an AVMA accredited program and submit the following:
   a. An official transcript of veterinary technology course work.
   b. Completed Northeast Community College Veterinary Technology Program Disclosure Statement.
   c. A signed letter of good standing from the director of an AVMA accredited program. Students who cannot provide a letter of good standing from the program's director or who were dismissed from the program for academic or behavioral issues will not be accepted.
2. Transfer students must complete the same selection process as all of Northeast's students. To determine their GPA, the program director will use course grades that are "C+" or higher in an equivalent course. If there is no equivalent course work, the transferring student must take the Northeast Community College Veterinary Technology Program's required course.
3. Transferring students with a 2.5 GPA in the four veterinary technology courses may be invited to interview for the program.
4. If admitted into the program, the veterinary technology course work that the student wishes to transfer in will be at the discretion of the Northeast Community College Veterinary Technology program director. All other college course work will be evaluated by the college registrar for acceptance. Only grades of "C+" or higher in veterinary technology courses will be accepted.
5. All transferring students must agree to follow the Northeast Community College Veterinary Technology Program requirements.
6. All transfer students who have been admitted into the program must take the following courses through Northeast Community College: VTEC 2612, VTEC 2611, VTEC 2622, VTEC 2621, VTEC 1410, VTEC 1411, VTEC 1211, VTEC 2562, VTEC 2561, VTEC 1220, VTEC 2520, VTEC 2521, VTEC 2680, and VTEC 2660. No equivalency course will be accepted for these courses.

VETERANS

Northeast Community College programs are approved by the Department of Education for students eligible to receive Veterans educational benefits. Northeast Community College proudly supports its Veterans. Services are provided through the Admissions and Registration Office in the College Welcome Center.

A dedicated Veteran Lounge provides a comfortable spot for studying or socializing. The Student Veteran Organization (SVO) helps to ease the transition into college life, as well as provide service opportunities within the community.

Northeast also offers college credit for qualifying military experiences, based on American Council on Education (ACE) guidelines. Qualifying students are eligible for in-state tuition rates.

Consistent with the Veterans Benefits and Transition Act of 2018, Section 3679 of title 38, United States Code, Section 103, Northeast Community College does not impose any penalties due to the delayed disbursement of a payment by the U.S. Department of Veteran Affairs, VA, on recipients of Chapter 31 and Chapter 33 VA Benefits. Northeast will permit any covered individual to attend or participate in the course of education during the period beginning on the date on which the individual provides Northeast Community College with a certificate of eligibility for entitlement to educational assistance under Chapter 31 or 33, and ending on the earlier of the following dates:

1. The date on which payment from the VA is made to the institution **OR**
2. 90 days after the date the institution certified tuition and fees following the receipt of the COE (*Certificate of Eligibility*).

Additionally, Northeast will not require that a covered individual borrow additional funds, on any covered expense because of the individual's inability to meet his or her financial obligations to the College, due to the delayed disbursement of funding from the Department of Veterans Affairs under Chapter 31 or 33. A covered Individual is any individual who is entitled to educational assistance under Chapter 31-Veterans Readiness and Employment Services, or Chapter 33-Post 9/11 GI Bill® benefits, and has been verified by the school certifying official as benefit

eligible. This requirement is limited to the portion of funds paid by the VA.

A Veteran and/or eligible person must make satisfactory progress toward an approved educational objective leading to employment. Veteran and/or eligible person's Standard of Progress will be determined by utilizing the Academic Standards as listed in the College catalog:

- Student Attendance (*see page 28-29*)
- Student Code of Conduct (*located in the online Student Handbook*).

Students planning to use any type of military educational benefit must complete the Northeast Community College Request Certification Form in each term. This electronic form is located on the Veteran Support page of the Northeast website.

Students who have their education at Northeast interrupted as the result of being called to active military duty will be served in the following manner:

1. The student must contact the Director of Financial Aid and the Veterans Certifying Official at Northeast prior to leaving for active duty. The student Veteran/reservist must provide a copy of the orders activating them. The copy of the orders will be on file in the Admissions and Registration Office.
2. The student is also requested to communicate the anticipated military leave to each of their instructors. The Veterans Certifying Official, within 48 hours of the student's anticipated leave date, will make a follow-up contact with the student's instructors.
3. Students being called to active duty for three weeks or less will be granted a leave of absence from Northeast to fulfill their military obligations. Upon the student's return to Northeast, every effort will be made to grant the student a timeline equivalent to double the amount of time they are absent for completion of work missed. The maximum six-week time period may be extended per individual instructor discretion.
4. If a student's absence extends beyond three weeks, the student will be administratively withdrawn, and they will be given a full refund of tuition and fees. Return of any Title IV Aid received will be calculated as of the last date of attendance prior to the military leave.
5. Students living on campus will have the option of relinquishing their on-campus housing or being charged for the amount of time their belongings remain in housing. Meal plans will be adjusted accordingly.
6. Readmission procedures for service members who have had their education interrupted due to military service can be found in the Student Military Leave and Readmission procedure on the college website.

GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government website at www.benefits.va.gov/gibill.

ADMISSIONS TESTING AND COURSE PLACEMENT

All degree-seeking and non-degree seeking students requesting to register in a math or English course, are required to complete an assessment of academic abilities prior to enrollment. This requirement can be fulfilled in one of the following ways:

- Complete a pre-enrollment placement exam through Northeast's Testing Center.
- Provide current ACT, Pre-ACT, Accuplacer Next Generation, or Map test scores.
- Submit an official college transcript demonstrating successful (*"C" grade or better*) completion of a college-level English and/or math course.

Placement test scores and previous college transcripts must be on file in the Admission and Registration Office prior to class registration. Scores and transcripts will be reviewed during advisement and used to determine appropriate levels of coursework.

If students do not have current placement test scores and have not successfully completed a college-level English or math course, a pre-enrollment assessment will be administered at the Norfolk campus or any of Northeast's extended campus locations. Distance learning students who cannot access testing services at these locations need to arrange for testing at a site near them and transfer their scores to Northeast.

For further information regarding course placement testing, please contact the Testing Center or visit the Testing Center website.

ENROLLMENT PROCEDURES FOR NEW STUDENTS

Students are eligible to enroll under the following conditions:

If the student has:

- Completed the Application for Admission,
- No outstanding financial obligations to the College,
- Not been dismissed for conduct reasons or academic suspension, and
- Provided official placement test scores or submitted official college transcripts demonstrating successful ("C" grade or better) completion of college-level English and/or math coursework.

NEW STUDENT REGISTRATION

All new degree-seeking students are required to attend a New Student Registration event prior to their first enrollment at Northeast.

New students are notified of dates when they can register for the upcoming semester. The College informs students of registration dates on the Northeast website, mail and email communication, and notices on campus. Although multiple New Student Registration events are held prior to the start of each semester, students will find it to their advantage in terms of course and time selections to register as early as possible.

During a New Student Registration event, students will meet with an advisor and register for courses after thorough discussion and review of program and college requirements. Advisors will assist students to register (*the process of enrolling*) for classes using My Northeast, a web-based student information system. My Northeast can be accessed through the My Apps portal on the website. My Northeast houses the course schedule for each academic term, as well as the student's academic and financial records.

While the focus of New Student Registration is advising and registration, students will be able to gather valuable information about required tools, equipment and program uniforms, and access a variety of student support services.

NEW STUDENT ORIENTATION

New Student Orientation events will be held in the Fall and Spring semesters for incoming degree-seeking students, along with students who are returning to Northeast, or transferring to Northeast from another institution. New Student Orientation serves to familiarize students with the services and resources available to them at Northeast. During Orientation, students will connect with advisors, faculty, and other students and will learn helpful information to get their semester off to a great start!

ENROLLMENT PROCEDURES FOR CURRENT, RETURNING, OR TRANSFERRING STUDENTS

Students who are currently or have been previously enrolled at Northeast and students who are transferring to the College may register for the following semester during scheduled times in the spring and fall. The College informs students of registration dates on the Northeast website, mail and email communication, and the published academic calendar. Students will find it to their advantage in terms of course and time selections to register as early as possible.

ADVISING

All students are required to meet with an academic advisor prior to registration until they have earned 28 credit hours and are in Good Standing academically. Every degree-seeking student is assigned an advising team made up of a First Year Advisor and a Faculty Advisor.

Advisors help students with schedule building and adjustment, transfer planning, career exploration and development, changes of major, academic recovery, and other issues impacting academic success. First Year Advisors are located in the College Welcome Center. Faculty Advisors are typically faculty within the student's program of study. Advisor assignments can be found in the student's My Northeast account and Degree Works.

While advisors provide guidance, final responsibility for planning courses, meeting requirements, and observing regulations lies with the student. Students should read this catalog carefully as their source of information on requirements and regulations. Electives and/or substitutions must have the approval of the Advisor and/or Dean of the Division of the student's program.

CAREER EXPLORATION

For students who are uncertain or undecided about their program of study, Northeast Community College offers opportunities for career exploration. Students can schedule appointments at Career Services with the Career Education and Outreach Coordinator for personalized assistance. The services offered are career assessments, career information, job shadowing, micro-internships, and career fairs. Students may also seek career guidance by visiting with their First Year Advisor or their instructors.

CHANGING A FIELD OF STUDY, PATHWAY, OR PROGRAM

Students may add or change their Field of Study, Pathway, or Program by completing one of two online forms with their advisor. The applicable form must be submitted by the student and their First Year Advisor, Division Dean or Associate Dean, or the Director of their program after thorough discussion and careful consideration of the impact a change or addition will have, if any, on financial aid, transfer, and degree completion timeline.

The form must be filled out completely and submitted online to the Admissions and Registration Office for processing. Forms submitted after the second week of any semester will not go into effect until the following academic term. Exceptions may be granted with approval from the Registrar or their designee.

If the student is requesting a change to a limited enrollment program, the student must check with the Admissions and Registration Office regarding the availability of space in the program. Changing one's program to a limited enrollment program does not guarantee a spot in the program.

COURSE DROP AND ADD

Students needing to make schedule changes need to do so in the first week of the term. Any exception to this must be approved by the Program Director, Associate Dean, or Dean associated with the course and the student must submit a Drop/Add Form to the Admissions and Registration Office.

Adding a Full-Semester Course

Once registration opens for an upcoming semester, students may register for full-semester courses in My Northeast through the first week of the term. Students are strongly encouraged to make schedule changes during the first week of the semester. In the rare instance a student needs to add a course during the second week of the semester, they must get permission from the Program Director, Dean, or Associate Dean associated with the course and submit a Drop/Add Form to the Admissions and Registration Office.

Dropping a Full-Semester Course

Students may drop full-semester courses online in My Northeast through the second week of the semester. Once the online drop period has ended, students must submit a completed Drop/Add Form to the Admissions and Registration Office. The Drop/Add Form can be obtained from the Admissions and Registration Office or downloaded from the College's website. Students wishing to drop a course(s) must do so by the last date to withdraw from full-term courses which is published in the academic calendar found in the College Catalog and on the website.

Short-Term Courses

Courses with a shortened or alternate schedule will not follow standard drop/add periods. Students should consult with their Advisor or the Admissions and Registration Office for dates.

Student Veterans

Students receiving Veteran benefits and withdrawing from a course(s) which will drop them below the required credit level may be required to reimburse the Department of Veteran Affairs for payments received for that term. Students may contact the Northeast School Certifying Official with questions.

TERM WITHDRAWAL

Students wishing to withdraw from all their courses following the two-week online drop period must complete a Term Withdrawal Form. This form is available in the Admissions and Registration Office or from their advisor.

Students who submit a Term Withdrawal Form will receive a "W" grade for each course they were enrolled in. Students must submit the form prior to the official last date to withdraw for that part of term.

Any student who stops attending classes and does not officially withdraw prior to the official last date to withdraw will receive a "UF" (*Unearned "F"*) grade.

In the case of extenuating circumstances, the Executive Director of Student Success, or their designee, can determine that the student qualifies for a "W" grade after the withdrawal period has officially ended.

The term withdrawal date for the purpose of returning unearned military tuition assistance and/or Federal financial aid program funds will be determined by the student's last day of attendance.

Students receiving Veteran benefits who withdraw from Northeast without extenuating circumstances may be required to reimburse the Department of Veteran Affairs for payments received retroactive to the beginning of the term.

TRANSFER PLANNING

Northeast Community College strives to make the transfer process to four-year institutions as seamless as possible. Students planning to transfer to another institution should work closely with their First Year and Faculty Advisors to select courses that best fit their transfer plans.

Northeast has transfer articulation agreements with several institutions in Nebraska, South Dakota, and Iowa. Transfer information can be accessed on the Advisement page on the website.

The Nebraska Transfer Initiative was signed in 1995 by 25 post-secondary institutions in Nebraska.

This initiative is a cooperative effort by Nebraska's public and private higher education institutions to facilitate the transfer of students who have earned an Associate of Arts or Associate of Science degree into baccalaureate-level programs. The signing of this document has led to increased cooperation in the transfer of courses between Nebraska's community colleges and its four-year institutions. Through this initiative, associate and baccalaureate-granting institutions are equal partners in providing the first two years of a baccalaureate degree.

In addition to articulation agreements, Northeast has now joined the other Nebraska higher education institutions with the Transfer Nebraska website. Students may refer to the Transfer Nebraska link on the Northeast website for transfer equivalency information. This one-stop site allows students to easily check transferability of classes to and from various colleges, including Northeast. Instant access to accurate information helps students to plan better schedules thus saving time and money.

FOUNDATIONAL COURSEWORK

Foundational English

Foundational English is designed to improve and enhance English skills in reading, writing, spelling, and vocabulary. Instruction is based on the student's individual needs, such as use of context clues, five step paragraph development, thesis statements, grammar, sentence types, correction of fragments and run-ons, main ideas, relationships, inferences, and the author's purpose and tone. In addition, students can receive English assistance in other courses. See course descriptions.

Foundational Math

The foundational math program is designed to build and enhance skills necessary for student success in college-level mathematics. There are multiple pathways to progress through foundational mathematics depending on placement and degree requirements. Instruction is based on individual needs and enables students to progress from where they are to where they need to be. Foundational courses emphasize skill-building and concepts related to the required college math course(s) needed for graduation. Students can receive individual assistance for their required courses. See course descriptions.

FIRST YEAR EXPERIENCE

Successful transition to college happens by design, not accident. First Year Experience is a credit course designed to increase a student's likelihood of attaining and maintaining academic, personal, and career success. Students will learn techniques that foster success in college and in life within this engaging and rewarding learning environment.

ENGLISH AS A SECOND LANGUAGE (ESL)

Northeast Community College offers a sequence of classes for students who want to develop English language proficiency. Students may enroll in non-credit offerings through the Adult Education Office with classes that begin with basic literacy instruction and continue through more advanced language and writing skills. Credit classes are also offered that will develop English language skills through advanced levels in preparation for the TOEFL exam or college coursework.

Students are required to complete assessment testing to determine appropriate placement into the sequence of courses. Additional information concerning non-credit ESL instruction can be obtained by contacting the Adult Education Office. For information about credit ESL courses and language placement testing, contact the Student Services Office in the College Welcome Center.

STUDENT ATTENDANCE

Students are expected to attend classes and complete assignments, including those missed due to absence, as scheduled. Each instructor develops and enforces the attendance requirements for their course(s). Students who cannot attend a class must notify the course instructor. In cases of extended illness, students must also notify the Executive Director of Student Success. Students who miss class due to military obligations must notify the College's VA Certifying Official in the Admissions and Registration Office.

In addition, instructors are required to report students who fail to establish attendance and/or students who stop attending class, as described in the following:

Student Failure to Start Attendance/ Administrative Withdrawal

Northeast Community College is required to verify the enrollment and participation of students who participate in Federal Title IV student aid programs and/or who receive educational benefits through alternate funding sources. Attendance is established when a student physically attends a class or submits a graded assignment in an online class. Submitting the syllabus confirmation does not qualify as active participation. Students who fail to start a class and never complete an assignment will be administratively withdrawn from the course and the student's financial aid will be adjusted to reflect eligibility for only those courses attended.

Students who have been administratively withdrawn from a course will have the course and all tuition and fees associated with the course removed from their record. Students who are administratively withdrawn will receive email notification from the Admissions and Registration Office.

Students who have not had any active participation in a course in the first two weeks of the term will not be allowed to re-enroll in the course. In the event that the student can prove they had active participation within the first two weeks, the student must appeal to the course instructor to be re-enrolled.

Students Who Stop Attending/ Unofficial Withdrawal

Students are expected to follow the College's Drop/ Withdrawal procedures. Students who stop attending a course after attendance has been established must drop the course and/or withdraw from the term or they will be reported for non-attendance. Stopping attendance during a term is defined as not actively participating in a course for 14 consecutive calendar days. Stopping attendance does not cancel tuition charges or prevent the course and grade from appearing on the student's academic record. Students who have stopped attending a course and fail to officially drop the course will be unofficially withdrawn and assigned a "UF" (Unearned "F") grade.

A "UF" grade is counted as a failure in the calculation of grade point average and academic standing. A student who is assigned a "UF" grade will not be allowed to return to the class for the current term. The issuance of a "UF" grade will activate re-evaluation of the student's financial aid and may result in repayment as noted in the Return to Title IV guidelines.

Students who have been issued a grade of "UF" can officially withdraw from the course by submitting a Drop/Add or, if withdrawing from all courses, a Term Withdrawal form to the Admissions and Registration Office by the official last date to withdraw for that part of term. This will replace the "UF" grade with a "W" for the course(s) from which they are officially withdrawn.

ACADEMIC STANDARDS

Every student who enrolls at Northeast is expected to make progress toward the completion of their education goal. Students are evaluated at the end of each term, resulting in the following:

President's List

Academic Standing Measures: Student must earn a 4.0 GPA after completing at least 12 credit hours in nominated semester.

Academic Outcomes: Student will be recognized as an outstanding student.

President's List for Part-Time Students

Academic Standing Measures: Student must earn a 4.0 GPA after completing at least 6 credit hours in nominated semester.

Academic Outcomes: Student will be recognized as an outstanding student.

Dean's List

Academic Success Measures: Student must earn a GPA of 3.75 to 3.99 after completing at least 12 credit hours in nominated semester.

Academic Outcomes: Student will be recognized as an outstanding student.

Dean's List for Part-Time Students

Academic Success Measures: Student must earn a GPA of 3.75 to 3.99 after completing at least 6 credit hours in nominated semester.

Academic Outcomes: Student will be recognized as an outstanding student.

Good Standing

Academic Standing Measures: Student must earn and maintain a cumulative GPA of 2.0 or higher.

Academic Outcomes: Student may pursue their academic goals with no restrictions. Student must attain a cumulative GPA of 2.0 or higher in their graduating term to receive a degree, diploma or certificate.

Academic Warning

Academic Standing Measures: Student earns a cumulative GPA of 1.99 or less.

Academic Outcomes: Student will be placed on Academic Warning and restricted to no more than 12 credit hours in the following semester. A registration restriction will be placed on student's account.

Student must meet with a First Year Advisor prior to or at the beginning of the academic warning semester to develop an Academic Recovery Plan and adjust their schedule. Student must meet with a First Year Advisor to register for any subsequent terms until their cumulative GPA is 2.0 or higher.

Student will remain in Academic Warning until their cumulative GPA is 2.0 or higher as long as a semester GPA of 2.0 or higher is earned in every subsequent term. Student returns to Good Standing when their cumulative GPA is 2.0 or above. Appeals for an increase in credit hours should be directed to the Executive Director of Student Success once an Academic Recovery Plan has been developed.

Academic Probation

Academic Standing Measures: Student on Academic Warning and did not achieve a 2.0 semester GPA in the next semester.

Academic Outcomes: Student will be placed on Academic Probation and restricted to no more than 6 credit hours in the following semester.

Student must meet with a First Year Advisor prior to or at the beginning of the academic probation registration for the following semester to develop

an Academic Recovery Plan and adjust schedule. A registration restriction will be placed on student's account. Student must meet with a First Year Advisor to register for any subsequent terms until cumulative GPA is 2.0 or higher.

Student will remain on Academic Probation until their cumulative GPA is 2.0 or higher as long as a semester GPA of 2.0 or higher is earned in every subsequent term. Student returns to Good Standing when their cumulative GPA is 2.0 or above. Requests for an increase in credit hours for students on academic probation should be directed to the Executive Director of Student Success once an Academic Recovery Plan has been developed.

Academic Suspension

Academic Standing Measures: Student on Academic Probation and did not achieve a 2.0 semester GPA in the next semester.

Academic Outcomes: Student will be placed on Academic Suspension and prohibited from enrolling for one semester, excluding the summer term. Student will be administratively withdrawn from any classes they are enrolled in for the next term. Student must meet with a First Year Advisor to develop an Academic Recovery Plan prior to re-enrolling.

To appeal Academic Suspension, student must submit an Academic Suspension Appeal packet and meet with the Executive Director of Student Success. If an appeal is granted, student will remain on Academic Probation, adhering to any requirements imposed by the Executive Director of Student Success. Failure to follow through with requirements and achieve a 2.0 semester GPA will result in Academic Suspension for two full semesters. Student returns to Good Standing when their cumulative GPA is 2.0 or above.

To maintain financial aid eligibility, students must comply with the Satisfactory Academic Progress (SAP) standards outlined on pages 14-16. Academic standing impacts other services and activities, to include Veteran's benefits, collegiate athletics and housing.

TRANSCRIPTS

Official academic transcripts may be requested through Northeast Community College's Electronic Transcript Order Site. The order site can be used to request both electronic delivery and mailed transcripts. Directions on requesting transcripts through the online order site can be found on the Records and Registration page of the Northeast website. Printed transcripts may also be requested directly from the Admissions and Registration Office by submitting a completed Transcript Request Form. Please allow 1-2 business days for processing.

Northeast cannot release another institution's transcript to a third party, including the student to whom the record belongs. These records must be requested through the original credit-granting institution.

Northeast Community College abides by the Family Educational Rights and Privacy Act of 1974 (FERPA).

DISABILITY SERVICES

Northeast Community College is committed to providing equal access to all instructional material, facilities, services, and activities for all students to include those with disabilities (permanent or temporary to include those who are pregnant) who require reasonable accommodations to participate fully.

A student requesting accommodations must disclose a permanent or temporary diagnosed disability exists to the Disability Services Office and complete an application. A student provides documentation of a disability as defined by the Americans with Disability Amendment Act 2008 (ADAAA) and Section 504 of the rehabilitation act of 1973. Under the ADAAA and Section 504, a person has a disability if a physical or mental impairment substantially limits one or more major life activities that includes but is not limited to caring for oneself, performing manual tasks, seeing, hearing, sleeping, walking, standing, lifting, bending, speaking, breathing, learning, reading, concentrating, thinking, and communicating.

Students with a disability (SWD) have a right to:

- Equal access to courses, programs, services, jobs, activities, and facilities;
- Reasonable, appropriate, and effective accommodations, academic adjustments, and or auxiliary aids that are determined on an individual basis; and
- Have all documentation pertaining to their disability kept confidential with the choice of whom to disclose information to, except as required by law.

The Disability Services Office is the designated office to receive and file disability related documents. Reasonable accommodations are determined on an individual basis following a comprehensive intake interview with the student by Disability Services staff. The Director of Disability Services is Northeast's designated staff person who determines necessary and appropriate accommodations with the student.

Examples of appropriate accommodations, academic adjustments, and/or auxiliary aids consist of:

- Testing accommodations which may include listening to exams, extended time for exams, calculator usage, and/or taking exams in a reduced distraction environment.
- Obtaining textbooks in an electronic format to listen to the textbook while reading.
- Note-taking accommodations such as copies of lecture notes, access to Power Point presentations, and/or recording lectures; usage of note-taking technology such as smart pens and apps.
- Usage of computer software and apps including, but not limited to, speech recognition software and text-to-speech software.
- FM systems.
- Interpreters for students who are deaf.
- Adjustments to course participation.

Some accommodations may take several weeks to put into place, so please make requests known early.

To obtain additional information, and/or to schedule an appointment:

- Visit to the Disability Services Office in the College Welcome Center, Room 1263,
- Call (402) 844-7343,
- E-mail disability@northeast.edu, or

Visit northeast.edu/support-services/disability-services.

The Section 504/ADA/Title IX Compliance Officer at Northeast Community College is the Vice President of Human Resources & Organizational Development.

INSURANCE

Because Northeast does not provide insurance coverage for illness or injury, the College urges students to carry some form of personal health insurance.

Northeast highly recommends that any student living either on campus or renting off campus invest in renter's insurance or verify that their family's home-owners insurance covers their rental unit.

CAMPUS ALERT

Northeast believes that safety on the main and extended campuses is of paramount importance. Campus Alert is available to all staff, faculty, and enrolled students. Northeast's Campus Alert system will disseminate timely emergency notifications and severe weather announcements via text message, email, and/or voice messages. For more detailed information, visit the Northeast website.

STUDENT RESPONSIBILITIES, RIGHTS, AND FREEDOMS

Members of an academic community are expected to conduct themselves in a mature and responsible manner. It is the policy of Northeast Community College to allow students maximum freedom consistent with good scholarship and good citizenship. Good citizenship implies high standards of conduct both on campus and elsewhere and requires conformity to the laws of the United States, State of Nebraska, and its subdivisions, and to College policies and regulations.

Student conduct is governed by the Northeast Community College Student Code of Conduct available on the Student Handbook page of the Northeast website at northeast.edu/student-handbook.

Northeast Community College does not discriminate on the basis of race, gender, religion, national or ethnic origin, military or Veteran status, political affiliation, marital or family status, age, disability, sexual orientation, gender expression or identity in educational programs, admissions policies, employment policies, financial aid or other College administered programs and activities. It is the intent of Northeast Community College to comply with both the letter and the spirit of the law in making certain discrimination does not exist in its policies, regulations and operations.

Inquiries may be addressed to:

Northeast Compliance Officer for Title IX, ADA, Section 504
Vice President of Human Resources & Organizational Development
P.O. Box 469
Norfolk, NE 68702-0469
Phone: (402) 844-7046
E-mail: complianceofficer@northeast.edu

Inquiries may also be mailed to:

U.S. Department of Education
Office for Civil Rights
One Petticoat Lane
1010 Walnut Street, 3rd Floor, Suite 320
Kansas City, MO 64106

STATEMENT OF STUDENT/PARENTS' RIGHTS AS RELATED TO STUDENT EDUCATIONAL RECORDS

Northeast Community College complies with all federal, state, and local laws, which relate to student records including the Family Educational Rights and Privacy Act (FERPA) and pursuant regulations. Regardless of the student's age, rights under FERPA begin when a student enrolls at Northeast Community College.

The College Registrar through the Vice President of Student Services is responsible for maintaining and controlling all student education records. An individual who believes that the College has failed to comply with the requirements of FERPA may file a complaint with:

U.S. Department of Education
400 Maryland Avenue, SW
Washington, DC 20202-8520

Under the law, directory information may be released by the College without the student's consent. The following items are considered directory information:

- The student's name, address (*mailing and email*), and telephone number,
- The student's program of study,
- Any participation in officially recognized sports and activities,
- The weight and height of athletic team members,
- The student's terms of enrollment,
- Any certificates, diplomas, or degrees conferred,
- Any college honors and awards received,
- The student's enrollment status (*full-time or part-time*),
- Photographs,
- And the most recent previous institution attended by the student.

If a student does not desire such directory information to be released, a request in writing must be filed in the Admissions and Registration Office.

Release of information other than directory information normally requires written permission from the student. The College may release non-directory information without consent in specific cases as outlined in College policies. Northeast maintains a record of all disclosures, and if a student so requests, a copy of the disclosure will be given to the student.

Northeast officials may release information without student's prior written consent to the following groups:

- Northeast Community College faculty and staff with a legitimate educational interest and needs to review an educational record in order to fulfill his or her professional responsibilities for the College.
- A secondary educational institution in which the student is co-enrolled.
- Person or company with whom the College has contracted as its agent to provide a service instead of using College employees or officials (*such as an attorney, auditor, collection agent, verification agency such as the National Student Clearinghouse*).
- Specified officials for audit or evaluation purposes.
- Appropriate parties in connection with financial aid to a student.
- Organizations conducting certain studies on or on behalf of the school.
- Accrediting organizations.
- To comply with a judicial order or lawfully issued subpoena.
- Appropriate officials in cases of health and safety emergencies.
- State and local authorities, within a juvenile justice system, pursuant to specific State law.

Students have the right to inspect their educational records. The College will not withhold a student's record from a student who has properly requested information under the conditions described in College policies and presented valid identification. A student has the right to request an amendment of their record, obtain a hearing related to their record, or add a statement to their record. An individual who

believes that he or she has been denied the right to view appropriate records may appeal the decision with the Vice President of Student Services through the student grievance procedure. This procedure does not apply to disputes about grades assigned by faculty. For information on the grade appeal policy and procedure, refer to the Grading Student Handbook page of the Northeast website at northeast.edu/student-handbook or the College Catalog.

For additional information regarding students' rights and freedoms, refer to the Student Code of Conduct available on the Student Handbook page of the Northeast website at northeast.edu/student-handbook. To obtain a complete copy of the College's policy governing educational records, contact the Vice President of Student Services.

STUDENT CONSUMER INFORMATION

The following is a sample of consumer information that is available upon request in the Student Services Office:

- The rate of retention,
- The number of students who complete the programs they start at Northeast,
- The types of financial aid available and how to apply,
- How and when financial aid is distributed,
- The criteria for continued financial aid eligibility,
- The refund and Return of Title IV Funds policy,
- Admission and registration information,
- Athletic equity information,
- The drug and alcohol policy including treatment recommendations,
- And statistics related to crime and security, fires, and crime prevention information.

COMPLAINT PROCESS

If a student or future student encounters a College-related problem that they do not know how to resolve, students should always try to work out the problem by first discussing it with those directly involved with the issue. If, however, an issue or problem still exists, there is a formal complaint process at Northeast Community College that students may initiate. All formal complaints must be put in writing using the online Student Complaint Form. All documented complaints will be tracked to ensure an action has been taken.

Complaint: A written concern or formal charge of dissatisfaction with a person, service, or process that requires clarification, investigation, and resolution. This requires completion of the Student Complaint Form.

Exclusions: The Student Complaint Process does not apply to grade appeals, complaints of sexual harassment, or any student-to-student complaints. Please refer to the College website for information on grade appeals and the Student Code of Conduct for procedures regarding sexual harassment or student-to-student complaints.

Instructions for initiating a formal complaint:

1. Attempt to resolve the issue by speaking directly with the individual(s) or office(s) involved.
2. Complete and submit the online Student Complaint Form.
3. When the complaint is received by the Dean of Students, it will be forwarded to the appropriate individual to review and address the issue.
4. After the concern has been addressed, the student/future student will receive communication from the Dean of Students documenting the receipt, review, and resolution of the complaint.

If a student feels the administrative response is not satisfactory, the Formal Student Grievance Process may be initiated. See page 21 of the Student Code of Conduct.

Individuals, other than students, engaged with the College that would like to file a complaint can contact the Vice President of Administrative Services Office to formally submit their complaint.

DISTANCE EDUCATION STUDENT COMPLAINTS

In compliance with the Higher Education Opportunities Act of 2008, the U.S. Department of Education conducted a Negotiated Rule Making Process in 2010, and institutions offering distance education must provide enrolled and prospective students with contact information for filing complaints with its accrediting agency and with the appropriate state agency for handling complaints in the student's state on the website and in the College catalog.

It is recommended that students taking online classes at Northeast Community College first pursue their concerns locally via the institutional complaint process. Students taking online classes at Northeast Community College who reside out-of-state should follow the instructions for initiating a formal complaint listed below.

1. The student should begin the complaint process with the institution.

If a resolution is not found, the student would contact the institution's home state SARA Portal Entity. NC-SARA maintains a directory of SARA State Portal Entity contacts.

Additional agency contact information for filing student complaints can also be found on the Northeast website.

STUDENT GRIEVANCES

If a student feels the administrative response to a formal complaint is not satisfactory, the Student Grievance Process may be initiated.

The grievance may be based upon event(s) or condition(s) which affect the welfare of the student. This includes the interpretation, meaning, or application of any College policy, procedure, or an action or position taken by the College or by a College staff member.

Student Grievance Procedures

1. **Step One:** Within five (5) College working days of the of receipt of the complaint resolution, the student [*the grievant*] shall file a written notice, in any format, stating the nature of the grievance and deliver such notice to Vice President of Student Services. Within five (5) College working days after the written grievance has been filed, the accused, their immediate supervisor, and the appropriate divisional vice president shall meet and review the grievance. If the grievance is regarding a College policy or procedure, the appropriate staff/faculty member with oversight of the policy or procedure, and the appropriate divisional vice president shall meet and review the grievance. This meeting shall be set up by the divisional vice president or their designee. Within ten (10) College working days from the date of filing the written grievance, the divisional vice president or their designee will set up a meeting with the grievant and the accused, at a mutually agreed upon time and place, to discuss the grievance. The grievant shall have the option of requesting the attendance of the accused's immediate supervisor at this meeting.
2. **Appeal:** If the grievance cannot be resolved in Step One and the grievant desires to pursue the grievance further, the grievant must file a "Formal Student Grievance Appeal" on a form available from the Dean of Students within five (5) College working days of the informal meeting identified in Step One. The Dean of Students shall schedule a formal grievance hearing within ten (10) College working days of the date the "Formal Student Grievance Appeal" is filed. A "Grievance Committee" shall hear the grievance. A Grievance Committee consisting of one (1) representative of each College employee group (exempt, non-exempt, and Faculty) shall be appointed by the Dean of Students or Vice President of Student Services respectively, and three (3) student members who shall be selected by the Dean of Students or the Vice President of Student Services, and the Dean of Students or Vice President of Student Services serving as the Chair. The grievant or the accused shall have the right to strike any of the Committee members selected from the employee groups or the students prior to the hearing. Any stricken Committee member shall be replaced by a new member selected by Dean of Students or the Vice President of Student Services. The Grievance Committee shall issue a decision either supporting or not supporting the grievance within five (5) College working days of the hearing, and shall file a "Formal Grievance Disposition" with the Human Resources Office. The Human Resources Office shall send the "Formal Grievance Disposition" to the grievant and the accused by certified mail, return receipt requested, within three (3) College working days of the receipt of the "Formal Grievance Disposition". The Human Resources Office shall also provide a copy of the disposition to the Dean of Students and Vice President of Student Services.

Time Limits

1. The failure of the grievant or the accused to act within the prescribed time limits will act as a bar to any further appeal.
2. The failure of the Grievance Committee or the designated administrator to give a written decision within the prescribed time limits shall permit the grievance to proceed to the next step.
3. Any grievances not appealed within the time limits shall be deemed settled on the basis of the Grievance Committee or designated administrator's last written response.
4. Time limits may be extended at any step by mutual consent of both parties involved. Notice of any such extended time limits shall be provided to the Human Resources Office in writing, at which time the new date shall be controlling.

Separate Grievance File

All documents, communications, and records dealing with the processing of a grievance involving a student shall be filed in a separate grievance file and shall not be kept in the student file or the employee file of any participant until the final decision is rendered, at which time the disposition will be placed in the student or employee file.

Documentation

1. **Step 1:** The student/future student will receive communication from the Dean of Students documenting the receipt, review, and resolution of the complaint.
2. **Step 2:** Time, date, who attended, and a copy of the signed written agreement, if resolved at this level, is to be filed with the parties involved and the Human Resources Office.

3. **Appeal:** The Formal Grievance Disposition will be completed and signed by the chairperson of the Grievance Committee.
4. A recording of the proceedings in Step 2 shall be made and shall be the official transcript of the proceedings; no other recordings shall be permitted.

Retribution or Retaliation

Under no circumstances will any person who in good faith files a grievance or assists in a hearing and/or investigation be subject to any form of retribution or retaliation. Any person who makes or participates in such retribution or retaliation, directly or indirectly, will be subject to disciplinary action. A person who believes he or she has been or is being subjected to retribution or retaliation should immediately notify the Associate Vice President of Human Resources & Organizational Development or his or her designee (*employees*) and/or the Vice President of Student Services or his or her designee (*students*).

Other

None of the meetings and hearings under these procedures shall be conducted in public, except as provided in this procedure, and shall include only the grievant, the accused, committee members, and individuals called to give testimony.

Costs associated with additional copies of materials, reports, certified mail, or written transcripts requested by the grievant and not identified in these procedures shall be paid by the grievant.

Transcripts, reports, or other information generated as a result of the grievance shall be confidential records and shall be reviewed only with the parties involved in the grievance process.

ASSESSMENT OF STUDENT LEARNING

Northeast Community College measures student learning as part of its ongoing efforts to improve co-curricular and academic programs. Through the assessment of student learning, Northeast Community College continuously monitors its effectiveness and implements changes for improvement.

The College utilizes a variety of direct and indirect measurements for assessment of Student Learning. Examples include:

- Entry-level tests and assessments for beginning students.
- Comprehensive exams at the course and program levels.
- Nationally standardized tests.
- Formal and informal surveys.
- Strategies that assess general education learning-outcomes within courses and/or through specially scheduled activities.
- Post-graduation surveys.
- Capstone courses.

STUDENT PARTICIPATION IN COLLEGE ASSESSMENT ACTIVITIES

Admission to Northeast Community College implies each student's willingness to participate in various efforts of the College to assess learning outcomes and the effectiveness of its co-curricular and academic programs. All students enrolled at Northeast may be asked to participate in assessment activities. Students should take their assessment activity participation seriously.

The cost to the student is a small amount of time; the results are improved programs, services and instruction. Information collected is used to determine program and institutional effectiveness with regard to student learning outcomes. Assessment reports present data in aggregate form. Analysis and results focus on group rather than individual outcomes.

GENERAL EDUCATION PHILOSOPHY

General Education at Northeast Community College provides students with a cohesive set of coursework that supports their educational, personal, and career development. General Education expands students' perspectives beyond the skills required in their chosen disciplines and provides them with a foundation for lifelong learning. Experiences in general education form the basis necessary for making informed and reasoned contributions at work, at home, and in society.

INSTITUTIONAL OUTCOMES

Members of society need to communicate effectively, reason, and demonstrate relational perspective and stewardship as responsible citizens. Northeast Community College has established a set of institutional outcomes to enhance these attributes.

Institutional outcomes can be achieved in general education courses, degree-specific courses and during co-curricular activities. The following identify the institutional outcomes and learning objectives that are integrated into a variety of courses and activities at the College.

- **Stewardship:** Students will demonstrate stewardship.
- **Communication:** Students will communicate effectively.
- **Reasoning:** Students will analyze information.
- **Relational Perspective:** Students will discuss their connection in the world.

GENERAL EDUCATION REQUIREMENTS

All students seeking an Associate Degree from Northeast Community College must complete general education requirements as specified by degree type.

Each associate degree offered by Northeast Community College includes the core curriculum requirements. Additional general education requirements vary according to the intended degree. A specific listing of general education courses as they apply to each of the Associate of Arts (AA), Associate of Science (AS), and the Associate of Applied Science (AAS) Degrees can be found on pages 37-39. The Associate Degree of Nursing (ADN) can be found on pages 86-87.

Students who are considering transferring credit to another institution are encouraged to select general education courses based on transferability. Students should meet with their advisors to plan for registration and academic transfer. For more information regarding the transfer of credit, please refer to the section on Transfer located in the Student and Academic Support Services section of this Catalog.

The institutional outcomes identified in the previous section are part of the Northeast general education curriculum. These outcomes are woven into the general education core and program curricula. Students receive instruction regarding each of the general education goals through the completion of requirements for an associate degree.

GRADUATION REQUIREMENTS

Students intending to receive a degree, diploma, or certificate from Northeast Community College must:

1. Attain a cumulative Grade Point Average (GPA) of 2.0 in their graduating term.
2. Earn a minimum of 15 credit hours of course instruction from Northeast Community College for a degree, 9 credit hours for a diploma, and 6 credit hours for a certificate.
3. Follow the Catalog that was in effect when the student first enrolled. A new Catalog will be followed if there has been a break in enrollment, if the student has changed majors, or if the previous program curricula is not available.
4. Complete the Graduation Application.
5. Meet the additional requirements specified for the degree, diploma, or certificate (*See Catalog section in Degree, Diploma, Certificate, or Programs of Study*).
6. If a student has a financial obligation with the College, the degree will be awarded but a diploma will not be issued until all debts are paid in full.

DIPLOMA REQUIREMENTS

Diploma programs at Northeast Community College are designed for students who want a skill in less time than it takes to earn an Associate of Applied Science Degree. These programs are complete programs of study leading to specific employment skills. Students must satisfactorily complete a prescribed program of 30 or more semester credit hours and have a cumulative grade average of "C" or better to receive a diploma. A student with transfer hours must earn a minimum of 9 credit hours from Northeast Community College when seeking a diploma.
Note: *Hours earned in courses below the 1000 level will not be counted towards the required 30 hours for a diploma.*

CERTIFICATE REQUIREMENTS

Certificates are awarded for successful completion of a planned curriculum of credit courses for a specific skill area with a minimum of 16 semester credit hours. Students must have a cumulative grade average of "C" or above. A student with transfer hours must earn a minimum of 6 credit hours from Northeast Community College when seeking a certificate. Certificates of Continued Learning are also awarded for non-credit classes.

DEGREE REQUIREMENTS

Northeast Community College offers the following degrees:

- The Associate Degree in Nursing (ADN)
- Associate of Applied Science Degree (AAS)
- Associate of Arts Degree (AA)
- Associate of Science Degree (AS)

See Nursing in the Degree Offerings section of this Catalog for ADN requirements. The number of required general education credit hours vary by degree. Specific course requirements for each degree are listed on the following pages.

ASSOCIATE OF ARTS DEGREE REQUIREMENTS

The Associate of Arts Degree is conferred upon the completion of all requirements for graduation in a liberal arts curriculum, including academic/college transfer.

A. A student must satisfactorily complete a minimum of 60 semester hours in a course of study with a cumulative grade point average of "C" or better.
Note: *Hours earned in courses below the 1000 level will not be counted towards the required 60 semester hours for graduation.*

B. A student must satisfy the following minimum general education requirements:

1. Communication ..... **6 Cr. Hours**
(*must earn a "C" or above in each*)

Oral (*select one*)

a. COMM 1010 Fundamentals of Communication.....(3 cr.)
b. COMM 1110 Public Speaking ..... (3 cr.)

Written (*required*)

a. ENGL 1010 English Composition I ..... (3 cr.)

2. Behavioral & Social Sciences ..... 9 Cr. Hours

Behavioral Science (*select one*)

a. PSYC 1810 Introduction to Psychology ..... (3 cr.)
b. SOCI 1010 Introduction to Sociology ..... (3 cr.)

History (*select one*)

a. HIST 1030 Premodern Europe ..... (3 cr.)
b. HIST 1040 History of Modern Europe ..... (3 cr.)
c. HIST 1050 World History to 1500 CE ..... (3 cr.)
d. HIST 1060 World History Since 1500 CE ... (3 cr.)
e. HIST 2010 American History I ..... (3 cr.)
f. HIST 2020 American History II ..... (3 cr.)

Social Science (*select one*)

a. ECON 2110 Princ. of Macroeconomics ..... (3 cr.)
b. GEOG 1020 World Reg. Geography ..... (3 cr.)
c. POLS 1000 American Government ..... (3 cr.)
d. POLS 1600 International Relations ..... (3 cr.)

3. Humanities ..... **6 Cr. Hours**

English/Literature (*select one*)
(must earn a "C" or above in each)

a. ENGL 1020 English Composition II ..... (3 cr.)
b. ENGL 2030 Creating Poetry I ..... (3 cr.)
c. ENGL 2050 Creating Stories I ..... (3 cr.)
d. ENGL 2070 Technical Communications I ... (3 cr.)
e. ENGL 2100 Introduction to Literature ..... (3 cr.)
f. ENGL 2140 Introduction to Shakespeare ... (3 cr.)
g. ENGL 2150 American Lit. to 1865 ..... (3 cr.)
h. ENGL 2160 American Lit. after 1865 ..... (3 cr.)
i. ENGL 2170 Comic and Graphic Novels ..... (3 cr.)
j. ENGL 2190 Comparative Mythology ..... (3 cr.)
k. ENGL 2200 British Lit. to 1800 ..... (3 cr.)
l. ENGL 2210 British Lit. since 1800 ..... (3 cr.)
m. ENGL 2730 Fiction and Cinema ..... (3 cr.)
n. THEA 1010 Introduction to Theatre ..... (3 cr.)

Fine Arts and Language (*select one*)

a. ARTS 1050 Intro to Art Hist & Criticism I ... (3 cr.)
b. ARTS 1060 Intro to Art Hist & Criticism II ... (3 cr.)
c. FREN 1200 Elementary French I ..... (4 cr.)
d. HUMS 1100 Introduction to Humanities .... (3 cr.)
e. MUSC 1010 Introduction to Music ..... (3 cr.)
f. PHIL 1010 Introduction to Philosophy ..... (3 cr.)
g. PHIL 2610 Comparative Religions ..... (3 cr.)
h. SPAN 1200 Elementary Spanish I ..... (4 cr.)
i. Any other college level foreign language ... (3 cr.)

4. Mathematics (*select one*) ..... **3-5 Cr. Hours**

a. MATH 1010 Math for Elementary Teachers ... (3 cr.)
(*Elementary Education and Early Childhood majors only*)
b. MATH 1025 Math for Health Care Professionals ..... (3 cr.)
(*Pre-nursing or Associate Degree Nursing majors only*)
c. MATH 1100 Topics & Ideas in Mathematics ..... (3 cr.)
d. MATH 1140 Intermediate Algebra ..... (4 cr.)
e. Any other higher level of college math

5. Natural Science (*select one*) ..... **4-5 Cr. Hours**

a. BIOS 1010 General Biology ..... (4 cr.)
b. BIOS 2020 Introduction to Environmental Issues ..... (4 cr.)
c. BIOS 2250 Introduction to Human Anatomy and Physiology I ..... (4 cr.)
d. BIOS 2260 Introduction to Human Anatomy and Physiology II ..... (4 cr.)
e. BIOS 2460 Microbiology ..... (4 cr.)
f. CHEM 1090 General Chemistry I ..... (4 cr.)
g. CHEM 1100 General Chemistry II ..... (4 cr.)
h. PHYS 1100 Physical Science ..... (4 cr.)
i. PHYS 1410 Elementary General Physics I with Algebra and Trigonometry ..... (5 cr.)
j. PHYS 1420 Elementary General Physics II with Algebra and Trigonometry ..... (5 cr.)
k. PHYS 2110 General Physics I with Calculus ... (5 cr.)
l. PHYS 2120 General Physics II with Calculus ... (4 cr.)
m. Any other higher level of Natural Science & lab

ASSOCIATE OF SCIENCE DEGREE REQUIREMENTS

The Associate of Science Degree is conferred upon completion of all requirements for graduation in a course of study, including academic college transfer, with particular emphasis on science and mathematics.

A. A student must satisfactorily complete a minimum of 60 semester hours in a course of study with a cumulative grade point average of "C" or better.

Note: *Hours earned in courses below the 1000 level will not be counted towards the required 60 semester hours for graduation.*

B. A student must satisfy the following minimum general education requirements:

1. Communication ..... **6 Cr. Hours (*must earn a "C" or above in each*)**

Oral (*select one*)

a. ENGL 2080 Technical Communications II ... (3 cr.)
b. COMM 1010 Fundamentals of Communication ..... (3 cr.)
c. COMM 1110 Public Speaking..... (3 cr.)

Written (*select one*)

a. ENGL 1010 English Composition I ..... (3 cr.)
b. ENGL 2070 Tech Communications I ..... (3 cr.)

2. Behavioral & Social Sciences ..... **3-6 Cr. Hours (*select at least one*)**

a. AGRI 1530 Water Resources ..... (3 cr.)
b. ECON 2110 Princ. of Macroeconomics ..... (3 cr.)
c. GEOG 1020 World Regional Geography ..... (3 cr.)
d. HIST 1030 Premodern Europe ..... (3 cr.)
e. HIST 1040 History of Modern Europe ..... (3 cr.)
f. HIST 1050 World History to 1500 CE ..... (3 cr.)
g. HIST 1060 World History since 1500 CE .... (3 cr.)
h. HIST 2010 American History I ..... (3 cr.)
i. HIST 2020 American History II ..... (3 cr.)
j. POLS 1000 American Government ..... (3 cr.)
k. POLS 1600 International Relations ..... (3 cr.)
l. PSYC 1810 Introduction to Psychology ..... (3 cr.)
m. SOCI 1010 Introduction of Sociology ..... (3 cr.)

3. English/Literature ..... **3-6 Cr. Hours (*select at least one*) (*must earn a "C" or above*)**

a. ENGL 1020 English Composition II ..... (3 cr.)
b. ENGL 2030 Creating Poetry I ..... (3 cr.)
c. ENGL 2050 Creating Stories I ..... (3 cr.)
d. ENGL 2070 Technical Communications I .... (3 cr.)
e. ENGL 2100 Introduction to Literature ..... (3 cr.)
f. ENGL 2140 Introduction to Shakespeare ... (3 cr.)
g. ENGL 2150 American Lit. to 1865 ..... (3 cr.)
h. ENGL 2160 American Lit. after 1865 ..... (3 cr.)
i. ENGL 2170 Comic and Graphic Novels ..... (3 cr.)
j. ENGL 2190 Comparative Mythology ..... (3 cr.)
k. ENGL 2200 British Lit. to 1800 ..... (3 cr.)
l. ENGL 2210 British Lit. after 1800 ..... (3 cr.)
m. ENGL 2730 Fiction and Cinema ..... (3 cr.)
n. THEA 1010 Introduction to Theatre ..... (3 cr.)

4. Fine Arts and Language ..... **0-4 Cr. Hours (*see note below*)**

a. ARTS 1050 Intro to Art Hist & Criticism I ... (3 cr.)
b. ARTS 1060 Intro to Art Hist & Criticism II ... (3 cr.)
c. FREN 1200 Elementary French I ..... (4 cr.)
d. MUSC 1010 Introduction to Music ..... (3 cr.)
e. PHIL 1010 Introduction to Philosophy ..... (3 cr.)
f. PHIL 2610 Comparative Religions ..... (3 cr.)
g. SPAN 1200 Elementary Spanish I ..... (4 cr.)
h. Any other college level foreign language

Note: *A total of 9 credit hours are required between categories 2, 3, and 4 with at least 3 credit hours required from both category 2 and category 3.*

5. Mathematics ..... **6 Cr. Hours (*select at least 3 credit hours at the 1600 level or above*)**

a. MATH 1100 Topics & Ideas in Mathematics ..... (3 cr.)
b. MATH 1140 Intermediate Algebra ..... (4 cr.)
c. MATH 1150 College Algebra ..... (3 cr.)
d. MATH 1220 Trigonometry ..... (3 cr.)
e. MATH 1600 Analytic Geometry and Calculus I ..... (5 cr.)
f. MATH 2010 Analytic Geometry and Calculus II ..... (5 cr.)
g. MATH 2020 Analytic Geometry and Calculus III ..... (5 cr.)
h. MATH 2170 Applied Statistics ..... (3 cr.)
i. Any other approved higher-level Math course

6. Natural Science ..... **8 Cr. Hours (*select two*)**

a. AGRI 1131 Plant Science ..... (3 cr.) and AGRI 1132 Plant Science Lab ..... (1 cr.) **(*Agriculture Transfer and Pre-Vet Tech majors only*)**
b. BIOS 1010 General Biology ..... (4 cr.)
c. BIOS 2020 Introduction to Environmental Issues ..... (4 cr.)
d. BIOS 2250 Introduction to Human Anatomy and Physiology I ..... (4 cr.)
e. BIOS 2260 Introduction to Human Anatomy and Physiology II ..... (4 cr.)
f. BIOS 2460 Microbiology ..... (4 cr.)
g. CHEM 1090 General Chemistry I ..... (4 cr.)
h. CHEM 1100 General Chemistry II ..... (4 cr.)
i. PHYS 1100 Physical Science ..... (4 cr.)
j. PHYS 1410 Elementary General Physics I with Algebra and Trigonometry ..... (5 cr.)
k. PHYS 1420 Elementary General Physics II with Algebra and Trigonometry ..... (5 cr.)
l. PHYS 2110 General Physics I with Calculus ... (5 cr.)
m. PHYS 2120 General Physics II with Calculus ..... (4 cr.)
n. Any other Natural Science course

Note: *General education courses listed under the Associate of Arts and/or the Associate of Science Degree requirements, or recognized equivalent courses as specified within an individual program's prescribed course of study, may be substituted for courses listed above. For more information, speak with an advisor.*

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS

An Associate of Applied Science Degree is conferred upon the completion of all requirements for graduation in a career and technical education program intended to lead to an occupational career following completion. Although some college and universities may accept these courses for elective transfer credit, they are not intended to transfer to four-year colleges and universities.

A. A student must satisfactorily complete a minimum of 60 semester hours in a prescribed course of study with a cumulative grade point average of "C" or better.

Note: *Hours earned in courses below the 1000 level will not be counted towards the required 60 semester hours for graduation.*

B. A student must take a minimum of 15 credit hours of general education requirements. See Program of Study page for suggested general education requirements.

C. Student must satisfy the following general education requirements:

1. Communication ..... **3-6 Cr. Hours**
(Must select one from each of the written and oral categories or one from the combination category)

Written and Oral Category

Written

a. ENGL 1010 English Composition I ..... (3 cr.)

Oral (*select one*)

a. COMM 1010 Fundamentals of Communication ..... (3 cr.)
b. COMM 1050 Career Communication ..... (1 cr.)
c. COMM 1110 Public Speaking ..... (3 cr.)
d. Any other approved higher-level Communication course

Combination Category

a. BSAD 2050 Business Communications ..... (3 cr.)
b. ENGL 1050 Workplace Communication ..... (3 cr.)

2. Behavioral Science ..... **2-3 Cr. Hours**
(*select one*)

a. AGRI 1420 Interpersonal Skills ..... (3 cr.)
b. BSAD 1000 Human Relations and Ethics ..... (3 cr.)
c. PSYC 1000 Human Relations ..... (2 cr.)
d. PSYC 1810 Intro. to Psychology ..... (3 cr.)
e. SOCI 1010 Introduction to Sociology ..... (3 cr.)
f. Any other approved higher-level behavioral science course

3. Mathematics ..... **3-6 Cr. Hours**
(*Must meet math requirement for Program of Study*)

a. MATH 1010 Math for Elementary Teachers ... (3 cr.) (*Early Childhood majors only*)
b. MATH 1020 Technical Mathematics I ..... (3 cr.)
c. MATH 1025 Math for Health Care Professionals ..... (3 cr.)
d. MATH 1060 Technical Mathematics II ..... (3 cr.)
e. MATH 1100 Topics & Ideas in Mathematics ..... (3 cr.)
f. MATH 1140 Intermediate Algebra ..... (4 cr.)
g. MATH 2170 Applied Statistics ..... (3 cr.)

4. Social Science or Exploratory Studies ..... **2-3 Cr. Hours**

Social Science

a. AGRI 1410 Introduction to the Economics of Agriculture ..... (3 cr.)
b. ECON 1010 Personal and Business Finance ..... (2 cr.)
c. ECON/BSAD 1040 Personal Finance ..... (2-3 cr.)
d. ECON 2110 Principles of Macroeconomics ..... (3 cr.)

Exploratory Studies

a. BSAD 2250 International Business ..... (3 cr.)
b. CAPL 1290 Introduction to Job Search and Employment ..... (1 cr.)
c. LNSK 1010 First Year Experience ..... (2 cr.)
d. SOCI 2150 Exploring Unity & Diversity ..... (3 cr.)

5. Science or Technology ..... **2-6 Cr. Hours**

Science

a. HVAC 2230 Physics of Building Science ... (2 cr.)
b. INDT 1040 Industrial Process Dynamics ... (2 cr.)
c. Any Natural Science Course

Technology

Technology courses not listed need to be approved by program advisor.

a. AGRI 1500 Microcomputer Applications in Agriculture ..... (3 cr.)
b. INFO 1000 Basic Computer Applications ... (2 cr.)
c. INFO 1010 Fund of Info Technology ..... (3 cr.)
d. INFO 1100 Microcomputer Applications ... (3 cr.)
e. OFFT 1500 Microsoft Office ..... (3 cr.)
f. UTIL 1280 Computer Literacy ..... (2 cr.)

Note: *For programs that integrate technology extensively into the program curriculum, the technology course requirement has been met.*

GRADING SYSTEM

The following grades are used to record student achievement in courses of instruction:

- A+, A Superior; work of exceptional character
- B+, B Above average work
- C+, C Average quality of work
- D+, D Below average work
- F Failing work
- UF Unearned "F" grade
- P Pass; can only be used for a pass/fail class; credit awarded; no quality points
- W Withdrawal; recorded after a student formally withdraws from a class. A student must initiate action for withdrawal through the Admissions and Registration Office prior to the end of the withdrawal period.
- I Incomplete. The temporary grade of "I" may be issued when a student has completed most of the course requirements but is unable to complete the remainder due to circumstances clearly beyond their control (i.e., serious illness or an emergency). It is the student's responsibility to request an Incomplete Form from the instructor. Arrangements will then be made for the completion of the course objectives. An incomplete should not involve the student attending the majority of the class sessions during a subsequent term. An "I" must be completed by the date specified on the Incomplete Form, never more than one year after the course has concluded. If course work is not completed during this time, the "I" will be changed to an "F" on the student's permanent transcript.
- AU See Audit (page 41).

Remedial coursework (courses at the zero level) will have an R notation in front of the grade.

- RA+, RA Superior, work of exceptional character
- RB+, RB Above average work
- RC+, RC Average quality of work
- RD+, RD Below average work
- RF Failing work

Continuing Education courses are not offered for college credit and do not count toward degree requirements. Although these classes may have a grade, no credit is given and they do not count in GPA calculations. The following grading scale is used for continuing education courses:

- NA+, NA Superior, work of exceptional character
- NB+, NB Above average work
- NC+, NC Average quality of work
- ND+, ND Below average work
- NF Failing work
- NP Pass, can only be used for a pass/fail class
- REG Registered for course only; grade not required for course

ACADEMIC AMNESTY

Academic Amnesty removes all courses, credit hours, grades, and grade points taken during the identified academic amnesty term(s), including courses that were successfully completed. Academic Amnesty procedures can be found on the College's website or in the Admissions and Registration Office.

GRADE APPEAL POLICY

Grade appeal allows a student to appeal the final grade in a course in accordance with the grade appeal procedures. A formal grade appeal shall be filed no later than 40 calendar days from the course end date. Grade appeal procedures can be found on the College's website or in the Admissions and Registration Office.

GRADE POINT AVERAGE

The grade point average, usually referred to as GPA, is a function of the grading system used to determine academic status, including scholastic probation, scholastic honors, and eligibility for graduation.

Grade points are allocated for each credit hour earned as follows:

- A+ ..... 4.0 points
- A ..... 4.0 points
- B+ ..... 3.5 points
- B ..... 3.0 points
- C+ ..... 2.5 points
- C ..... 2.0 points
- D+ ..... 1.5 points
- D ..... 1.0 points
- F ..... 0.0 points
- UF ..... 0.0 points

To compute GPA, multiply the semester hours of credit for each course by the grade points, then divide the sum of the grade points by the total number of credits attempted.

CREDIT HOUR

A credit hour is a unit measurement used to ascertain the educational value of course work offered by the institution to students enrolling in such course work, earned by such students upon successful completions of such course work, and for which tuition is charged. Credit/contact time ratio guidelines for semester are outlined in Nebraska state statute 85-1503.

Semester

1:15 = Classroom Hour

1:30 = Academic Transfer, General Education & Academic Support Lab Hour

1:45 = Vocational Laboratory & Clinical Hour

1:45 = Practicum Hour

1:60 = Cooperative Work Experience

CREDIT BY TRANSFER

Credits earned in accredited institutions will be considered for transfer at Northeast. Credits earned at non-accredited institutions may be allowed after being evaluated by the Northeast division dean. Students should note that such courses taken at a non-accredited institution and accepted by Northeast may not be accepted by any other transfer institution.

Coursework for which the student earned less than a "C" grade will not be accepted for credit by transfer. In addition, coursework under the 1000 level will not be accepted for credit by transfer.

A transfer student must send an official transcript from each institution previously attended to the Admissions and Registration Office at Northeast. Decisions on the applicability of credits will be made by the division dean, department personnel, and Registrar.

PRIOR LEARNING ASSESSMENT

Prior Learning Assessment is a process that involves identification, documentation, assessment, and recognition of the learning acquired through formal and informal study.

Prior Learning Assessment includes learning from work and life experiences; correspondence and extension courses; individual study and reading; civic, community, and volunteer work; and participation in informal courses and in-service training sponsored by associations, business, government, and industry.

For information on how to begin the process of Prior Learning Assessment, contact any division dean or the Registrar.

ALTERNATE STUDY COURSES

Special Topics

Special topics courses are designed to provide opportunities for the College to offer classes based on the interest of students and faculty. Students may repeat a special topics class in a discipline area up to four times. Any offerings in that same discipline area beyond four times will be considered a repeat offering and the credits will not accumulate on the student's transcript.

____ 1990 Special Topics I in _____ 1-3 Credits

____ 2990 Special Topics II in _____ 1-3 Credits

Cooperative Internship Education

Through cooperative internship education, regularly enrolled Northeast students have the opportunity to participate in College-sponsored on-the-job training before graduation. Cooperative internship education is a requirement in some programs; other programs consider the experience as an elective. Check the specific programs for more information.

AUDIT

Auditing a course allows students to attend classes without earning college credit. Students may audit any classes that do not include laboratories or studio activities with the permission of the course instructors.

Students auditing courses pay the same tuition and fees as those taking courses for credit. The audited courses are marked "audit" at the time of registration or before the second meeting of the course. Students who have registered to audit courses may not change to college credit after the second week of the semester.

CLASSIFICATION OF STUDENTS

Northeast classifies students as freshmen or sophomores by the number of credit hours they have completed and also as full-time or part-time by the number of credit hours they are attempting.

- **Freshmen:** Students who have completed less than 28 semester credit hours.
- **Sophomores:** Students who have completed 28 or more credit hours.
- **Full-time:** Students taking 12 or more semester hours.
- **Part-time:** Students taking less than 12 semester hours.

Students should note that all degree programs require a minimum of 60 semester credit hours for completion. Hours below 1000 level do not count toward the required hours.

DISTANCE EDUCATION

Online Degrees

Northeast Community College is committed to providing opportunities to fit education into busy lives by offering fully online degree programs as well as many online general education and program courses. Standard admission policies apply to online students.

Basic skills assessment is available at selected sites in the Northeast Community College 20-county service area. Out-of-service area applicants may submit test results obtained at other qualified test centers. Results of the basic skills assessment are used for initial placement in English, reading, and math courses.

The College provides coursework to equip students with the academic skills necessary to succeed in college-level courses; however, Foundational English, Foundational Reading, and Prescriptive Math classes are not available in an online format.

Listed below are the fully online options available:

Associate of Arts Degree:

- Academic Transfer
- Accounting
- Agriculture
- Business Administration
- Criminal Justice – Corrections
- Criminal Justice – Law Enforcement
- Early Childhood Education
- Elementary Education
- Human Services
- Psychology
- Social Science
- Social Work
- Writing and Literature

Associate of Applied Science Degree:

- Business
- Early Childhood Education
- Health Information Management Systems

Diploma/Certificate

- Administrative Professional
- Business
- Computer Application Specialist
- Drug and Alcohol Counseling
- Early Childhood Education
- Entrepreneurship
- Health Information Management Systems

Email advising@northeast.edu to learn more about online courses, degrees, and academic and student services available to online students.

Online courses are not right for every learner. It requires discipline, focus, and a high level of computer competency. Online students are expected to work in their online courses 2-3 hours per week for every credit hour of the course. For example: a 3-credit hour course requires 6-8 hours per week of study, preparation, and assessment of learning activities. If not owning a computer or just purchased one, consider a face-to-face basic computer course as a starting point.

ADVISORY COMMITTEES

For each occupational program of study, Northeast Community College has organized an advisory committee made up of interested leaders in area businesses, agriculture, industries, and the professions. The College and the advisory committees work together to determine training and employment needs, to develop new programs and courses, to evaluate present programs, facilities, and graduates, and to assist in placement and follow-up of students.

EARLY COLLEGE – COLLEGE CREDIT FOR STUDENTS IN HIGH SCHOOL

Students who want to earn college credit while still attending high school are Early College students. They can earn credit two different ways—Dual Credit and college credit only.

Dual Credit

A cooperative program between Northeast Community College and participating area high schools, Dual Credit provides a mechanism for high school students to take college courses and earn college credits. These courses are offered to students through Northeast at any of our campuses, at their local high school during the regular high school day, and online or virtual. The courses are of the same content and rigor as the courses taught on campus. Dual Credit courses may be taught at the high school by high school faculty who qualify as Northeast Community College adjunct instructors with advanced degrees in their subject areas, or by Northeast Community College faculty who are dually certified.

The courses offered through the Dual Credit program are the same courses offered at Northeast. The course material, textbook, and instructor syllabus are equivalent to those used on campus. Dual Credit courses are of greater depth, take more time, and require more work than a normal high school class.

Tuition for Early College students is at no cost. Textbooks, course fees, tools, and testing fees still apply. Dual Credit students complete an online High School Early College Application and register online through My Northeast. Students also adhere to College drop, withdrawal, and refund policies.

Textbooks may be provided at the local school's discretion or they may be purchased by individual students through the Northeast Hawks Shop.

Successful completion of the Dual Credit course earns grades and credit to be recorded on a Northeast Community College transcript. These credits may be used at Northeast or transferred to another college or university. The receiving institution has the ultimate decision about accepting transfer credits, so it is important to check with potential colleges before taking a particular class. Northeast also has written transfer agreements in place with several regional colleges.

College Credit Only

Early College students may take classes for which they receive only college credit, not high school credit.

Among the ways that students take college credit only classes are:

1. in a virtual class,
2. in an online class, or
3. by attending live classes on-campus or at one of the extended campus locations.

Students must follow the Early College student admission and registration procedures described in the Admissions section of this Catalog.

High School Career Pathways

Northeast Community College works in conjunction with area K-12 schools to build pathways for students to transition from high school to college. Opportunities also exist for students to gain a head start on their college education while exploring a specific career field.

Further information is available by contacting the Director of Early College Programs at Northeast Community College.

WORKFORCE DEVELOPMENT

The focus of the Workforce Development department is to provide excellence in education and training to meet workforce needs as seen through the eyes of employers and communities. This focus will be delivered through business and industry training, continuing education, work-based learning, and community education.

Businesses, industries, and communities in northeast Nebraska can get a helping hand through a variety of services at the College.

Northeast assists in community economic development in cooperation with the Nebraska Department of Economic Development, the Nebraska Development Network, Growing Together, and other regional development partners. Community needs assessment, strategic planning, leadership training, and rural development assistance are available to all northeast Nebraska communities throughout the College service area.

Northeast Community College assists communities within the 20-county service area by providing coaching, facilitation, and coordination of economic development resources in efforts to encourage “Rural Revitalization” throughout the region.

ADULT AND CONTINUING EDUCATION

The College offers adult education programs in Norfolk and throughout the 20-county service area. Courses are offered at flexible daytime and evening hours to assist individuals in upgrading their present job skills, training for new careers, preparing for high school completion tests, improving basic education skills, and transitioning to earning college credits.

These adult education programs are made as accessible as possible for students by making them available in their local community. Classes are made available through cooperative agreements with local high schools, hospitals, libraries, civic organizations, businesses, industries, and churches for any person in the 20-county area. Education and training needs are specific to each community.

To make suggestions, submit requests, or obtain more information about the adult and continuing education programs described in this section, contact adulteducation@northeast.edu.

JOB UPGRADING AND PREPARATION/ CUSTOMIZED TRAINING

Adults who want to upgrade skills for their present jobs or learn new skills for a different job may do so through adult education classes. Northeast offers both credit and non-credit classes for job upgrading, job preparation, and professional re-licensure. These classes are offered based on the needs of area businesses, industries, employers, and advisory committees. Through Workforce Development, the College has provided start-up training for new industries in the area, as well as employee improvement training both in-plant and on campus. Customized training courses are available to new or existing business and industries and are developed by one-on-one consultation, assessment of training needs, development of training packages, and location of grants and resources for training to help reduce or eliminate training costs for the business.

Workshops and seminars are scheduled on a regular basis with topics geared toward business and industry. These can also be scheduled at various locations with sufficient enrollment.

ALLIED HEALTH

The Allied Health Department at Northeast Community College offers many opportunities for individuals to upgrade job skills and take job preparatory classes. These workshops and classes are available to healthcare providers, social workers, drug and alcohol counselors, and the general public. Some of the available programs for healthcare providers are:

- Advanced Cardiac Life Support (ACLS)
- Basic Nurse Aide (CNA)
- Community Health Worker
- CPR/AED
- First Aid
- Food Service/Dietary Management
- Medication Aide
- Pediatric Advanced Life Support (PALS)

The Allied Health staff develops training, continuing education courses, and conferences for healthcare providers that renew required state certificates and licenses.

Allied Health works closely with other health care facilities and organizations to provide a high-quality education for the community. Some of these facilities and organizations are: The Midwest Multistate Division, Nebraska Health Care Association, Faith Regional Health Services, Nebraska State Department of Health and Human Services, Nebraska Department of Social Services, Association of Nutrition and Foodservice Professionals, Northern Nebraska Area Health Education Center (AHEC), American Heart Association, and American Red Cross.

EMERGENCY MEDICAL SERVICES

Rural health care is important to the citizens of northeast Nebraska, just as providing quality education to Emergency Medical Services (EMS) personnel is important to the EMS and Paramedicine program at Northeast Community College.

Northeast Community College, working cooperatively with the Nebraska Department of Health and Human Services EMS Division, offers classes for all levels of Emergency Medical Technicians. Classes offered are Emergency Medical Responder, Emergency Medical Technician (EMT), Pre-hospital Emergency Care for Nurses, and Paramedicine. Northeast Community College also offers classes to maintain all levels of pre-hospital licensure from Emergency Responder to Paramedic.

Northeast also offers Paramedicine as a two-year Associate of Applied Science Degree and a one-year Diploma. This state approved program is offered at diverse times and evenings, allowing students to maintain other job and family commitments. See Paramedicine Program of Study.

Northeast Community College is approved as an advanced EMT training agency, recognized by the Nebraska Department of Health and Human Services. For further details on the required EMT classes, see Paramedicine degree and programs or call the Director of EMS Services.

The Paramedicine program at Northeast is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP).

ABE/GED®/ESL DEPARTMENT

Northeast Community College provides learner services in conjunction with the Nebraska State Department of Education, the U.S. Department of Education, and with private organizations, agencies, and businesses. Classes are offered in several primary locations across our service area, through remote classes, self-paced distance education programs, and individual tutoring sessions in other locations as learner needs arise.

The Adult Education Department offers two primary kinds of services, including preparation for a high school diploma and English Language instruction. The program is free to persons 16 years of age or older and who are not enrolled in a secondary school. Students under the age of 18 must meet the requirements of Nebraska Revised Statute 79-202. Other areas of focus include instruction in basic skills in reading, writing, mathematics, civics, job preparation, and consumer education. Students are required to attend an orientation session to register and take diagnostic tests to determine what skills are needed and develop a learning plan.

Preparation for the Nebraska High School Diploma: Adult and out-of-school youth who want to prepare for the General Educational Development GED® tests to qualify for the Nebraska High School Diploma attend weekly classes or tutoring sessions in various regional locations and/or daily class sessions on campus.

Learners spend individualized sessions studying for the GED® tests in literacy, science, mathematics, and social studies. When prepared, learners may test at our primary test center located in Norfolk. Call (402) 844-7253 for testing information. Testing is scheduled through ged.com. The student is able to test at any GED® approved testing center or remotely utilizing Pearson OnVUE.

Preparation of the Law Enforcement Academy Entrance Test: Adults may brush up on basic skills to prepare for the entrance test. The entrance test is administered at the Adult Education Office on campus and must be scheduled in advance. A $10.00 fee is required for administering these tests. Call (402) 844-7253 to schedule testing.

ENGLISH LANGUAGE LEARNER (ESL)

Adults who speak limited English may take English Second Language (ESL) classes. Classes are designed to serve individuals ranging from beginning learners, intermediate learners, and advanced learners. The classes are designed to stress communication, pronunciation, basic sentence patterns, and essential vocabulary, as well as speaking and writing skills.

Personal Improvement Courses: (AE) Personal improvement courses provide instruction in basic skills such as reading, writing, mathematics, English language fluency, money management, or job preparatory skills. Classes are designed for adults who are not seeking a GED®. Classes and individualized sessions give learners as much help and time as needed to reach their goals.

DEGREE OFFERINGS

FIELDS OF STUDY

Northeast offers students the opportunity to gain skills on the fast-track to a career or the first steps towards a bachelor's degree. With over 130 degrees, programs, certificates, diplomas, and non-credit, continuing education programs, Northeast will prepare students for a career in one of the following career fields.

AGRICULTURE, FOOD, AND NATURAL RESOURCES FIELD OF STUDY

CAREER

Agriculture & Natural Resources Pathway

Agribusiness	AAS
Agriculture-Mechanized Agriculture	AAS
Agriculture-Urban Agriculture	AAS
Agriculture-Agronomy	AAS
Agriculture-Animal Science	AAS
Agriculture-Diversified Agriculture	AAS
Horticulture/Golf Course Mgmt	AAS
Precision Agriculture	AAS
Dairy Technician	DIPL
Horticulture	DIPL

Veterinary Sciences Pathway

Veterinary Technology	AAS

TRANSFER

Agriculture & Natural Resources Pathway

Agriculture-College Transfer	AA/AS
Natural Resources	AS

Veterinary Sciences Pathway

Pre-Professional Veterinary	AA/AS
Pre-Veterinary Technology	AS

ARTS AND COMMUNICATION FIELD OF STUDY

CAREER

Graphic & Media Arts Pathway

Graphic Design	AAS
Media Arts	AAS
Media Production	CERT

TRANSFER

Graphic & Media Arts Pathway

Graphic Design	AA

Visual & Performing Arts Pathway

Art	AA
Theatre	AA

Writing & Communication Pathway

Communication	AA
Writing & Literature	AA

BUSINESS, MARKETING, AND MANAGEMENT FIELD OF STUDY

CAREER

Business & Accounting Pathway

Accounting	AAS
Accounting	DIPL/CERT
Administrative Professional	DIPL/CERT
Business	AAS
Business	DIPL
Business-Entrepreneurship	CERT
Computer Application Specialist	CERT

TRANSFER

Business & Accounting Pathway

Accounting	AA
Business Administration	AA

HEALTH SCIENCES FIELD OF STUDY

CAREER

Fitness & Recreation Pathway

Personal Training	DIPL

Allied Health & Nursing Pathway

Community Healthcare Worker	CERT
Health Information Mgmt Systems	AAS
Health Information Mgmt Systms	DIPL/CERT
Medical Billing	DIPL
Nursing	ADN
Nursing-Practical	DIPL
Paramedicine	AAS
Paramedicine	DIPL
Physical Therapist Assistant	AAS

TRANSFER

Fitness & Recreation Pathway

Athletic Training	AS
Personal Training	AA
Exercise Science	AS
Recreation	AA

Allied Health & Nursing Pathway

Nursing-Pre-Professional	AA/AS
Nursing-Pre-Prof UNMC Transfer	AS
Paramedicine-Pre-Professional	AA/AS
Physical Therapy-Pre-Professional	AA/AS
Public Health	AS

HUMAN SERVICES AND EDUCATION FIELD OF STUDY

CAREER

Education and Social Sciences Pathway

Early Childhood Education	AAS
Early Childhood Education	CERT

Human Services Pathway

Drug and Alcohol Counseling	CERT

TRANSFER

Criminal Justice Pathway

Criminal Justice-Corrections	AA
Criminal Justice-Law Enforcement	AA

Education and Social Sciences Pathway

Early Childhood Education	AA
Elementary Education	AA
Global Studies	AA
History	AA
Paraprofessional Education	AA
Physical Education Teacher Education	AA
Secondary Education	AA
Skilled & Technical Sciences Education	AA
Social Science	AA

Human Services Pathway

Human Services	AA
Psychology	AA
Social Work	AA

STEM AND PRE-PROFESSIONAL HEALTH FIELD OF STUDY

CAREER

Information Technology Pathway

Cisco Networking & Info Security	AAS
Cisco Networking & System Admin	AAS
Cisco Networking & Tech Services Support	AAS

TRANSFER

Math & Science Pathway

Biology	AA/AS
Chemistry	AS
Mathematics	AS

STEM AND PRE-PROFESSIONAL HEALTH FIELD OF STUDY CONT.

CAREER

Information Technology Pathway

Info Security & System Admin	AAS
Info Security & Tech Services Support	AAS
System Admin & Tech Services Support	AAS
Web/Visual App Devl & Cisco Ntwrkng	AAS
Web/Visual App Devl & Info Security	AAS
Web/Visual App Devl & Tech Serv Spprt	AAS
Cisco Networking Academy	CERT
Information Security	CERT
Information Technology-General	CERT
System Administration	CERT
Technical Services Support	CERT
Web & Visual Application Devl	CERT

TRANSFER

Math & Science Pathway

Physics	AS

Information Technology Pathway

Info Tech-Computer Info Systems	AA
Info Tech-Computer Science	AA

Engineering Pathway

Pre-Engineering	AA/AS

Pre-Professional Health Pathway

Pre-Professional Health Science	AA/AS

SKILLED AND TECHNICAL TRADES FIELD OF STUDY

CAREER

Construction Pathway

Building Construction	AAS
Drafting-Architectural	AAS
Drafting	DIPL/CERT
Drafting-Structural	AAS
Heating, Ventilation, & Air Conditioning	AAS
Plumbing Technology	DIPL

Electrical & Energy Pathway

Electrical Construction and Control	AAS
Electromechanical Technology	AAS
Utility Line	AAS
Wind Energy	AAS
Wind Energy	DIPL

Transportation Pathway

Auto Body Repair Technology	AAS
Automotive Technology	AAS
Automotive Technology	DIPL
Automotive Light Service Technician	CERT
Diesel Technology-Agriculture	AAS
Diesel Technology-Truck	AAS

Manufacturing Pathway

Drafting-Mechanical	AAS
Drafting-Mechanical	DIPL/CERT
Machining & Manufacturing Auto	DIPL/CERT
Welding	DIPL/CERT

TRANSFER

General Studies: Pre-Skilled & Technical	AA

AGRICULTURE, FOOD, AND NATURAL RESOURCES

Northeast Community College Agriculture, Food, and Natural Resources fields of study provide students with a broad exposure to many agricultural disciplines. Opportunities to study in a wide range of programs will expose students to the technologies that impact the agriculture industry. Students are advised to work closely with advisors at Northeast Community College and with the transfer office of their four-year institution (if transferring) as they plan their coursework.

YEAR ONE PATHWAY			
First Semester		**Second Semester**	
Course	**Credits**	**Course**	**Credits**
ENGL 1010 English Composition I*	3	COMM 1110 Public Speaking*	3
MATH 1100 **OR** Higher*	3-5	English/Literature*	3
Behavioral **OR** Social Science*	3	Behavioral **OR** Social Science,*	
Natural Science*	4-5	English Literature,* **OR**	
Program Course(s)**	3	Fine Arts and Language*	3-4
	16-19	Program Course(s)**	6
			15-16

*See general education requirements. **See program of study catalog page and/or advisor for assistance choosing Program Course(s) based on professional goals and transfer institution.

CAREER AND TRANSFER PATHWAYS

Career Pathways offer students the opportunity to complete coursework toward earning a Certificate, Diploma, or Associate of Applied Science Degree and enter the workforce having acquired the skills necessary to succeed in their chosen area of interest.

Transfer Pathways afford students with opportunities to complete coursework toward an Associate of Arts or an Associate of Science Degree, then transfer to a four-year institution with the first two years on their path to a bachelor's degree completed.

AGRICULTURE, FOOD, AND NATURAL RESOURCES FIELD OF STUDY

CAREER

Agriculture & Natural Resources Pathway

Agribusiness	AAS
Agriculture-Mechanized Agriculture	AAS
Agriculture-Urban Agriculture	AAS
Agriculture-Agronomy	AAS
Agriculture-Animal Science	AAS
Agriculture-Diversified Agriculture	AAS
Horticulture/Golf Course Management	AAS
Precision Agriculture	AAS
Dairy Technician	DIPL
Horticulture	DIPL

Veterinary Sciences Pathway

Veterinary Technology	AAS

TRANSFER

Agriculture & Natural Resources Pathway

Agriculture-College Transfer	AA/AS
Natural Resources	AS

Veterinary Sciences Pathway

Pre-Professional Veterinary	AA/AS
Pre-Veterinary Technology	AS

GOALS PROGRAM: GLOBAL OPPORTUNITIES IN AGRICULTURE LEADERSHIP STUDIES

Students interested in international travel can apply for the GOALS program. Selected applicants will enroll in an honors section of AGRI 1115 Issues in Agriculture II for the semester before their travel experience and focus their study on the designated country for which travel is being planned. Upon completion of the honors course, students will enroll in an AGRI 2115 course that includes the travel experience to the designated country. The combination of the AGRI 1115 and AGRI 2115 courses will fulfill the summer experience requirement for the Associate of Applied Science degree. Normally, students have two options to complete their summer experience requirement:

- Paid internship where the student works for an agriculture business for 180 hours. The student receives college credit and pays for three credit hours of tuition, **OR**
- Summer course (*Crops & Irrigation OR Livestock Production*). The student pays three credit hours of tuition. AGRI 1115 Issues in Agriculture II (*1 credit*) and AGRI 2115 Global Opportunities in Agricultural Leadership Studies (*3 credits*) will take the place of the usual summer class requirement for the students who successfully complete the course and the travel experience.

AGRIBUSINESS

Agribusiness is the study of the business and economics of agribusiness firms. Aspects unique to agribusiness include: the risk and uncertainties of agricultural production, the heavy reliance on natural resources, the uniqueness of the institutions that govern food and agriculture, the competitive structures within the agribusiness sector, the technology of commercial agriculture and food processing, and the global dimensions of food and agriculture.

Opportunities for students pursuing a career in agribusiness continue to be plentiful. Northeast Community College graduates have taken positions in the areas of cooperative management, feedlot management, crop insurance sales and adjusting, agronomic and machinery sales, and agricultural loan officers. Graduates have also gone on to continue their education at the four-year level with a number of institutions across the country. The demand for graduates with a background of study in agribusiness continues to be extremely strong with notices of job openings coming on a daily basis.

Required Program of Study for Associate of Applied Science Degree (2 years)

FIRST YEAR

Fall Semester

Course	Credits
AGRI 1105 Issues in Agriculture I	1
AGRI 1500 Microcomputer Applications in Agriculture*	3
AGRI 1410 Introduction to the Economics of Agriculture*	3
MATH 1020 Technical Mathematics I*	3
ENGL 1050 Workplace Communication*	3
Select one of the following options:	**4**
AGRI 1010 & AGRI 1340 Animal Science & Lab, AGRI 1131 & AGRI 1132 Plant Science & Lab, AGRI 1030 & AGRI 1040 Soil Science & Lab, **OR** HORT 1010 Horticulture Science	
	17

Spring Semester

Course	Credits
AGRI 1420 Interpersonal Skills*	3
AGRI 1310 Agricultural Marketing System	3
AGRI 1005 Precision Agriculture Systems	3
AGRI 2870 Agricultural Law	3
ACCT 1100 Survey of Accounting **OR** ACCT 1200 Principles of Accounting I	3
	15

Internship Options***

Course	Credits
Select one of the following options:	**3-4**
AGRI 1300 Cooperative Internship I,	3
AGRI 2020 Crops and Irrigation (*summer*),	3
AGRI 2040 Livestock Production Management (*summer*), **OR**	3
AGRI 1115 Issues in Agriculture II & *(pre-requisite to AGRI 2115 must be taken in proceeding semester)*	
AGRI 2115 Global Opportunities in Agricultural Leadership (*International travel*)	4

SECOND YEAR

Fall Semester

Course	Credits
AGRI 2015 Farm and Ranch Management	4
AGRI 1290 International Agriculture and Agribusiness	3
Program Elective(s)**	6
	13

Spring Semester

Course	Credits
AGRI 2290 Agricultural Commodities Marketing	3
AGRI 2880 Principles of Agricultural Selling	2
AGRI 2885 Agricultural Finance	3
AGRI 2890 Agriculture Capstone Experience	1
Program Elective(s)**	6
	15

Total Credit Hours 63-64

*Course fulfills a general education requirement for Northeast Community College. See general education requirements.

**See advisor for assistance choosing elective(s) based on professional goals and transfer institution.

AGRICULTURE

The Associate of Applied Science degree in Agriculture provides students with options to earn a degree in Agriculture, while selecting classes which focus on their areas of interest. Core classes and general education requirements are common to both options. Students then select from recommended electives to complete their degree in Agriculture with a Concentration in either Mechanized Agriculture or Urban Agriculture. This degree is commonly sought by students planning to return to their family or home operations with skills that will help them to add value, diversity, or become entrepreneurs. Many students also secure employment in local agricultural businesses.

Required Program of Study for Associate of Applied Science Degree (2 years)

Agriculture Core Courses

Course	Credits
AGRI 1005 Precision Agriculture Systems	3
AGRI 1030 Soil Science	3
AGRI 1040 Soil Science Lab **OR** HORT 1040 Intro to Soil Science Lab	1
AGRI 1105 Issues in Agriculture I	1
Internship or course options*	3-4
AGRI/HORT 2890 Capstone Experience	1
	12-13

General Education Courses

Course	Credits
MATH 1020 Technical Mathematics I	3
AGRI 1500 Microcomputer Applications in Agriculture	3
ENGL 1050 Workplace Communication	3
AGRI 1410 Introduction to the Economics of Agriculture	3
AGRI 1420 Interpersonal Skills	3
	15

**Select one of the following: AGRI/HORT 1300 Cooperative Internship I, AGRI 2020 Crops and Irrigation, AGRI 2040 Livestock Production I, or AGRI 1115 Issues in Agriculture II and AGRI 2115 Global Opportunities in Agriculture Leadership Studies.*

Core Requirements	12-13
General Education Requirements	15
Concentration Courses**	36-40
Total Credits	**63-68**

Concentration in Mechanized Agriculture

Course	Credits
AGRI 1050 Farm Welding	1
AGRI 1060 Farm Welding Lab	2
AGRI 1130 Large Engine Maintenance	1
AGRI 1131 Plant Science	3
AGRI 1132 Plant Science Lab	1
AGRI 1140 Large Engine Maintenance Lab	2
AGRI 1280 Crop Chemicals	2
AGRI 1290 International Agriculture and Agribusiness	3
AGRI 1350 Tillage, Planting and Spraying Equipment	1
AGRI 1360 Tillage, Planting and Spraying Equipment Lab	1
AGRI 1400 Farm and Environmental Safety	2
AGRI 2010 Irrigation and Equipment	3
AGRI 2015 Farm and Ranch Management	4
AGRI 2100 Farm Electricity and Wiring	1
AGRI 2105 Farm Electricity and Wiring Lab	2
AGRI 2140 Farm Welding Repair and Projects	1
AGRI 2150 Farm Welding Repair and Projects Lab	2
AGRI 2200 Advanced Fertilizers	2
AGRI 2250 Grain Harvesting and Handling Systems	3
AGRI 2290 Agricultural Commodities Marketing	3
	40

Concentration in Urban Agriculture**

Course	Credits
HORT 1010 Horticulture Science	4
HORT 1070 Plant Propagation	2
HORT 1080 Plant Propagation Lab	1
HORT 1090 Integrated Pest Management	2
HORT 2020 Nursery Greenhouse Management	4
HORT 2080 Woody Perennial Identification	3
HORT 2090 Herbaceous Perennial Identification	3
HORT 2160 Vegetable Gardening and Farm Production	3
HORT 2165 Value Added Diversified Marketing	3
HORT 2180 Horticulture Irrigation & Equipment	3
AGRI 1150 Entomology	3
BIOS 2020 Introduction to Environmental Issues	4
Program Elective(s)**	1-4
	36-39

**See advisor for assistance choosing elective(s) based on professional goals and transfer institution.

AGRONOMY

Scientific advances are changing the way America and the rest of the world raise field crops and manage soil, in turn affecting the trading and marketing of these commodities. Today's agronomist needs specialized training in advanced agricultural technologies as well as expertise in processes related to chemical application, seed conditioning, production, quality, and value-added processing. Industry demand for agronomists is much greater than the supply, and a degree from Northeast carries a strong, positive reputation among potential employers in agronomy. The internship experience will allow students to continue to develop job related skills as agronomists. Agronomy students at Northeast take courses in areas of soil science, crop science, entomology, forages, chemicals, marketing, sales, computers, and precision farming (GPS/GIS) to form a strong foundation in the field.

Required Program of Study for Associate of Applied Science Degree (2 years)

FIRST YEAR

Fall Semester

Course	Credits
AGRI 1005 Precision Agriculture Systems	3
AGRI 1030 Soil Science	3
AGRI 1040 Soil Science Lab	1
AGRI 1105 Issues in Agriculture I	1
AGRI 1290 International Agriculture and Agribusiness	3
AGRI 1400 Farm and Environmental Safety	2
AGRI 1410 Introduction to the Economics of Agriculture*	3
MATH 1020 Technical Mathematics I*	3
	19

Spring Semester

Course	Credits
AGRI 1131 Plant Science	3
AGRI 1132 Plant Science Lab	1
AGRI 1150 Entomology	3
AGRI 1280 Crop Chemicals	2
AGRI 1300 Cooperative Internship*** (*final 4 weeks*)	1
AGRI 1500 Microcomputer Applications in Agriculture*	3
ENGL 1050 Workplace Communication*	3
	16

Internship Options***

Course	Credits
Select one of the following options:	**2-4**
AGRI 2020 Crops and Irrigation, (*summer*)	3
AGRI 2300 Cooperative Internship II (*must take AGRI 1300 1st*),	2
AGRI 1300 Cooperative Internship I, **OR**	3
AGRI 1115 Issues in Agriculture II & *(pre-requisite to AGRI 2115 must be taken in proceeding semester)*	
AGRI 2115 Global Opportunities in Agricultural Leadership (*International travel*)	4

SECOND YEAR

Fall Semester

Course	Credits
AGRI 2015 Farm and Ranch Management	4
AGRI 2200 Advanced Fertilizers	2
AGRI 2250 Grain Harvesting and Handling Systems	3
AGRI 2400 Forage, Pasture, and Grassland Production	3
AGRI 2410 Forage, Pasture, and Grassland Production Lab	1
Program Elective(s)**	2
	15

Spring Semester

Course	Credits
AGRI 1310 Agricultural Marketing System	3
AGRI 1350 Tillage, Planting, and Spraying Equipment	1
AGRI 1420 Interpersonal Skills*	3
AGRI 2290 Agricultural Commodities Marketing	3
AGRI 2460 Resource-Efficient Crop Management	3
AGRI 2890 Agriculture Capstone Experience	1
Program Elective(s)**	2
	16

Total Credit Hours 68-70

*Course fulfills a general education requirement for Northeast Community College. See general education requirements.

**See advisor for assistance choosing elective(s) based on professional goals and transfer institution.

ANIMAL SCIENCE

Many graduates with an animal science degree enter livestock production as owners, partners, or managers. Graduates may consider using their skills in family livestock operations or managing production for someone else. Other career opportunities are available in the livestock and meat industry including: feedlots, hog and cattle confinements, livestock buying, banking and finance, the feed industry, marketing, livestock pharmaceuticals, promotion, and sales. The animal science degree combines the latest in production technologies and animal management with computer, business, and analysis skills. The emphasis is on the selection, breeding, feeding, and marketing of livestock for a profitable return. Beef, swine, and sheep maintained on the Northeast farm provide students with opportunities for practical experience in all aspects of livestock management. In addition, students may join the Northeast Livestock Judging Team, which travels to several states each year representing Northeast in judging contests.

Required Program of Study for Associate of Applied Science Degree (2 years)

FIRST YEAR

Fall Semester

Course	Credits
AGRI 1005 Precision Agriculture Systems	3
AGRI 1010 Animal Science	3
AGRI 1030 Soil Science	3
AGRI 1040 Soil Science Lab	1
AGRI 1105 Issues in Agriculture I	1
AGRI 1290 International Agriculture and Agribusiness	3
AGRI 1340 Animal Science Lab	1
MATH 1020 Technical Mathematics I*	3
	18

Spring Semester

Course	Credits
AGRI 1131 Plant Science	3
AGRI 1132 Plant Science Lab	1
AGRI 1230 Feeds and Feeding	3
AGRI 1320 Animal Reproduction Physiology	3
AGRI 1410 Introduction to the Economics of Agriculture*	3
AGRI 1500 Microcomputer Applications in Agriculture*	3
	16

Internship Options**

Course	Credits
Select one of the following options:	**3-4**
AGRI 2040 Livestock Production Management (*summer*),	3
AGRI 1300 Cooperative Internship I, **OR**	3
AGRI 1115 Issues in Agriculture II & *(pre-requisite to AGRI 2115 must be taken in proceeding semester)*	
AGRI 2115 Global Opportunities in Agricultural Leadership (*International travel*)	4

SECOND YEAR

Fall Semester

Course	Credits
AGRI 2015 Farm and Ranch Management	4
AGRI 2400 Forage, Pasture, and Grassland Production	3
AGRI 2410 Forage, Pasture, and Grassland Production Lab	1
AGRI 2830 Advanced Animal Nutrition	2
ENGL 1050 Workplace Communication*	3
	13

Spring Semester

Course	Credits
AGRI 1310 Agricultural Marketing System	3
AGRI 1400 Farm and Environmental Safety	2
AGRI 1420 Interpersonal Skills*	3
AGRI 2210 Animal Health	3
AGRI 2290 Agricultural **OR** Commodities Marketing	3
AGRI 2890 Agriculture Capstone Experience	1
	15

Second Year Electives

Course	Credits
Select two of the following courses:	**4**
AGRI 2810 Horsemanship and Horse Care (*fall*)	2
AGRI 2840 Cow Calf Production Management (*fall*)	2
AGRI 2260 Beef Feedlot Production Management (*spring*)	2
AGRI 2285 Swine Production Management (*spring*)	2

Total Credit Hours 69-70

*Course fulfills a general education requirement for Northeast Community College. See general education requirements.

**See advisor for assistance choosing elective(s) based on professional goals and transfer institution.

DIVERSIFIED AGRICULTURE

A degree in diversified agriculture prepares students for a wide variety of employment possibilities. Graduates may choose to return to a family farm operation, or work for a large, diversified farm, or private and commercial cattle feedlots and swine farrowing operations. Opportunities also exist in the animal health field, feed, seed, and fertilizer industries in sales or management positions. The diversified agriculture program of study gives students a well-rounded background for a wide variety of career opportunities in the agriculture industry.

Students benefit from a broad curriculum ranging from livestock and crop production to marketing skills. Students study the latest advancements in agriculture production technology, agriculture record keeping, and computer analysis, thus preparing to make sound business decisions for a profitable farming operation. Courses in computers, agribusiness management, marketing, agricultural records, agricultural sales, and precision farming (GPS/GIS) form a framework for specific courses in animal science and agronomy.

Required Program of Study for Associate of Applied Science Degree (2 years)

FIRST YEAR

Fall Semester

Course	Credits
AGRI 1005 Precision Agriculture Systems	3
AGRI 1010 Animal Science	3
AGRI 1030 Soil Science	3
AGRI 1040 Soil Science Lab	1
AGRI 1105 Issues in Agriculture I	1
AGRI 1290 International Agriculture and Agribusiness	3
AGRI 1340 Animal Science Lab	1
MATH 1020 Technical Mathematics I*	3
	18

Spring Semester

Course	Credits
AGRI 1131 Plant Science	3
AGRI 1132 Plant Science Lab	1
AGRI 1280 Crop Chemicals	2
AGRI 1410 Introduction to the Economics of Agriculture*	3
AGRI 1420 Interpersonal Skills*	3
AGRI 1500 Microcomputer Applications in Agriculture*	3
	15

Internship Options***

Course	Credits
Select one of the following options:	**3-4**
AGRI 2020 Crops and Irrigation (*summer*),	3
AGRI 1115 Issues in Agriculture II & *(pre-requisite to AGRI 2115 must be taken in proceeding semester)*	
AGRI 2115 Global Opportunities in Agricultural Leadership (*International travel*),	4
AGRI 2040 Livestock Production (*summer*), **OR**	3
AGRI 1300 Cooperative Internship I	3

SECOND YEAR

Fall Semester

Course	Credits
AGRI 2015 Farm and Ranch Management	4
AGRI 2200 Advanced Fertilizers	2
AGRI 2250 Grain Harvesting and Handling Systems	3
ENGL 1050 Workplace Communication*	3
Program Elective(s)**	3
	15

Spring Semester

Course	Credits
AGRI 1230 Feeds and Feeding	3
AGRI 1400 Farm and Environmental Safety	2
AGRI 2210 Animal Health	3
AGRI 2290 Agricultural Commodities Marketing	3
AGRI 2890 Agriculture Capstone Experience	1
Program Elective(s)**	3
	15

Total Credit Hours 66-67

*Course fulfills a general education requirement for Northeast Community College. See general education requirements.

**See advisor for assistance choosing elective(s) based on professional goals and transfer institution.

HORTICULTURE AND GOLF COURSE MANAGEMENT

The curriculum for the horticulture and golf course management program will develop skills in various areas of horticulture to help students gain a broad understanding of the skills needed to succeed in several horticulture industries. Many courses have content to explore business management and personnel development. A consistent focus on environmentally ethical and regenerative practices supplements the horticulture content. Students have many hands-on learning opportunities such as the campus greenhouse, the college farm, and a local 18-hole golf course. A cooperative internship provides valuable supplementation to the classroom by allowing students to gain valuable work experience in a horticulture industry of their choice.

Required Program of Study for Associate of Applied Science Degree (2 years)

FIRST YEAR

Fall Semester

Course	Credits
HORT 1010 Horticulture Science	4
HORT 1025 Residential Turf Management	3
AGRI 1030 Soil Science	3
HORT 1040 Introduction to Soil Science Lab	1
ENGL 1050 Workplace Communication*	3
HORT 2080 Woody Perennial Identification	3
	17

Spring Semester

Course	Credits
HORT 1050 Commercial Turf Management	3
HORT 1060 Commercial Turf Management Lab	1
HORT 1070 Plant Propagation	2
HORT 1080 Plant Propagation Lab	1
HORT 1090 Integrated Pest Management	2
MATH 1020 Technical Mathematics I*	3
BIOS 1050 General Botany*	4
	16

Summer

Course	Credits
HORT 1300 Cooperative Internship	3

SECOND YEAR

Fall Semester

Course	Credits
HORT 2060 Sports Turf Management	3
HORT 2070 Sports Turf Management Lab	1
HORT 2090 Herbaceous Perennial Identification	3
HORT 2180 Irrigation and Equipment	3
AGRI 1410 Intro to the Economics of Agriculture*	3
AGRI 1420 Interpersonal Skills*	3
	16

Spring Semester

Course	Credits
HORT 2020 Nursery and Greenhouse Management	4
HORT 2045 Landscape Management	3
HORT 2055 Landscape Design	3
HORT 2890 Horticulture Capstone Experience	1
Program Elective(s)**	3
	14

Total Credit Hours 66

*Course fulfills general education requirements.

**Recommended electives: HORT 2000 Landscape History and Use, HORT 2100 Golf Course Management, HORT 2140 Hydroponic Growing Systems, HORT 2150 Annual Flower Identification, Production, and Care, HORT 2160 Vegetable Garden and Farm Production, HORT 2165 Value-Added Diversified Marketing, HORT 2170 Alternative Horticulture. See advisor for assistance choosing elective(s) based on professional goals and transfer institution.

PRECISION AGRICULTURE

Students in the Precision Agriculture program will develop technical skills and learn to interpret, analyze, and utilize data gathered from precision agriculture technologies to improve production. Graduates will be skilled and competent to work as technicians and producers in a rapidly changing industry that is concerned with maximizing yield potential through resource efficient practices. A key component of this program is to deepen students' understanding of the intricacies that exist between agriculture and our natural resources. Upon completion of this program, students will be able to:

- Demonstrate fundamental knowledge of agronomic principles that guide effective decision-making in soil, plant, and water management.
- Discuss and utilize multiple agriculture GIS programs in a precision agriculture environment.
- Apply principles of data-based decision making to improve agricultural operations and outcomes.
- Demonstrate knowledge and skills in the proper collection of data with careful attention to ensuring data accuracy.
- Identify and explain guidance systems, data collection tools, and variable rate application systems and how they work with each other.
- Demonstrate proper calibration methods and discuss the theory behind calibrations.

Required Program of Study for Associate of Applied Science Degree (2 years)

FIRST YEAR

Fall Semester

Course	Credits
AGRI 1030 Soil Science	3
AGRI 1040 Soil Science Lab	1
ENGL 1050 Workplace Communication*	3
AGRI 1500 Microcomputer Applications in Agriculture*	3
AGRI 1540 Precision Irrigation Management	3
AGRI 1005 Precision Agriculture Systems	3
AGRI 1105 Issues in Agriculture I	1
	17

Spring Semester

Course	Credits
AGRI 2510 Ag GIS Fundamentals	3
AGRI 1131 Plant Science	3
AGRI 1132 Plant Science Lab	1
AGRI 1400 Farm and Environmental Safety	2
AGRI 1410 Introduction to the Economics of Agriculture*	3
MATH 2170 Applied Statistics*	3
	15

Internship Options***

Course	Credits
Select one of the following options:	**3-4**
AGRI 2020 Crops and Irrigation (*summer*),	3
AGRI 1115 Issues in Agriculture II & *(pre-requisite to AGRI 2115 must be taken in proceeding semester)*	
AGRI 2115 Global Opportunities in Agricultural Leadership (*International travel*),	4
AGRI 2040 Livestock Production I (*summer*), **OR**	3
AGRI 1300 Cooperative Internship I	3

SECOND YEAR

Fall Semester

Course	Credits
AGRI 1520 Intro to Ag Electronics & Hydraulics	3
AGRI 1525 Intro to Ag Electronics & Hydraulics Lab	1
AGRI 2015 Farm and Ranch Management	4
AGRI 2200 Advanced Fertilizers	2
AGRI 2500 Data Collection Methodologies	3
Program Elective(s)**	2
	15

Spring Semester

Course	Credits
AGRI 2005 Precision Agriculture Theory	3
AGRI 2520 Ag GPS Applications	3
AGRI 2525 Ag GPS Applications Lab	1
AGRI 2530 Precision Hardware	3
AGRI 2535 Precision Hardware Lab	1
AGRI 1420 Interpersonal Skills*	3
AGRI 2890 Agriculture Capstone Experience	1
Program Elective(s)**	2
	17

Total Credit Hours 67-68

*Course fulfills a general education requirement for Northeast Community College. See general education requirements.

**See advisor for assistance choosing elective(s) based on professional goals and transfer institution.

VETERINARY TECHNOLOGY

The veterinary technology program is designed to prepare entry-level veterinary technicians via classroom study, laboratory, and clinical practice with fundamental veterinary technician skills. The graduate should be able to successfully complete the licensing requirement of their state. This program will work toward meeting the needs of the State of Nebraska for well qualified veterinary technicians to perform duties under the scope of the Veterinary Medicine Practice Act. The Veterinary Technology program has special admission guidelines.

The veterinary technology program is accredited by the American Veterinary Medical Association, 1931 N. Meacham Road, Suite 100, Schaumburg, IL 60173-4360, phone (847) 925-8070.

Required Program of Study for Associate of Applied Science (2 years)

FIRST YEAR

Fall Semester

Course	Credits
VTEC 1000 Animal Husbandry and Restraint	3
VTEC 1110 Veterinary Medical Terminology	2
VTEC 1120 Anatomy and Physiology	3
VTEC 1123 Anatomy and Physiology Lab	1
Natural Science*	4-5
Mathematics*	3-4
	16-18

NOTE: In order for a student to continue in the Veterinary Technology program, students must meet all requirements and have been selected into the program. The special admission guidelines are found in the catalog.

Spring Semester

Course	Credits
VTEC 1121 Anatomy and Physiology II	3
VTEC 1212 Laboratory Techniques I	3
VTEC 1211 Laboratory Techniques I Lab	1
VTEC 1410 Clinical Nursing of Companion Animals	3
VTEC 1411 Clinical Nursing Lab	1
VTEC 2622 Anesthesia for Veterinary Technicians	3
VTEC 2621 Anesthesia Lab for Veterinary Technicians	1
VTEC 2200 Veterinary Office Practices	3
	18

Summer

Course	Credits
Communication*	3-6
Social Science*	2-3
	5-9

*See general education requirements.

SECOND YEAR

Fall Semester

Course	Credits
VTEC 2612 Principles of Veterinary Surgical Nursing & Dentistry	3
VTEC 2611 Principles of Veterinary Surgical Nursing & Dentistry Lab	1
VTEC 2562 Laboratory Techniques II	3
VTEC 2561 Laboratory Techniques II Lab	1
VTEC 2520 Clinical Nursing of Large Animals	3
VTEC 2521 Clinical Nursing of Large Animals Lab	1
VTEC 1220 Pharmacology	3
VTEC 1322 Radiology and Ultrasonography	3
VTEC 1321 Radiology and Ultrasonography Lab	1
	19

Spring Semester

Course	Credits
VTEC 2570 Laboratory Techniques III	2
VTEC 2571 Laboratory Techniques III Lab	1
VTEC 1440 Lab Animal Science	2
VTEC 2630 Clinical Nursing of Exotics	2
VTEC 2660 Internship	6
VTEC 2680 Board Review for Veterinary Technicians	1
Behavioral Science*	3
	17

Total Credit Hours: 75-81

NOTE: Students in the Veterinary Technology program will be required to have a "C+" grade or better in all VTEC coursework.

DAIRY TECHNICIAN DIPLOMA

The purpose of the dairy technician program is to train students to work in the expanding dairy industry in Nebraska. The dairy technician diploma is a “stepping stone” for students interested in involvement in the dairy industry. Career opportunities exist on an increasing number of large dairy farms in Nebraska. Opportunities also exist for developing working partnerships with family dairy farm operations. In addition, this program enables graduates to return to their own dairy farms with a focus on grass-based systems. With the increasing amount of milk being produced, career opportunities also exist in the milk and cheese processing industries. All coursework in the Dairy Technician Diploma program will apply as full credit towards the Associate of Arts Degree or the Associate of Science Degree.

Required Program of Study for Diploma (32 weeks)

FALL SEMESTER

Course	Credits
AGRI 1010 Animal Science	3
AGRI 1340 Animal Science Lab	1
AGRI 1420 Interpersonal Skills	3
AGRI 2830 Advanced Animal Nutrition	2
MATH 1020 Technical Mathematics I	3
AGRI 1410 Introduction to the Economics of Agriculture	3
	15

SPRING SEMESTER

Course	Credits
AGRI 1230 Feeds and Feeding	3
AGRI 1310 Agricultural Marketing System	3
AGRI 1320 Animal Reproduction Physiology	3
AGRI 1500 Microcomputer Applications in Agriculture	3
AGRI 2210 Animal Health	3
AGRI 2860 Dairy Production Management	2
	17

Total Credit Hours 32

HORTICULTURE - GENERAL DIPLOMA

The general horticulture diploma is intended to train students to work in portions of the horticulture industry that do not require a full degree. This diploma can be used as a "stepping stone" for students who need to take a non-traditional approach to their career goals. The general horticulture courses help students develop a basic understanding of the science surrounding plants and their environment.

All coursework in the Horticulture - General Diploma program will apply as full credit towards Horticulture and Golf Course Management Associate of Applied Science Degree, the Associate of Arts Degree, or the Associate of Science Degree.

Required Program of Study for Diploma (32 weeks)

FALL SEMESTER

Course	Credits
HORT 1010 Horticulture Science	4
HORT 1025 Residential Turf Management	3
AGRI 1030 Soil Science	3
HORT 1040 Introduction to Soil Science Lab	1
ENGL 1050 Workplace Communication	3
HORT 2080 Woody Perennial Identification	3
	17

SPRING SEMESTER

Course	Credits
HORT 1050 Commercial Turf Management	3
HORT 1060 Commercial Turf Management Lab	1
HORT 1070 Plant Propagation	2
HORT 1080 Plant Propagation Lab	1
HORT 1090 Integrated Pest Management	2
MATH 1020 Technical Mathematics I	3
Elective(s)*	2-3
	14-15

Total Credit Hours 31-32

*See general education requirements.

AGRICULTURE - COLLEGE TRANSFER

Students interested in pursuing academic transfer in agriculture to other colleges can obtain an Associate of Arts degree from Northeast Community College. This degree includes several general education classes as well as agriculture classes that transfer easily to baccalaureate programs at other colleges and universities.

Northeast has articulated agreements with the University of Nebraska-Lincoln, Wayne State College, Northwest Missouri State, Colorado State University, and South Dakota State University. Individual program plans to transfer to other four-year institutions can be developed with the help of an agriculture advisor. Students can obtain specific plans of study for these colleges from the Director of Ag Programs.

Ag Transfer students are strongly encouraged to meet with an agriculture advisor regularly to ensure transferability of elective courses to student identified transfer institution.

Suggested Program of Study for Associate of Arts Degree (2 years)

FIRST YEAR

Fall Semester

Course	Credits
ENGL 1010 English Composition I*	3
Mathematics*	3-5
History*	3
Natural Science*	4-5
Elective(s)**	3
	16-19

Spring Semester

Course	Credits
COMM 1110 Public Speaking*	3
English/Literature*	3
Behavioral **OR** Social Science*	3
Elective(s)**	6
	15

SECOND YEAR

Fall Semester

Course	Credits
Behavioral **OR** Social Science*	3
Fine Arts and Language*	3
Elective(s)**	8
	14

Spring Semester

Course	Credits
Elective(s)**	15
	15

Total Credit Hours 60-63

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

*See general education requirements.

**Recommended electives: AGRI 1010 Animal Science and AGRI 1340 Animal Science Lab, AGRI 1030 Soil Science and AGRI 1040 Soil Science Lab, AGRI 1131 Plant Science and AGRI 1132 Plant Science Lab, AGRI 1150 Entomology, AGRI 1230 Feeds and Feeding & Species Course, AGRI 1290 International Agriculture and Agribusiness, AGRI 1310 Agriculture Marketing System, AGRI 1410 Introduction to the Economics of Agriculture, AGRI 1420 Interpersonal Skills, AGRI 1530 Water Resources, AGRI 2015 Farm and Ranch Management, AGRI 2200 Advanced Fertilizers, AGRI 2400 Forage, Pasture and Grassland Production and AGRI 2410 Forage, Pasture and Grassland Production Lab, AGRI 2460 Resource Efficient Crop Management, AGRI 2870 Agriculture Law. See advisor for assistance choosing elective(s) based on professional goals and transfer institution.

AGRICULTURE - COLLEGE TRANSFER

Students interested in pursuing academic transfer in agriculture to other colleges can obtain an associate of science degree from Northeast Community College. This degree includes several general education classes as well as agriculture classes that transfer easily to baccalaureate programs at other colleges and universities.

Northeast has articulated agreements with the University of Nebraska-Lincoln, Wayne State College, Northwest Missouri State, Colorado State University, and South Dakota State University. Individual program plans to transfer to other four-year institutions can be developed with the help of an agriculture advisor. Students can obtain specific plans of study for these colleges from the Director of Ag Programs.

The Associate of Science Agriculture-College Transfer is recommended for transfer to the University of Nebraska-Lincoln.

Ag Transfer students are strongly encouraged to meet with an agriculture advisor regularly to ensure transferability of elective courses to student identified transfer institution.

Suggested Program of Study for Associate of Science Degree (2 years)

FIRST YEAR

First Semester

Course	Credits
ENGL 1010 English Composition I*	3
MATH 1150 **OR** Higher*	3-5
Behavioral **OR** Social Science*	3
Natural Science*	4-5
Elective(s)**	3
	16-19

Second Semester

Course	Credits
COMM 1110 Public Speaking*	3
English/Literature*	3
Behavioral **OR** Social Science,* English Literature,* **OR** Fine Arts and Language*	3-4
Elective(s)**	6
	15-16

SECOND YEAR

First Semester

Course	Credits
MATH 1600 **OR** Higher*	3-5
Elective(s)**	12
	15-17

Second Semester

Course	Credits
Natural Science*	4-5
Elective(s)**	10-11
	14-16

Total Credit Hours	60-68

To earn an associate of science degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

*See general education requirements.

**Recommended electives: AGRI 1010 Animal Science and AGRI 1340 Animal Science Lab, AGRI 1030 Soil Science and AGRI 1040 Soil Science Lab, AGRI 1131 Plant Science and AGRI 1132 Plant Science Lab, AGRI 1150 Entomology, AGRI 1230 Feeds and Feeding & Species Course, AGRI 1290 International Agriculture and Agribusiness, AGRI 1310 Agriculture Marketing System, AGRI 1410 Introduction to the Economics of Agriculture, AGRI 1420 Interpersonal Skills, AGRI 1530 Water Resources, AGRI 2015 Farm and Ranch Management, AGRI 2200 Advanced Fertilizers, AGRI 2400 Forage, Pasture and Grassland Production and AGRI 2410 Forage, Pasture and Grassland Production Lab, AGRI 2460 Resource Efficient Crop Management, AGRI 2870 Agriculture Law. See advisor for assistance choosing elective(s) based on professional goals and transfer institution.

NATURAL RESOURCES

Students pursuing a concentration in natural resources will study the interdependence of resource concerns, conservation, and the management practices involved in production agriculture. To gain an understanding of the characteristics and importance of our natural resources, sustainability, regulations, and best practices will be addressed. The program of study prepares students to work as technicians in natural resources, environmental stewardship, and agricultural production. Students will also be prepared to transfer into related baccalaureate programs of study.

Suggested Program of Study for Associate of Science Degree (2 Years)

FIRST YEAR

First Semester

Course	Credits
ENGL 1010 English Composition I*	3
Mathematics*	3-5
AGRI 1530 Water Resources*	3
BIOS 1010 General Biology* **OR** PHYS 1410 Elementary General Physics I with Algebra and Trigonometry*	4-5
AGRI 1030 Soil Science	3
AGRI 1040 Soil Science Lab	1
	17-20

Second Semester

Course	Credits
COMM 1110 Public Speaking*	3
English/Literature*	3
Fine Arts/Language*	3
AGRI 1131 Plant Science*	3
AGRI 1132 Plant Science Lab*	1
	13

SECOND YEAR

First Semester

Course	Credits
AGRI 2400 Forage Pasture and Grassland Production	3
AGRI 1145 Natural Resources	3
MATH 2170 Applied Statistics*	3
BIOS 2020 Introduction to Environmental Issues	4
Elective(s)**	2-4
	15-17

Second Semester

Course	Credits
Behavioral **OR** Social Science*	3
CHEM 1090 General Chemistry I	4
BIOS 1050 Botany	4
Elective(s)**	4
	15

Total Credit Hours 60-65

To earn an associate of science degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

*See general education requirements.

**Recommended electives: AGRI 1150 Entomology, AGRI 1010 Animal Science, AGRI 1310 Agriculture Marketing System, AGRI 1340 Animal Science Lab, AGRI 2035 Agroecology, AGRI 2200 Advanced Fertilizers, AGRI 2290 Agriculture Commodities Marketing, AGRI 2410 Forage Pasture & Grassland Production Lab, AGRI 2460 Resource Efficient Management, AGRI 2870 Agricultural Law, PHYS 1410 Elementary General Physics I with Algebra and Trigonometry.

PRE-PROFESSIONAL VETERINARY

The pre-professional veterinary degree will prepare students to work in a variety of related jobs within the animal health and science industries. The coursework will also serve to prepare students to transfer and complete additional veterinary school pre-requisites or transfer on to a bachelor's degree program in a related subject area after completing the Associate of Arts degree.

IMPORTANT NOTE: This degree does not lead to licensure as a veterinary technician.

Suggested Program of Study for Associate of Arts Degree (2 years)

FIRST YEAR

First Semester

Course	Credits
Written Communication*	3
Behavioral and Social Sciences*	3
Mathematics*	3-5
Natural Science*	4-5
Elective(s)**	3
	16-19

Second Semester

Course	Credits
English/Literature*	3
Mathematics*	3-5
Oral Communication*	3
Natural Science*	4-5
Elective(s)**	3
	16-19

SECOND YEAR

First Semester

Course	Credits
Behavioral and Social Science,* English Literature,* **OR** Fine Arts and Language*	3
Elective(s)**	10
	13

Second Semester

Course	Credits
Elective(s)**	15
	15

Total Credit Hours 60-66

*See general education requirements.

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that includes the general education requirements.

**Recommended electives: VTEC 1110 Veterinary Terminology, VTEC 1120 Anatomy and Physiology of Domestic Animals I, VTEC 1121 Anatomy and Physiology of Domestic Animals II, VTEC 1123 Anatomy and Physiology of Domestic Animals Lab, BIOS 2250 Introduction to Human Anatomy and Physiology I, BIOS 2260 Introduction to Human Anatomy and Physiology II, BIOS 2460 Microbiology, CHEM 1090 General Chemistry I, CHEM 1100 General Chemistry II, PHYS 1410 Elementary General Physics I with Algebra and Trigonometry, PHYS 1420 Elementary General Physics II with Algebra and Trigonometry, PHYS 2110 General Physics I with Calculus, PHYS 2120 General Physics II with Calculus, AGRI 1410 Introduction to the Economics of Agriculture, AGRI 1290 International Agriculture and Agribusiness, AGRI 1530 Water Resources, BIOS 1010 General Biology.

PRE-VETERINARY TECHNOLOGY

The pre-veterinary technology degree is intended for students who are preparing to be accepted into the Veterinary Technology program at Northeast Community College. Upon successfully completing the first semester of courses identified below and going through the selection process, a student may be accepted into the Veterinary Technology program. (See selective admission process) Once selected, a student will complete the change of major process and continue on in the Associate of Applied Science Veterinary Technology degree program.

For students who are not selected into the Veterinary Technology program following their first semester, this degree provides a program of study that will prepare them to work in a variety of related jobs within the animal health and science industries. The coursework will also serve to better prepare students to re-apply for the Veterinary Technology program during the next selection period. Students may also decide to transfer on to a bachelor's degree program in a related subject area after completing the Associate of Science degree.

IMPORTANT NOTE: This degree does not lead to licensure as a veterinary technician, nor is it intended for students pursuing a goal to become a Doctor of Veterinary Medicine.

Suggested Program of Study for Associate of Science Degree (2 years)

FIRST YEAR

First Semester

Course	Credits
ENGL 1010 English Composition I*	3
BIOS 1010 General Biology*	4
VTEC 1000 Animal Husbandry and Restraint	3
VTEC 1110 Veterinary Terminology	3
VTEC 1120 Anatomy and Physiology of Domestic Animals I	3
VTEC 1123 Anatomy and Physiology of Domestic Animals Lab	1
PSYC 1810 Introduction to Psychology*	3
	20

Second Semester

Course	Credits
COMM 1110 Public Speaking*	3
English/Literature*	3
ECON 2110 Principles of Macroeconomics*	3
Mathematics*	3-5
VTEC 1121 Anatomy and Physiology of Domestic Animals II	3
	15-17

SECOND YEAR

First Semester

Course	Credits
AGRI 1131 Plant Science*	3
AGRI 1132 Plant Science Lab*	1
AGRI 2870 Agricultural Law	3
MATH 2170 Applied Statistics*	3
AGRI 1010 Animal Science	3
AGRI 1340 Animal Science Lab	1
	14

Second Semester

Course	Credits
AGRI 2210 Animal Health	3
AGRI 1230 Feeds and Feeding	3
Elective(s)*	6
	12

Total Credit Hours 61-63

*See general education requirements.

If a student achieves a grade of "C+" or above in all VTEC classes during the first semester of the freshman year, meets the program selection criteria, and is selected by the committee through the selective admission's process, the student will be admitted into the Veterinary Technology Program through the Change of Major process for the second semester.
(*See Veterinary Technology program of study page*)

To earn an associate of science degree, a student must satisfactorily complete a minimum of 60 semester hours that includes the general education requirements.

ARTS AND COMMUNICATION

Whether looking to be creative through art, audio, video, or communications, this career field is right for the student. The Art, Audio/Video Technology, and Communications programs offer a challenging and supportive environment to help develop a creative style.

YEAR ONE PATHWAY

First Semester

Course	Credits
ENGL 1010 English Composition I*	3
MATH 1100 Topics & Ideas in Mathematics* **OR** MATH 2170 Applied Statistics*	3
History*	3
COMM 1110 Public Speaking*	3
Program Course(s)**	2-3
	14-15

Second Semester

Course	Credits
ENGL 1020 English Composition II*	3
BIOS 1010 General Biology*	4
Fine Arts & Language*	3-4
Behavioral Science*	3
Program Course(s)**	3
	16-17

*See general education requirements. **See program of study catalog page and/or advisor for assistance choosing Program Course(s) based on professional goals and transfer institution.

CAREER AND TRANSFER PATHWAYS

Career Pathways offer students the opportunity to complete coursework toward earning a Certificate, Diploma, or Associate of Applied Science Degree and enter the workforce having acquired the skills necessary to succeed in their chosen area of interest.

Transfer Pathways afford students with opportunities to complete coursework toward an Associate of Arts or an Associate of Science Degree, then transfer to a four-year institution with the first two years on their path to a bachelor's degree completed.

ARTS AND COMMUNICATION FIELD OF STUDY

CAREER

Graphic & Media Arts Pathway

Graphic Design	AAS
Media Arts	AAS
Media Production	CERT

TRANSFER

Graphic & Media Arts Pathway

Graphic Design	AA

Visual & Performing Arts Pathway

Art	AA
Theatre	AA

Writing & Communication Pathway

Communication	AA
Writing & Literature	AA

GRAPHIC DESIGN

This program prepares students for a variety of job opportunities in the exciting field of graphic design. The program emphasizes technical skill development using industry standard design software, as well as developing knowledge in the principles of design and artistic expression. (*Enrollment into this program is limited and based on the date of application.*)

The AAS program prepares students for a variety of job opportunities in the exciting field of graphic design. The program emphasizes technical skill development using industry standard design software, as well as developing knowledge in the principles of design and artistic expression. Students will have the opportunity to gain hands-on experience by working on class projects. Internships with area businesses provide them with real-life experiences.

Required Program of Study for Associate of Applied Science Degree (2 years)

FIRST YEAR

Fall Semester

Course	Credits
GCAD 1250 Drawing Logic I	3
GCAD 1300 Design I	3
GCAD 1700 Digital Photography	3
ARTS 1050 Introduction to Art History & Criticism I **OR** ARTS 1060 Introduction to Art History & Criticism II	3
GCAD 1450 Graphic Arts I	3
	15

Spring Semester

Course	Credits
GCAD 1100 Typography	3
GCAD 1600 Design II	3
GCAD 1500 Layout and Design I	3
GCAD 2100 Digital Pre-Press	3
MATH 1100 Topics and Ideas in Mathematics*	3
	15

Summer

GCAD 1310 Cooperative Internship I	1-3

*See general education requirements.

SECOND YEAR

Fall Semester

Course	Credits
BSAD 2520 Principles of Marketing	3
GCAD 2450 Graphic Arts II	3
GCAD 2500 Layout and Design II	3
INFO 2230 Web Page Development	3
BSAD 2050 Business Communications*	3
	15

Spring Semester

Course	Credits
INFO 2250 Web Development Using HTML and CSS	3
ECON 1040 Personal Finance*	3
PSYC 1810 Introduction to Psychology*	3
GCAD 2300 Package Design	3
GCAD 2610 Graphic Design Capstone	1
GCAD 2200 Typography II	3
	16

Total Credit Hours	62-64

MEDIA ARTS

Using fully-equipped radio, television, sound recording, and video production facilities, students in the Media Arts program learn and build hands-on skills for a variety of entry-level jobs in the media broadcasting, journalism, and production industries.

Required Program of Study for
Associate of Applied Science Degree (2 years)

FIRST YEAR

Fall Semester

Course	Credits
BRDC 1010 Introduction to Mass Media	3
BRDC 1210 Television Production & Performance	3
CINE 1000 Camera and Lighting I	2
CINE 1010 Camera and Lighting I Lab	1
CINE 1700 Post Production I	3
MATH 1100 Topics & Ideas in Mathematics*	3
	15

Spring Semester

Course	Credits
BRDC 1110 Radio Production & Performance	3
CINE 1720 Post Production II	3
CINE 1020 Camera and Lighting II	2
CINE 1030 Camera and Lighting II Lab	1
BSAD 2050 Business Communications*	3
BSAD 1050 Introduction to Business	3
	15

*See general education requirements.

SECOND YEAR

Fall Semester

Course	Credits
AUDR 1600 Audio Principles and Technology	2
AUDR 1615 Audio Recording Techniques I Lab	1
AUDR 2800 Audio and Recording Projects I	2
BRDC 2170 Applied TV Production I	3
CINE 2700 Post Production III	3
Behavioral Science*	3
Social Science or Exploratory Studies*	3
	17

Spring Semester

Course	Credits
AUDR 2820 Audio and Recording Projects II	2
BRDC 2270 Applied TV Production II	3
INFO 1600 PC Systems Maintenance and Repair	3
INFO 1610 PC Systems Maintenance and Repair Lab	1
CINE 2982 Digital Cinema and Media Capstone	4
	13

Total Credit Hours 60

MEDIA PRODUCTION CERTIFICATE

Students who complete the following courses in the first year of a media arts degree offering will be eligible for the media production certificate. This certificate program will provide students with the basic necessary skills for gaining entry-level employment in the areas of assistant audio engineering, broadcast production support and multimedia production.

All coursework in the Media Production Certificate program will apply as full credit towards the Associate of Applied Science in Media Arts.

Required Program of Study for Certificate (32 weeks)

FALL SEMESTER

Course	Credits
BRDC 1010 Introduction to Mass Media	3
BRDC 1210 Television Production & Performance	3
CINE 1000 Camera and Lighting I	2
CINE 1010 Camera and Lighting I Lab	1
CINE 1700 Post Production I	3
	12

SPRING SEMESTER

Course	Credits
CINE 1720 Post Production II	3
CINE 1020 Camera and Lighting II	2
CINE 1030 Camera and Lighting II Lab	1
AAS General Education Course*	3
	9

Total Credit Hours 21

*See general education requirements.

ACADEMIC TRANSFER

Academic Transfer is an associate degree designed for students who may be unsure of their career goals but who intend to continue their education at a four-year institution after attending Northeast Community College. Depending on a student's general interest area, either an associate of arts degree or an associate of science degree may be applicable.

Students are advised to work closely with advisors at Northeast Community College and with the transfer office of their four-year institution as they plan their coursework.

Required Program of Study for Associate of Arts Degree (2 years)

Course	Credits
Written Communication*	3
Oral Communication*	3
Fine Arts and Language*	3-4
English/Literature*	3
History*	3
Social Science*	3
Behavioral Science*	3
Mathematics*	3-5
Natural Science*	4-5
Elective(s)**	32
	60-64

*See general education requirements.

Required Program of Study for Associate of Science Degree (2 years)

Course	Credits
Written Communication*	3
Oral Communication*	3
English/Literature*	3
Behavioral and Social Sciences*	3
Humanities*	3-4
Natural Science*	8-10
Mathematics*	6-10
Elective(s)**	31
	60-67

*See general education requirements.

***Electives typically applicable include:

Additional History Class	3
Additional Fine Arts Class	3
Additional Science Class	4-5
Foreign Language	4
Additional Math Class	3-5
Additional Writing or Literature Class	3
Elective(s)	4-12
	24-35

To earn an associate of arts degree or an associate of science degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

YEAR ONE PATHWAY

First Semester

Course	Credits
ENGL 1010 English Composition I*	3
MATH 1100 Topics & Ideas in Mathematics* **OR** MATH 2170 Applied Statistics*	3
History*	3
COMM 1110 Public Speaking*	3
Program Course(s)**	2-3
	14-15

Second Semester

Course	Credits
ENGL 1020 English Composition II*	3
BIOS 1010 General Biology*	4
Fine Arts & Language*	3-4
Behavioral Science*	3
Program Course(s)**	3
	16-17

*See general education requirements. **See program of study catalog page and/or advisor for assistance choosing Program Course(s) based on professional goals and transfer institution.

ART

The art concentration at Northeast Community College allows students to experiment in many phases of art, including line, form, color, and perspective, as well as study the history of art. Students apply these basics to a variety of artistic skills such as painting, design, photography, and drawing. After earning an associate of arts degree, students may choose to enter the labor force or transfer to a four-year college for a bachelor's degree in art.

Career opportunities that value artistic skills may be found in fine arts, commercial art, photography, museums/galleries, media, fashion design, textile design, interior design, art sales, art therapy, or retail. As a skilled artist, students may obtain jobs in a variety of fields, such as fine arts, commercial art, photography, museums/galleries, media, fashion design, textile design, interior design, art education, art therapy, art sales and retail, as well as freelance work. A career in the arts takes dedication, patience, flexibility, talent, and sometimes luck.

Suggested Program of Study for Associate of Arts Degree (2 years)

FIRST YEAR

First Semester

Course	Credits
ENGL 1010 English Composition I*	3
MATH 1100 Topics and Ideas in Mathematics* **OR** MATH 2170 Applied Statistics	3
History*	3
COMM 1110 Public Speaking*	3
ARTS 1250 Drawing Logic I	3
	15

Second Semester

Course	Credits
ENG 1020 English Composition II*	3
BIOS 1010 General Biology*	4
Fine Arts and Language*	3
Behavioral Science*	3
ARTS 1750 Painting I	3
	16

SECOND YEAR

First Semester

Course	Credits
ARTS 1300 Design I	3
ARTS 1500 Drawing Logic II	3
ARTS 1350 Watercolor	3
Social Science*	3
Elective(s)**	3
	15

Second Semester

Course	Credits
ARTS 2750 Painting II	3
ARTS 1600 Design II	3
ARTS 1400 Ceramics	3
Elective(s)**	6
	15

Total Credit Hours 61

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

*See general education requirements.

**Recommended electives: ARTS 1450 Graphic Arts I, ARTS 1700 Digital Photography, ARTS 2450 Graphic Arts II, ARTS 1050 Introduction to Art History and Criticism I (*if not meeting the Fine Arts and Language General Education requirement*), ARTS 1060 Introduction to Art History and Criticism II (*if not meeting the Fine Arts and Language General Education requirement*).

COMMUNICATION

Effective communication skills are essential to success in any career. Students enrolled in the communication concentration will study theory and application of effective communication behaviors. Credits earned may be transferred to a four-year college and applied toward a bachelor's degree in communication. Career opportunities include mass media, teaching, consulting, business, non-profit organization, public relations, advertising, and other professions requiring interpersonal, small group, or public speaking skills.

Suggested Program of Study for Associate of Arts Degree (2 years)

FIRST YEAR

First Semester

Course	Credits
ENGL 1010 English Composition I*	3
MATH 1100 Topics and Ideas in Mathematics* **OR** MATH 2170 Applied Statistics	3
History*	3
COMM 1110 Public Speaking*	3
COMM 2010 Interpersonal Communication **OR** COMM 1100 Small Group Communication	3
BSAD 1005 Investing in Strengths	1
	16

Second Semester

Course	Credits
ENG 1020 English Composition II*	3
BIOS 1010 General Biology*	4
Fine Arts and Language*	3
Behavioral Science*	3
COMM 2300 Intercultural Communication **OR** COMM 2200 Public Relations	3
	16

SECOND YEAR

First Semester

Course	Credits
Social Science*	3
COMM 2010 Interpersonal Communication **OR** COMM 2200 Public Relations	3
HUMS 1100 Introduction to Humanities **OR** THEA 1340 Introduction to Acting	3
Elective(s)**	6
	15

Second Semester

Course	Credits
COMM 2300 Intercultural Communication **OR** COMM 2200 Public Relations	3
BRDC 1240 Voice and Diction	3
Elective(s)**	9
	15

Total Credit Hours 62

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

*See general education requirements.

**Recommended electives: BRDC 1010/JOUR 1010 Introduction to Mass Media, ENGL 2030/2040 Creating Poetry, ENGL 2050/2060 Creating Stories, THEA 1340 Introduction to Acting. Recommended electives depend on desired professional goal and/or requirements of transfer institution.

GRAPHIC DESIGN

Students in the Graphic Design program will find the most effective way to get messages across in print, electronic, and film media using a variety of methods such as color, type, illustration, photography, animation, and various print and layout techniques. Students learn the foundations of design from instructors who bring years of experience from the industry while using the same type of software that is used in the industry today.

The program is a two-year liberal arts curriculum designed to transfer to a four-year college for the completion of a bachelor's degree in graphic design, graphic communication, media arts, or related areas. This program of study emphasizes conceptual skill development, image production, elements of design and graphic design related software proficiency.

Suggested Program of Study for Associate of Arts Degree (2 years)

FIRST YEAR

First Semester

Course	Credits
ENGL 1010 English Composition I*	3
MATH 1100 Topics and Ideas in Mathematics* **OR** MATH 2170 Applied Statistics	3
History*	3
COMM 1110 Public Speaking*	3
GCAD 1450 Graphic Arts I	3
	15

Second Semester

Course	Credits
ENG 1020 English Composition II*	3
BIOS 1010 General Biology*	4
Fine Arts and Language*	3
Behavioral Science*	3
GCAD 1100 Typography	3
	16

SECOND YEAR

First Semester

Course	Credits
ECON 2110 Principles of Macroeconomics*	3
GCAD 1300 Design I	3
GCAD 1250 Drawing Logic I	3
GCAD 1700 Digital Photography	3
INFO 2230 Web Page Development	3
	15

Second Semester

Course	Credits
GCAD 1600 Design II **OR** GCAD 2450 Graphic Arts II	3
INFO 2250 Web Development using HTML and CSS	3
Electives**	9
	15

Total Credit Hours	61

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

*See general education requirements.

**Recommended electives: GCAD 1500 Layout and Design I, GCAD 2100 Digital Prepress, GCAD 2300 Package Design, GCAD 2450 Graphic Arts II, GCAD 2500 Layout and Design II. See advisor for assistance choosing elective(s) based on professional goals and transfer institution.

THEATRE

Theatre at Northeast Community College is an exciting participation activity. In addition to theatre classes, through a cooperative agreement with the Norfolk Community Theatre and the production of an all-college play, students participate in a wide variety of experiences in the production of theatre. After earning an associate of arts degree in two years, students may either put their skills directly to work or transfer into a bachelor's degree program at a four-year college.

As a Theatre major, students will develop performance and stage production skills. Students get several opportunities to participate in theatre annually (*in an acting and/or technical capacity*) with the Norfolk Community Theatre productions and the all-student College production. Opportunities include acting, stage management, and various crew positions, including lighting, set construction, costume construction, make-up, and props.

Career opportunities in theatre may be found in performing arts, directing, writing, set design, and other areas behind the scenes, movies and television, education, and business. Theatres, touring companies, show groups, amusement and theme parks, and television/radio stations are potential places of employment, and there are literally hundreds of regional, community, and summer stock companies across the nation. The business side includes production, management, marketing, and fundraising. A career in the arts takes patience, dedication, and luck. Consider pairing theatre with another career interest to open up more career opportunities.

Suggested Program of Study for Associate of Arts Degree (2 years)

FIRST YEAR

First Semester

Course	Credits
ENGL 1010 English Composition I*	3
MATH 1100 Topics and Ideas in Mathematics* **OR** MATH 2170 Applied Statistics	3
History*	3
COMM 1110 Public Speaking*	3
THEA 1340 Introduction to Acting **OR** THEA 2150 Introduction to Directing	3
THEA 1100 Applied Theatre I	1
	16

Second Semester

Course	Credits
ENG 1020 English Composition II*	3
BIOS 1010 General Biology*	4
Fine Arts and Language*	3
Behavioral Science*	3
THEA 1200 Play Production	2
THEA 1100 Applied Theatre II	1
	16

SECOND YEAR

First Semester

Course	Credits
Social Science*	3
THEA 1010 Introduction to Theatre	3
THEA 1340 Introduction to Acting **OR** THEA 2150 Introduction to Directing	3
THEA 2120 Applied Theatre III	1
Elective(s)**	6
	16

Second Semester

Course	Credits
BRDC 1240 Voice and Diction	3
THEA 2130 Applied Theatre IV	1
SOCI 2150 Exploring Unity and Diversity	3
ENGL 2140 Introduction to Shakespeare	3
Elective(s)**	6
	16

Total Credit Hours 64

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that includes the general education requirements.

*See general education requirements.

**See advisor for assistance choosing elective(s) based on professional goals and transfer institution.

WRITING AND LITERATURE

The Writing and Literature program prepares students to enter the job market in a variety of occupations that demand effective expression or to transfer credits toward a bachelor's degree in English at a four-year college or university. This course of study is a good preparation for continued graduate or professional training in areas such as English, law, political science/government, public administration, psychology, counseling, communication, and religious studies.

This program leads to opportunities in careers that require effective communication including journalism; technical, freelance, and creative writing; publishing; education; advertising; and public relations.

Suggested Program of Study for Associate of Arts Degree (2 years)

FIRST YEAR

First Semester

Course	Credits
ENGL 1010 English Composition I*	3
MATH 1100 Topics and Ideas in Mathematics* **OR** MATH 2170 Applied Statistics*	3
History*	3
COMM 1110 Public Speaking*	3
ENGL 2030 Creating Poetry I **OR** ENGL 2050 Creating Stories I	3
	15

Second Semester

Course	Credits
ENG 1020 English Composition II*	3
BIOS 1010 General Biology*	4
Fine Arts and Language*	3
Behavioral Science*	3
HUMS 1100 Introduction to Humanities	3
	16

SECOND YEAR

First Semester

Course	Credits
Social Science*	3
ENGL 2030 Creating Poetry I, ENGL 2040 Creating Poetry II, ENGL 2050 Creating Stories I, **OR** ENGL 2060 Creating Stories II	3
ENGL 2150 American Literature to 1865 **OR** ENGL 2160 American Literature since 1865	3
ENGL 2170 Comic and Graphic Novels **OR** ENGL 2730 Fiction and Cinema	3
Elective(s)**	3
	15

Second Semester

Course	Credits
ENGL 2040 Creating Poetry II **OR** ENGL 2060 Creating Stories II	3
ENGL 2190 Comparative Mythology	3
ENGL 2140 Introduction to Shakespeare, ENGL 2200 British Literature to 1800, **OR** ENGL 2210 British Literature after 1800	3
ENGL 2090 Editing and Publishing	2
Elective(s)**	3
	14

Total Credit Hours 60

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

*See general education requirements.

**See advisor for assistance choosing elective(s) based on professional goals and transfer institution.

BUSINESS, MARKETING, AND MANAGEMENT

In the ever-changing world of business today, our business faculty are committed to giving students an edge in achieving success by offering real-world experience, innovative courses, internship opportunities, as well as business student organizations.

While learning fundamentals in business, students will develop skills for real-life situations. Students will also have the opportunity to network with area business leaders as a part of their coursework. All classes are taught by faculty with both a Master's degree and professional experience.

Job opportunities in the business field are expected to steadily grow. Our graduates will find their degree will open doors in many fields. If graduates choose to continue education, they will be prepared for the challenge.

YEAR ONE PATHWAY

First Semester		Second Semester	
Course	**Credits**	**Course**	**Credits**
ENGL 1010 English Composition I*	3	ENGL/Literature*	3
MATH 1100 **OR** Higher*	3-5	Oral Communication*	3
Behavioral Science*	3	Fine Arts & Language*	3-4
Program Course(s)**	6	Program Course(s)**	6
	15-17		15-16

*See general education requirements. **See program of study catalog page and/or advisor for assistance choosing Program Course(s) based on professional goals and transfer institution.

CAREER AND TRANSFER PATHWAYS

Career Pathways offer students the opportunity to complete coursework toward earning a Certificate, Diploma, or Associate of Applied Science Degree and enter the workforce having acquired the skills necessary to succeed in their chosen area of interest.

Transfer Pathways afford students with opportunities to complete coursework toward an Associate of Arts or an Associate of Science Degree, then transfer to a four-year institution with the first two years on their path to a bachelor's degree completed.

BUSINESS, MARKETING, AND MANAGEMENT FIELD OF STUDY

CAREER

Business & Accounting Pathway

Accounting	AAS
Accounting	DIPL/CERT
Administrative Professional	DIPL/CERT
Business	AAS
Business	DIPL
Business-Entrepreneurship	CERT
Computer Application Specialist	CERT

TRANSFER

Business & Accounting Pathway

Accounting	AA
Business Administration	AA

ACCOUNTING

The accounting associate of applied science degree teaches the basic concepts, definitions, terminologies, and methods of operating an accounting system. Outstanding career opportunities await students who are accurate, conscientious, and analytical. Northeast prepares graduates for immediate employment in an entry-level accounting position.

By enrolling in Northeast's Accounting program, students learn the latest accounting principles and how to use these skills in real-life situations. Our instructors have worked professionally in the accounting field and will share this valuable experience. They will help build a solid foundation of accounting knowledge.

The field of accounting offers challenging work that is constantly evolving. Accountants spend time analyzing business functions to determine financial success. It's no surprise that many successful people in business began their careers as accountants. Strong growth in accounting related jobs is expected as a result of stricter accounting and auditing regulations, along with an expanding economy.

Required Program of Study for Associate of Applied Science Degree (2 years)

FIRST YEAR

Fall Semester

Course	Credits
ACCT 1200 Principles of Accounting I***	3
BSAD 1050 Introduction to Business, BSAD 2540 Principles of Management, **OR** ENTR 1050 Introduction to Entrepreneurship	3
BSAD 2700 Business Law I	3
INFO 1010 Fundamentals of Information Technology,* INFO 1100 Microcomputer Applications,* **OR** OFFT 1500 Microsoft Office*	3
MATH 1100 Topics and Ideas in Mathematics*	3
	15

Spring Semester

Course	Credits
ACCT 1210 Principles of Accounting II***	3
ACCT 2020 Accounting with QuickBooks***	2
BSAD 1005 Investing in Strengths	1
BSAD 1000 Human Relations and Ethics* **OR** PSYC 1810 Introduction to Psychology*	3
BSAD 2160 Customer Service and Business Etiquette	3
ECON 2110 Principles of Macroeconomics* **OR** ECON 1040 Personal Finance*	3
	15

SECOND YEAR

Fall Semester

Course	Credits
ACCT 2010 Spreadsheet Accounting***	3
ACCT 2200 Intermediate Accounting I***	3
ACCT 2260 Individual and Business Income Tax***	3
BSAD 1070 Business Math	3
BSAD 2050 Business Communications*	3
	15

Spring Semester

Course	Credits
ACCT 2030 Payroll Accounting***	3
ACCT 2700 Accounting Capstone***	3
BSAD 1310 Cooperative Internship	3
OFFT 2110 Excel Spreadsheet Applications***	3
Program Elective(s)**	3
	15

Total Credit Hours 60

Note: Students with no accounting experience are encouraged to take ACCT 1060 Basic Accounting Procedures prior to ACCT 1200 Principles of Accounting I.

*See general education requirements.

**Recommended electives: BSAD 1040 Personal Finance, BSAD 1050 Introduction to Business, BSAD 1320 Cooperative Internship, BSAD 2130 Salesmanship, BSAD 2140 Principles of Banking, BSAD 2170 Applied Statistics, BSAD 2240 Principles of Insurance, BSAD 2250 International Business, BSAD 2350 Security and Loss Prevention, BSAD 2520 Principles of Marketing, BSAD 2540 Principles of Management, ECON 2110 Principles of Macroeconomics, ECON 2120 Principles of Microeconomics, ENTR 1050 Introduction to Entrepreneurship, BSAD 2710 Business Law II.

***Must be taken during this semester or in this sequence.

ACCOUNTING CERTIFICATE

The accounting certificate consists of 21 credit hours of selected courses from accounting, business, and information technology. The certificate is specifically intended for individuals wishing to update their skills after having been out of the workforce for several years, or for working adults wishing to change occupations. All coursework in the Accounting Certificate program will apply as full credit towards the Accounting Diploma program and the Associate of Applied Science in Accounting or the Associate of Arts Degree.

Required Program of Study for Certificate (48 weeks)

Fall Semester I

Course	Credits
ACCT 1200 Principles of Accounting I*	3
BSAD 1070 Business Math	3
INFO 1010 Fundamentals of Information Technology, INFO 1100 Microcomputer Applications, **OR** OFFT 1500 Microsoft Office	3
	9

Spring Semester

Course	Credits
ACCT 1210 Principles of Accounting II*	3
ACCT 2020 Accounting with QuickBooks*	2
ACCT 2030 Payroll Accounting*	3
BSAD 1005 Investing in Strengths	1
	9

Fall Semester II

Course	Credits
ACCT 2260 Individual and Business Income Tax*	3
	3

Total Credit Hours 21

Note: *Students with no accounting experience are encouraged to take ACCT 1060 Basic Accounting Procedures prior to ACCT 1200 Principles of Accounting I.*

*Must be taken in this semester or in this sequence.

ACCOUNTING DIPLOMA

The accounting diploma consists of 33 credit hours of selected courses from accounting, business, and information technology. The diploma is intended for individuals wishing to focus on accounting and related course work and who have previous successful work experience. All coursework in the Accounting Diploma program will apply as full credit towards Associate of Applied Science in Accounting or an Associate of Arts Degree.

Required Program of Study for Diploma (48 weeks)

Fall Semester I

Course	Credits
ACCT 1200 Principles of Accounting I*	3
ECON 2110 Principles of Macroeconomics **OR** ECON 1040 Personal Finance	3
INFO 1010 Fundamentals of Information Technology,* INFO 1100 Microcomputer Applications*, **OR** OFFT 1500 Microsoft Office*	3
BSAD 1070 Business Math	3
	12

Spring Semester

Course	Credits
ACCT 1210 Principles of Accounting II*	3
ACCT 2020 Accounting with QuickBooks*	2
ACCT 2030 Payroll Accounting*	3
BSAD 1005 Investing in Strengths	1
BSAD 2050 Business Communications	3
	12

Fall Semester II

Course	Credits
ACCT 2010 Spreadsheet Accounting*	3
ACCT 2260 Individual and Business Income Tax*	3
Elective(s)**	3
	9

Total Credit Hours 33

Note: *Students with no accounting experience are encouraged to take ACCT 1060 Basic Accounting Procedures prior to ACCT 1200 Principles of Accounting I.*

*Must be taken in this semester or in this sequence.

**Recommended electives: BSAD 1000 Human Relations and Ethics, BSAD 2140 Principles of Banking, BSAD 2160 Customer Service and Business Etiquette, BSAD 2240 Principles of Insurance, BSAD 2250 International Business, BSAD 2520 Principles of Marketing, BSAD 2540 Principles of Management, ECON 2120 Principles of Microeconomics, OFFT 2110 Excel Spreadsheet Applications, or others as approved by advisor.

ADMINISTRATIVE PROFESSIONAL CERTIFICATE

The Administrative Professional certificate consists of a minimum of 16 hours of selected courses from administrative professional, business, and information technology areas. The certificate is designed for students seeking immediate employment in entry-level, clerical positions with a focus on the basic skills of office support personnel. All coursework in the Administrative Professional Certificate program will apply as full credit toward the Administrative Professional Diploma program.

Required Program of Study for Certificate (16 weeks)

Required Courses

Course	Credits
OFFT 1500 Microsoft Office	3
OFFT 1580 Microsoft Outlook	1
BSAD 1000 Human Relations and Ethics	3
BSAD 1050 Introduction to Business	3
BSAD 2050 Business Communications	3
BSAD 2160 Customer Service & Business Etiquette	3
Total Credit Hours	16

ADMINISTRATIVE PROFESSIONAL DIPLOMA

As technology continues to expand in businesses and offices, the role of office personnel has evolved to include a wide range of responsibilities. The Administrative Professional diploma program is designed for students seeking fundamental skills in office processes, with emphasis on human relations, customer service, communication, professional behaviors, administrative skills, and computer technology applications. The diploma program provides students with the knowledge and skills necessary to be employed in a variety of office occupations.

Required Program of Study for Diploma (32 weeks)

FALL SEMESTER

Course	Credits
OFFT 1500 Microsoft Office	3
OFFT 1580 Microsoft Outlook	1
BSAD 1000 Human Relations and Ethics	3
BSAD 1050 Introduction to Business	3
BSAD 2050 Business Communications	3
BSAD 2160 Customer Service & Business Etiquette	3
	16

* Must be taken during this semester or in this sequence.

SPRING SEMESTER

Course	Credits
ACCT 1060 Basic Accounting Procedures **OR** ACCT 1200 Principles of Accounting	3
BSAD 1005 Investing in Strengths	1
ENGL 1010 English Composition I	3
OFFT 1880 Office Procedures and Practicum*	3
OFFT 2090 Advanced Word Certification	3
OFFT 2110 Excel Spreadsheet Applications	3
	16
Total Credit Hours	32

BUSINESS-ENTREPRENEURSHIP CERTIFICATE

Students who choose the Entrepreneurship Certificate will receive instruction pertaining to skills necessary to begin the journey of becoming an entrepreneur. In this program students will explore basic marketing, accounting, sales, and the first step in opening a business—the written business plan. All coursework in the Entrepreneurship Certificate program will apply as full credit towards an Associate of Arts Degree.

Required Program of Study for Certificate (48 weeks)

FALL SEMESTER

Course	Credits
ACCT 1200 Basic Accounting I*	3
BSAD 2520 Principles of Marketing	3
BSAD 2700 Business Law I	3
ENTR 1050 Introduction to Entrepreneurship	3
	12

SPRING SEMESTER

Course	Credits
ENTR 2040 Entrepreneurship Feasibility Study	3
ACCT 2020 Accounting with Quickbooks	2
	5

FALL SEMESTER

Course	Credits
ENTR 2090 Entrepreneurship Business Plan	3
	3
Total Credit Hours	20

*Students with no accounting experience are encouraged to take ACCT 1060 Basic Accounting Procedures prior to Principles of Accounting I.

COMPUTER APPLICATION SPECIALIST CERTIFICATE

The computer application specialist certificate is designed to prepare individuals for work in any setting that requires extensive knowledge and skills of computer application software. It is specifically intended for individuals needing to update their skills in various software applications. Intensive study in word processing, spreadsheet, database, and web page development software applications will prepare individuals for today's modern office or workplace. Through these courses, students will have the opportunity to complete up to seven Microsoft Office Specialist certifications, which provide industry-leading assessment of skills and knowledge through project-based testing. These certifications give students a commanding competitive edge in today's academic and professional environments.

Required Program of Study for Certificate (32 weeks)

FALL SEMESTER

Course	Credits
OFFT 1500 Microsoft Office	3
OFFT 1580 Microsoft Outlook	1
INFO 2230 Web Page Development	3
	7

SPRING SEMESTER

Course	Credits
OFFT 2090 Advanced Word Certification	3
OFFT 2110 Excel Spreadsheet Applications	3
OFFT 2500 Advanced Office Integration **OR** INFO 1800 Micro Computer Applications II*	3
	9
Total Credits	16

*Students in the Computer Applications Specialist certificate program that take INFO 1800 rather than OFFT 2500 may use OFFT 1500 as the prerequisite to INFO 1800. See advisor for more information.

BUSINESS DIPLOMA

The business diploma is best suited for working adults seeking to improve their understanding of basic business concepts. The business diploma program allows students to explore topics related to marketing, advertising, salesmanship, and management. All coursework in the Business Diploma program will apply as full credit towards the Business Associate of Applied Science Degree or an Associate of Arts Degree.

Required Program of Study for Diploma (32 weeks)

FALL SEMESTER

Course	Credits
ACCT 1200 Principles of Accounting I*	3
BSAD 2130 Salesmanship	3
BSAD 2250 International Business	3
BSAD 2520 Principles of Marketing	3
BSAD 2540 Principles of Management	3
OFFT 1500 Microsoft Office	3
	18

SPRING SEMESTER

Course	Credits
BSAD 1000 Human Relations and Ethics **OR** PSYC 1810 Introduction to Psychology	3
BSAD 1005 Investing in Strengths	1
BSAD 1070 Business Math	3
BSAD 2050 Business Communications	3
BSAD 2160 Customer Service and Business Etiquette	3
BSAD 1040 Personal Finance **OR** ECON 2110 Macroeconomics	3
	16

Total Credit Hours 34

*Students with no accounting experience are encouraged to take ACCT 1060 Basic Accounting Procedures or ACCT 1100 Survey of Accounting prior to ACCT 1200 Principles of Accounting I.

BUSINESS

A Business AAS offers comprehensive instruction covering basic skills for management, marketing, customer service and sales occupations. Students must successfully complete the general education requirements, the business core requirements, and approved electives. In addition to classroom work, students participate in a cooperative internship program, which incorporates on-the-job work experience. Students may add on specialized certificates to expand their business knowledge in Accounting, Administrative Professional, Computer Application Specialist, or Entrepreneurship.

Required Program of Study for Associate of Applied Science in Business (2 years)

FIRST YEAR

Fall Semester

Course	Credits
BSAD 1000 Human Relations and Ethics* **OR**	
PSYC 1810 Introduction to Psychology*	3
BSAD 1005 Investing in Strengths	1
BSAD 2540 Principles of Management	3
ENGL 1010 English Composition I*	3
INFO 1100 Microcomputer Applications* **OR**	
OFFT 1500 Microsoft Office*	3
MATH 1100 Topics and Ideas in Mathematics*	3
	16

Spring Semester

Course	Credits
BSAD 2050 Business Communications	3
BSAD 2160 Customer Service & Business Etiquette	3
BSAD 2520 Principles of Marketing	3
BSAD 2550 Advanced Management	3
ECON 1040 Personal Finance* **OR**	
ECON 2110 Macroeconomics*	3
	15

Required Summer Coursework

Course	Credits
BSAD 1320 Cooperative Internship	3

SECOND YEAR

Fall Semester

Course	Credits
ACCT 1200 Principles of Accounting I	3
BSAD 2130 Salesmanship	3
BSAD 2250 International Business	3
BSAD 2530 Advanced Marketing	3
COMM 1010 Fundamentals of Communication* **OR**	
COMM 1110 Public Speaking*	3
	15

Spring Semester

Course	Credits
BSAD 1070 Business Math	3
BSAD 2700 Business Law I	3
BSAD 2760 Applied Business Projects	3
Elective(s)**	5-6
	14-15

Total Credit Hours	63-64

*See general education requirements.

**Recommended electives: ACCT 1210 Principles of Accounting II, ACCT 2020 Accounting with QuickBooks, BSAD 2170 Business Statistics, BSAD 2140 Principles of Banking, BSAD 2240 Principles of Insurance, BSAD 2350 Security and Loss Prevention, BSAD 2710 Business Law II, ECON/BSAD 1040 Personal Finance, ECON 2110 Macroeconomics, ECON 2120 Microeconomics, ENTR 1050 Introduction to Entrepreneurship, ENTR 2040 Entrepreneurship Feasibility Study, ENTR 2090 Entrepreneurship Business Plan, INFO 2110 Access Database Applications, OFFT 1090 Microsoft Word I, OFFT 2500 Advanced Office Integration, SOCI 2150 Exploring Unity and Diversity.

ACCOUNTING

The associate of arts degree with a concentration in accounting is a two-year liberal arts curriculum for those students who plan to transfer to a four-year college for the completion of a bachelor's degree in the area of accounting. This program of study emphasizes instruction in accounting, business law, business communications, economics and statistics which will prepare the student to be successful at the transfer institution.

Suggested Program of Study for Associate of Arts Degree (2 years)

FIRST YEAR

First Semester

Course	Credits
ENGL 1010 English Composition I*	3
MATH 1100 **OR** Higher*	3-5
Behavioral Science*	3
ACCT 1200 Principles of Accounting I***	3
BSAD 1050 Introduction to Business**	3
	15-17

Second Semester

Course	Credits
English/Literature*	3
Oral Communication*	3
Fine Arts and Language*	3-4
ACCT 1210 Principles of Accounting II***	3
BSAD 2050 Business Communications	3
	15-16

SECOND YEAR

First Semester

Course	Credits
BSAD 1005 Investing in Strengths**	1
BSAD/MATH 2170 Applied Statistics**	3
ECON 2110 Principles of Macroeconomics*/***	3
BSAD 2700 Business Law I**	3
INFO 1010 Fundamentals of Information Technology*** **OR** OFFT 1500 Microsoft Office***	3
History*	3
	16

Second Semester

Course	Credits
Natural Science*	4-5
ECON 2120 Principles of Microeconomics***	3
BSAD 2710 Business Law II**	3
Elective(s)**	4
	14-15

Total Credit Hours 60-64

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

*See general education requirements.

**Recommended electives: ACCT 1060 Basic Accounting Procedures, ACCT 2010 Spreadsheet Accounting, OFFT 2110 Excel Spreadsheet Applications, other courses based on transfer institutions. See advisor for assistance choosing elective(s) based on professional goals and transfer institution.

***Must be taken during this semester or in this sequence.

Note: *Students with no accounting experience are encouraged to take ACCT 1060 Basic Accounting Procedures prior to ACCT 1200 Principles of Accounting I.*

BUSINESS ADMINISTRATION

The business administration program is a two-year liberal arts curriculum for those students that plan to transfer to a four-year college for the completion of a bachelor's degree in one of many areas of business. This program of study emphasizes instruction in accounting, business law, business communications, economics, and statistics, which will prepare the student to be successful at the transfer institution.

Suggested Program of Study for Associate of Arts Degree (2 years)

FIRST YEAR

First Semester

Course	Credits
ENGL 1010 English Composition I*	3
MATH 1100 **OR** Higher*	3-5
Behavioral Science*	3
ACCT 1200 Principles of Accounting I***	3
BSAD 1050 Introduction to Business**	3
	15-17

Second Semester

Course	Credits
English/Literature*	3
Oral Communication*	3
Fine Arts and Language*	3-4
ACCT 1210 Principles of Accounting II***	3
BSAD 2050 Business Communication	3
	15-16

SECOND YEAR

First Semester

Course	Credits
BSAD 1005 Investing in Strengths**	1
BSAD/MATH 2170 Applied Statistics**	3
ECON 2110 Principles of Macroeconomics*/***	3
BSAD 2700 Business Law I**	3
INFO 1010 Fundamentals of Information Technology** **OR** OFFT 1500 Microsoft Office**	3
History*	3
	16

Second Semester

Course	Credits
Natural Science*	4-5
ECON 2120 Principles of Microeconomics***	3
BSAD 2710 Business Law II***	3
Elective(s)**	4
	14-15

Total Credit Hours 60-64

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

*See general education requirements.

**Recommended electives: ACCT 1060 Basic Accounting Procedures, BSAD 2520 Principles of Marketing, BSAD 2540 Principles of Management, other electives based on professional goals and transfer institution. See advisor for assistance choosing elective(s) based on professional goals and transfer institution.

***Must be taken during this semester or in this sequence.

Note: *Students with no high school or work experience in accounting are advised to switch accounting and economics courses and are encouraged to take ACCT 1060 Basic Accounting Procedures prior to ACCT 1200 Principles of Accounting I.*

HEALTH SCIENCES

Northeast has a wide range of Health Science career fields. If a student is looking to be a part of the health industry, helping others with training, or starting their pre-professional journey, Northeast offers a program. During studies, students will learn leadership skills, teamwork, collaboration, and specialized knowledge while preparing for continued success and career advancement.

YEAR ONE PATHWAY - ASSOCIATE OF SCIENCE DEGREE

First Semester		Second Semester	
Course	**Credits**	**Course**	**Credits**
ENGL 1010 English Composition I*	3	ENGL/Literature*	3
Behavioral or Social Science*	3	Oral Communication*	3
MATH 1150 **OR** Higher*	3-5	Natural Science	4-5
Natural Science	4-5	ENGL/Literature,* Fine Arts & Language,* **OR** Behavioral **OR** Social Science*	3-4
Program Course(s)**	3	Program Course(s)**	3
	16-19		16-18

YEAR ONE PATHWAY - ASSOCIATE OF ARTS DEGREE

First Semester		Second Semester	
Course	**Credits**	**Course**	**Credits**
ENGL 1010 English Composition I*	3	ENGL/Literature*	3
Behavioral Science*	3	Oral Communication*	3
MATH 1150 **OR** Higher*	3-5	Fine Arts and Language*	3-4
Natural Science	4-5	Social Science*	3
Program Course(s)**	3	Program Course(s)**	3
	16-19		15-16

*See general education requirements. **See program of study catalog page and/or advisor for assistance choosing Program Course(s) based on professional goals and transfer institution.

CAREER AND TRANSFER PATHWAYS

Career Pathways offer students the opportunity to complete coursework toward earning a Certificate, Diploma, or Associate of Applied Science Degree and enter the workforce having acquired the skills necessary to succeed in their chosen area of interest.

Transfer Pathways afford students with opportunities to complete coursework toward an Associate of Arts or an Associate of Science Degree, then transfer to a four-year institution with the first two years on their path to a bachelor's degree completed.

HEALTH SCIENCES FIELD OF STUDY

CAREER		TRANSFER	
Fitness & Recreation Pathway		**Fitness & Recreation Pathway**	
Personal Training	DIPL	Athletic Training	AS
Allied Health & Nursing Pathway		Personal Training	AA
Community Healthcare Worker	CERT	Exercise Science	AS
Health Information Management Systems	AAS	Recreation	AA
Health Information Management Systems	DIPL/CERT	**Allied Health & Nursing Pathway**	
Medical Billing	DIPL	Nursing-Pre-Professional	AA/AS
Nursing	ADN	Nursing-Pre-Prof UNMC Transfer	AS
Nursing-Practical	DIPL	Paramedicine-Pre-Professional	AA/AS
Paramedicine	AAS	Physical Therapy-Pre-Professional	AA/AS
Paramedicine	DIPL	Public Health	AS
Physical Therapist Assistant	AAS		

COMMUNITY HEALTH WORKER CERTIFICATE

Community Health Workers (CHW) provide frontline health services to the public as case coordinators, community liaisons, family advocates, home health care providers and intake specialists giving guidance on health behaviors. The CHW serves as a liaison/link/intermediary between health/social services and the community to facilitate access to services and improve health knowledge and self-efficiency through a range of activities such as outreach, community education, informal counseling, social support, and advocacy. The CHW certificate program of study prepares individuals with the necessary skills to perform the duties of a community health worker. With additional education and/or work experience, there is opportunity for advancement into supervisory or managerial positions within the field of community and or public health. All of the course work in the certificate will apply toward the Associate of Arts Degree or the Associate of Science Degree with emphasis in Public Health.

Required Program of Study for Certificate (16 weeks)

FALL SEMESTER

Course	Credits
HLTH 1060 Comprehensive Medical Terminology	3
HLTH 1210 Community Health Worker	3
HPER 2310 Community Health	3
HUSR 1010 Introduction to Human Services & Counseling	3
NURA 1110 Nurse Aide	3
COMM 1110 Public Speaking	3
Total Credit Hours	18

MEDICAL BILLING DIPLOMA

The Medical Billing diploma prepares the student for a position as a medical biller in a variety of healthcare settings, such as physician offices, multi-specialty clinics, nursing homes, surgery centers, healthcare systems, and medical billing companies. The accuracy and timeliness of this work will be crucial to providers' financial operations, and the biller role serves as a valuable member of the healthcare team. Students in the HIMS Program will be required to have a 'C' grade or better in the HIMS coursework. Additionally, HIMS students will be required to complete a successful criminal background check, drug screen, and provide immunization history prior to completing the Professional Practice Experiences. All coursework in the Medical Billing Diploma program will apply as full credit towards the Associate of Arts Degree or the Associate of Science Degree.

Required Program of Study for Diploma (32 Weeks)

FALL SEMESTER

Course	Credits
BSAD 1005 Investing in Strengths	1
BSAD 2050 Business Communications	3
HIMS 1000 Introduction to Health Information Management	2
HIMS 1025 Medical Office Procedures	2
HIMS 1220 Structure and Function of the Human Body	3
HLTH 1060 Comprehensive Medical Terminology	3
OFFT 1500 Microsoft Office	3
	17

SPRING SEMESTER

Course	Credits
HIMS 1015 Introduction to Billing	1
HIMS 2000 Medical Billing & Reimbursement	3
HIMS 1140 Pathopharmacology	3
HIMS 2015 Principles of Healthcare Insurance	3
HIMS 2025 Medical Coding and Compliance for Billers	3
HIMS 2125 Billing Professional Practice Experience	3
	16
Total Credit Hours	33

HEALTH INFORMATION MANAGEMENT SYSTEMS CERTIFICATE

The certificate provides the necessary skills to perform successfully in entry-level administrative positions in the healthcare field. These support skills cover managing day-to-day medical office operations, understanding legal and ethical issues in healthcare operations, HIPAA, customer service, professionalism, and computer fundamentals customized for medical offices. Once the student has completed the certificate, they can continue classes in the HIMS program toward the Diploma or Associate of Applied Science degree in Health Information Management Systems and Medical Billing diploma. Students in the HIMS Program will be required to have a 'C' grade or better in the HIMS coursework. All coursework in the Health Information Management Systems Certificate program will apply as full credit towards the Health Information Management Systems Diploma and/or Health Information Management Systems Associate of Applied Science Degree.

Required Program of Study for Certificate (16 weeks)

Required Courses

Course	Credits
BSAD 1005 Investing in Strengths	1
BSAD 2050 Business Communications	3
HIMS 1000 Introduction to Health Information Management	2
HIMS 1025 Medical Office Procedures	2
HLTH 1060 Comprehensive Medical Terminology	3
HIMS 1220 Structure & Function of Human Body	3
OFFT 1500 Microsoft Office	3
Total Credit Hours	17

HEALTH INFORMATION MANAGEMENT SYSTEMS DIPLOMA

The coding courses prepare students for a national coding exam through the American Health Information Management Association (AHIMA). The courses for the diploma are embedded in the Health Information Management Systems (HIMS) Associate of Applied Science Degree. Once the student has completed the diploma, they can continue classes in the HIMS program toward the Associate of Applied Science degree. Students in the HIMS Program will be required to have a 'C' grade or better in the HIMS coursework. Additionally, HIMS students will be required to complete a successful criminal background check, drug screen, and provide immunization history prior to completing the Professional Practice Experiences. All coursework in the Health Information and Management Systems Diploma program will apply as full credit towards the Health Information Management Systems Associate of Applied Science Degree.

Required Program of Study for Diploma (1 year)

FALL SEMESTER

Course	Credits
BSAD 1005 Investing in Strengths	1
BSAD 2050 Business Communications	3
HIMS 1000 Introduction to Health Information Management	2
HIMS 1025 Medical Office Procedures	2
HLTH 1060 Comprehensive Medical Terminology	3
HIMS 1220 Structure & Function of Human Body	3
OFFT 1500 Microsoft Office	3
	17

SUMMER

Course	Credits
HIMS 2030 Health Information Management Applications	3
HIMS 1150 Professional Practice Experience I	2
	5

SPRING SEMESTER

Course	Credits
HIMS 1110 Coding I and Lab	4
HIMS 1120 Legal and Compliance Aspects in HIM	3
HIMS 2000 Medical Billing & Reimbursement	3
HIMS 2020 Coding II and Lab	4
HIMS 1140 Pathopharmacology	3
	17
Total Credit Hours	39

HEALTH INFORMATION MANAGEMENT SYSTEMS

Health Information Management (HIM) professionals play a critical role in maintaining, collecting, and analyzing the data that physicians, nurses, and other health care providers rely on to deliver quality health care. As the experts in patient health data management, they work in a variety of health care settings including hospitals, outpatient clinics, government agencies, and private industry. HIM professionals will be called upon to improve efficiency in health care facilities by optimizing productivity in billing and improving electronic data integrity through quality management. HIM professionals can expect to be in high demand as the health sector expands throughout this century. In fact, the Bureau of Labor Statistics cites health information technology as one of the 20 fastest growing occupations in the U.S.

A HIM professional will bring unique skills to the health care industry such as managing health records, health information systems, and summarizing data into useful information. Protecting the privacy and security of patient health information and assisting providers in understanding data flow and reporting requirements within the context of dynamic rules, regulations, and guidelines is a pertinent role in this profession. HIM professionals, hold many diverse roles, while sharing a common purpose: providing reliable and valid information that drives the healthcare industry. A degree in health information management is a good option for someone that desires a health care job in an office setting. HIM professionals will specialize in administering health information systems, managing medical records, and coding information for reimbursement and research.

At Northeast Community College, the Health Information Management Systems (HIMS) program provides the fundamental skills necessary to begin a career in the Health Information field. Students in the HIMS Program will be required to have a 'C' grade or better in the HIMS coursework. Additionally, HIMS students will be required to complete a successful criminal background check, drug screen, and provide immunization history prior to completing the Professional Practice Experiences.

The HIMS Associate of Applied Science Degree at Northeast Community College is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM). Upon successful completion of the AAS degree, the graduates are eligible to take the national qualifying examination required for certification as a Registered Health Information Technician (RHIT).
CAHIIM | 200 East Randolph Street, Suite 5100 | Chicago, IL 60601
telephone: 312-235-3255 | info@cahiim.org | www.cahiim.org

Required Program of Study for Associate of Applied Science Degree (2 years)

FIRST YEAR

Fall Semester

Course	Credits
BSAD 1005 Investing in Strengths	1
BSAD 2050 Business Communications*	3
HIMS 1000 Introduction to Health Information Management	2
HIMS 1025 Medical Office Procedures	2
HIMS 1220 Structure & Function of Human Body	3
HLTH 1060 Comprehensive Medical Terminology	3
OFFT 1500 Microsoft Office*	3
	17

Spring Semester

Course	Credits
HIMS 1110 Coding I and Lab	4
HIMS 2020 Coding II and Lab	4
HIMS 1120 Legal and Compliance Aspects in HIM	3
HIMS 1140 Pathopharmacology	3
HIMS 2000 Medical Billing & Reimbursement	3
	17

*See general education requirements.

SECOND YEAR

Fall Semester

Course	Credits
BSAD 1000 Human Relations and Ethics*	3
HIMS 1010 Applied Health Informatics	2
HIMS 2030 Health Information Management Applications	3
HIMS 2130 Reimbursement Methodologies	2
HIMS 1150 Professional Practice Experience I	2
MATH 2170 Applied Statistics*	3
	15

Spring Semester

Course	Credits
ECON 2110 Principles of Macroeconomics*	3
HIMS 2100 Quality Management & Process Improvement	3
HIMS 2110 Health Information Technology Assessment	1
HIMS 2120 Professional Practice Experience II	3
HIMS 2040 Advanced Health Informatics	3
HIMS 2150 HIM Leadership	1
	14
Total Credit Hours	63

NURSING

The nursing programs at Northeast Community College are designed to allow the students maximum mobility for either the practical or associate degree nursing education. Learn the art and science of nursing through a combination of theory and clinical courses specific to each level of nursing. Clinical coursework is completed in local hospitals, long-term care facilities and community based settings. State-of-the-art simulations create learning experiences that supplement actual clinical time. Innovative, experienced nursing faculty are there to coach the student every step of the way.

All students accepted into the program who successfully complete the first two semesters receive a diploma in practical nursing and may opt to take the NCLEX-PN exam for licensure. Based on grade point average, a student may be eligible to complete the last two semesters of the program to receive an associate degree in nursing and take the NCLEX-RN exam. Students must achieve a grade of 'B' or better in all Nursing (NURS) coursework.

The nursing program may be completed in one, two, or multiple years with full-time and part-time options. Nursing program admission is competitive. See nursing program admission requirements for detailed information. Students will be required to submit to a criminal background check and drug testing prior to acceptance into the program.

The Practical Nursing Program and the Associate Degree Nursing Programs are approved by the Nebraska State Board of Nursing.

The Associate Degree in Nursing Program is accredited by:
The Accreditation Commission for Education in Nursing (ACEN)
3390 Peachtree Road NE, Suite1400; Atlanta, GA 30326
(404) 975-5000; www.acenursing.org

Required Program of Study for Practical and Associate Degree in Nursing (2 years)

FIRST YEAR

Summer

Course	Credits
BIOS 2250 Intro to Human Anatomy & Physiology I*	4

Fall Semester

Course	Credits
BIOS 2260 Intro to Human Anatomy & Physiology II*/**	4
MATH 1025 Math for Health Care Professionals*/**	3
NURS 1010 Nursing Process and Critical Thinking I	3
NURS 1060 Pathophysiology Disease Processes I	1.5
NURS 1100 Nursing Science I	3
NURS 1110 Health Assessment/Health Promotion I	2
NURS 1120 Pharmacology and Nursing Practice I	1.5
NURS 1180 Nursing's Role I	1
	19

Spring Semester

Course	Credits
BIOS 2460 Microbiology*/**	4
ENGL 1010 English Composition I*/**	3
NURS 1070 Pathophysiology Disease Processes II	1.5
NURS 1125 Pharmacology and Nursing Practice II	1.5
NURS 1130 Nursing Process and Critical Thinking II	3
NURS 1140 Nursing Science II	3
NURS 1150 Intravenous Therapy Practical Nursing	1
NURS 1185 Nursing's Role II	1
	18

Total Nursing Hours in Curriculum	23
Total General Education Hours	18

Total Hours in Practical Nursing Curriculum 41

Upon successful completion, student may graduate and take NCLEX-PN Exam for licensure as a Practical Nurse.

SECOND YEAR

Fall Semester

Course	Credits
NURS 2120 Pharmacology and Nursing Practice III	1
NURS 2150 Nursing Process and Critical Thinking III	4
NURS 2160 Nursing Science III	5
NURS 2165 Nursing's Role III	1
PSYC 1810 Introduction to Psychology*/**	3
COMM 1010 Fundamentals of Communication*/**	3
	17

Spring Semester

Course	Credits
NURS 2170 Nursing Process and Critical Thinking IV	4
NURS 2180 Nursing Science IV	4
NURS 2185 Nursing's Role IV	3
Elective(s)***	3
	14

Total Nursing Hours in Curriculum	45
Total General Education Hours	27

Total Hours in ADN Curriculum 72

Upon successful completion, student may graduate and take NCLEX- RN Exam for licensure as a Registered Nurse.

*See general education requirements.

**These courses may be taken before admittance to the program or in conjunction with the nursing courses, post-admission.

***Recommended electives: ENGL 1020 English Composition II, MATH 2170 Applied Statistics, PSYC 2200 Human Development, SOCI 1010 Introduction to Sociology, CHEM 1090 General Chemistry I, HOEC 1050 Nutrition, NURS 2100 Health Care Ethics.

NURSING: LPN – ADN

The following program of study is designed for licensed practical nurses who are interested in returning to college after a period of years to become a registered nurse.

A Licensed Practical Nurse (LPN) who feels he/she has established a good base of knowledge and nursing experience may wish to take the next step and become a Registered Nurse (RN). LPNs seeking higher salaries, more responsibility, and career advancement should think about a career as an RN. Choosing to become an RN can be a great career move and becoming a Registered Nurse through an LPN to Associate Degree in Nursing (ADN) program at Northeast Community College can have many benefits. The LPN to ADN program is designed for qualified Licensed Practical Nurses who wish to become Registered Nurses with a minimum amount of time and with little repeat of course content and credits.

The difference between a LPN and a RN may seem small at first glance, but differ greatly in the education required to achieve licensure, and the opportunities afforded to each down the road are what really makes the difference. Many more options become available to an RN as they gain more experience, ones that will not be offered to an LPN regardless of experience or base knowledge.

All coursework in the Nursing- Practical Diploma program will apply as full credit towards the Associate Degree Nursing, the Associate of Arts Degree, or the Associate of Science Degree.

The Associate Degree Nursing Program is approved by the Nebraska State Board of Nursing and accredited by The Accreditation Commission for Education in Nursing (ACEN)
3390 Peachtree Road NE, Suite1400; Atlanta, GA 30326
(404) 975-5000; www.acenursing.org

Required Program of Study for LPN to ADN

General Education Courses

Course	Credits
BIOS 2250 Introduction to Human Anatomy and Physiology I*	4
BIOS 2260 Introduction to Human Anatomy and Physiology II*	4
BIOS 2460 Microbiology*	4
ENGL 1010 English Composition I*	3
MATH 1025 Math for Health Care Professionals	3
PSYC 1810 Introduction to Psychology*	3
COMM 1010 Fundamentals of Communication*	3
Elective(s)**	5-6
	29-30
Total General Education Hours	29-30

Upon successful completion, student may graduate and take NCLEX- RN Exam for licensure as a Registered Nurse.

** Recommended electives: ENGL 1020 English Composition II, MATH 2170 Applied Statistics, PSYC 2200 Human Development, SOCI 1010 Introduction to Sociology, CHEM 1090 General Chemistry I, HOEC 1050 Nutrition, NURS 2100 Health Care Ethics.

*See general education requirements.

Nursing Courses

Summer

Course	Credits
NURS 1120 Pharmacology and Nursing Practice I	1.5
NURS 1125 Pharmacology and Nursing Practice II	1.5
NURS 1150 Intravenous Therapy for Practical Nursing	1
	4

Fall Semester

Course	Credits
NURS 1060 Pathophysiology of Disease Processes I	1.5
NURS 1110 Health Assessment and Health Promotion I	2
NURS 2120 Pharmacology and Nursing Practice III	1
NURS 2150 Nursing Process and Critical Thinking III	4
NURS 2160 Nursing Science III	5
NURS 2165 Nursing's Role III	1
	14.5

Spring Semester

Course	Credits
NURS 1070 Pathophysiology of Disease Processes II	1.5
NURS 2170 Nursing Process and Critical Thinking IV	4
NURS 2180 Nursing Science IV	4
NURS 2185 Nursing's Role IV	3
	12.5
Total Nursing Course Hours	31
Total Credit Hours	60-61

PARAMEDICINE DIPLOMA

The EMS training program offers two different programs of study for the student desiring to become a paramedic. Both programs will develop field/clinical ready paramedics with the required knowledge and skills to care for patients who are injured due to trauma or suffer from medical problems. The degree program is presented in a less intense pace and allow for additional skill time. Students will receive their Advanced Cardiac Life Support (ACLS), Pediatric Advanced Life Support (PALS), Prehospital Trauma Life Support (PHTLS) and Advanced Medical Life Support (AMLS) certifications during this program of study and will be eligible to take the National Registry for Emergency Medical Technicians-Paramedic test. Upon successful certification by the National Registry, students will be able to apply for their license to practice as a Paramedic in the State of Nebraska. This program is approved through the State of Nebraska Department of Health and Human Services Regulation and Licensure.

Completion of EMTL 1840 Emergency Medical Technician Part I and EMTL 1845 Emergency Medical Technician Part II or current EMT license or certification by National Registry of EMT are a prerequisite for acceptance into the Northeast Paramedicine program.

Many of the field and clinical sites used by Northeast Community College for the Paramedicine program require that students coming into their facilities have a criminal background check completed. Students will be required to submit to a criminal background check and drug testing each year of the Paramedicine program. Individuals with a criminal record may not be eligible to complete clinical/field education in some settings based on the results of their criminal background check. Students will also be required to have a physical and show proof of current immunizations at the beginning of each school year.

All coursework in the Paramedicine Diploma program will apply as full credit towards the Associate of Applied Science in Paramedicine.

The Northeast Community College Paramedicine Program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP).

To contact CAAHEP: Commission on Accreditation of Allied Health Education Programs
9355 113th St. N. #7709 | Seminole, FL 33775
(727) 210-2350 | FAX (727) 210-2354 | www.caahep.org
To contact CoAEMSP: 8301 Lakeview Parkway, Suite 111-312 | Rowlett, TX 75088
(214) 703-8445 | FAX (214) 703-8992 | www.coaemsp.org

Required Program of Study for Diploma (1 year)

Fall Semester

Course	Credits
EMTL 2641 Paramedic I	5
EMTL 2651 Paramedic Clinical Practicum I	1.5
EMTL 2661 Paramedic Field Practicum I	1
Mathematics*	3-5
EMTL 2642 Paramedic II	5
EMTL 2652 Paramedic Clinical Practicum II	1.5
EMTL 2662 Paramedic Field Practicum II	1
	18-20

*See general education requirements.

Spring Semester

Course	Credits
EMTL 2643 Paramedic III	5
EMTL 2653 Paramedic Clinical Practicum III	2
EMTL 2663 Paramedic Field Practicum III	1
Communication*	3-6
EMTL 2644 Paramedic IV	5
EMTL 2654 Paramedic Clinical Practicum IV	2
EMTL 2664 Paramedic Field Practicum IV	1
	19-22

Summer

Course	Credits
EMTL 2852 Paramedic Field Internship	4.25
EMTL 1870 Prehospital Trauma Life Support	1
EMTL 1880 Advanced Medical Life Support	1
	6.25

Total Credit Hours 43.25-48.25

PARAMEDICINE

The EMS training program offers two different programs of study for the student desiring to become a paramedic. Both programs will develop field/clinical ready paramedics with the required knowledge and skills to care for patients who are injured due to trauma or suffer from medical problems. The degree program is presented in a less intense pace and allow for additional skill time. Students will receive their Advanced Cardiac Life Support (ACLS), Pediatric Advanced Life Support (PALS), Prehospital Trauma Life Support (PHTLS) and Advanced Medical Life Support (AMLS) certifications during this program of study and will be eligible to take the National Registry for Emergency Medical Technicians-Paramedic test. Upon successful certification by the National Registry, students will be able to apply for their license to practice as a Paramedic in the State of Nebraska. This program is approved through the State of Nebraska Department of Health and Human Services Regulation and Licensure.

Completion of EMTL 1840 Emergency Medical Technician Part I and EMTL 1845 Emergency Medical Technician Part II or current EMT license or certification by National Registry of EMT are a prerequisite for acceptance into the Northeast Paramedicine program.

Many of the field and clinical sites used by Northeast Community College for the Paramedicine program require that students coming into their facilities have a criminal background check completed. Students will be required to submit to a criminal background check and drug testing each year of the Paramedicine program. Individuals with a criminal record may not be eligible to complete clinical/field education in some settings based on the results of their criminal background check. Students will also be required to have a physical and show proof of current immunizations at the beginning of each school year.

The Northeast Community College Paramedicine Program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP).

To contact CAAHEP: Commission on Accreditation of Allied Health Education Programs
9355 113th St. N. #7709 | Seminole, FL 33775
(727) 210-2350 | FAX (727) 210-2354 | www.caahep.org
To contact CoAEMSP: 8301 Lakeview Parkway, Suite 111-312 | Rowlett, TX 75088
(214) 703-8445 | FAX (214) 703-8992 | www.coaemsp.org

Required Program of Study for Associate of Applied Science (2 years)

FIRST YEAR

Fall Semester

Course	Credits
EMTL 2641 Paramedic I	5
EMTL 2651 Paramedic Clinical Practicum I	1.5
EMTL 2661 Paramedic Field Practicum I	1
EMTL 2760 Paramedic Lab I	1
Mathematics*	3-5
HLTH 1060 Comprehensive Medical Terminology	3
	14.5-16.5

Spring Semester

Course	Credits
EMTL 2642 Paramedic II	5
EMTL 2652 Paramedic Clinical Practicum II	1.5
EMTL 2662 Paramedic Field Practicum II	1
EMTL 2761 Paramedic Lab II	1
BSAD 1000 Human Relations and Ethics*	3
BSAD/ECON 1040 Personal Finance*	3
	14.5

*See general education requirements.

SECOND YEAR

Fall Semester

Course	Credits
EMTL 2643 Paramedic III	5
EMTL 2653 Paramedic Clinical Practicum III	2
EMTL 2663 Paramedic Field Practicum III	1
EMTL 2860 Paramedic Lab III	1
Communication*	3
	12

Spring Semester

Course	Credits
EMTL 2644 Paramedic IV	5
EMTL 2654 Paramedic Clinical Practicum IV	2
EMTL 2664 Paramedic Field Practicum IV	1
EMTL 2861 Paramedic Lab IV	1
Science or Technology*	6
	15

Summer

Course	Credits
EMTL 2852 Paramedic Field Internship	4.25
EMTL 1870 Prehospital Trauma Life Support	1
EMTL 1880 Advanced Medical Life Support	1
	6.25

Total Credit Hours 62.25-64.25

PERSONAL TRAINING DIPLOMA

The personal training diploma develops an understanding of techniques used in personal training. Graduates of the program are prepared for entry level employment in the personal training field. Students will take the "National Council on Strength & Fitness" exam and become a Certified Personal Trainer after successfully passing the exam. All coursework in the Personal Training Diploma program will apply as full credit towards the Associate of Arts Degree or the Associate of Science Degree.

Required Program of Study for Diploma (32 weeks)

FALL SEMESTER

Course	Credits
COMM 1110 Public Speaking	3
HPER 1550 Lifetime Wellness	3
HPER 2310 Community Health	3
HPER 2210 Introduction to Exercise Science	4
HPER 1325 Introduction to Yoga, HPER 1326 Introduction to Pilates, HPER 2060 Weight Training, **OR** Elective(s)*	3
	16

SPRING SEMESTER

Course	Credits
BIOS 2250 Anatomy and Physiology I	4
HPER 1520 Nutrition for Fitness and Sport **OR** HOEC 1050 Nutrition	3
HPER 2300 Stress Management	3
HPER 2410 Advanced Exercise Science	4
HPER 1245 Weight Management	1
	15
Total Credit Hours	31

*See advisor for assistance choosing elective(s).

PHYSICAL THERAPIST ASSISTANT

2026 Graduates only. Students starting in Fall 2025 see page 92.

The Northeast Physical Therapist Assistant (PTA) program is designed to prepare qualified individuals for employment as entry-level physical therapist assistants. The program is an intense, academically challenging program that requires hard work and dedication. Engaged teaching and learning experiences promote an interactive learning environment in both lab and lecture. Students are trained with current technology and innovative exercise equipment to simulate realistic clinical settings.

As a condition of admission to the College, students are subject to placement testing for general education courses. Students enroll through open admission as Pre-Professional Physical Therapist Assistant. The first semester consists of general education and prerequisite coursework. Students are required to earn a grade of "C" in each course, and a cumulative GPA of 2.5 or higher in order to meet the standards of the PTA Program. Interested applicants who wish to transfer into the College should see a PTA Program advisor for transcript evaluation. Science courses must have been completed within the past five years to be considered eligible for transfer. Students must complete an application packet as part of the competitive selection process. Students are required to complete a physical exam, required vaccinations, tuberculosis test, a criminal background check, and a drug screen in order to perform clinical experiences during the second year of the program. See Special Admission Guidelines for details.

Program graduates will be eligible to take the National Physical Therapy Examination (NPTE) for PTAs. Upon successful completion of the NPTE, the graduate will be eligible for employment as a PTA under the supervision of a licensed physical therapist.

The Physical Therapist Assistant Program at Northeast Community College is accredited by the:

CAPTE
Commission on Accreditation in Physical Therapy Education

Commission on Accreditation in Physical Therapy Education (CAPTE),
3030 Potomac Avenue, Suite 100, Alexandria, Virginia 22305-3085
telephone: 703-706-3245 | email: accreditation@apta.org | website: capteonline.org
If needing to contact the program/institution directly, please call 402-844-7326 or email PTA@northeast.edu.

Required Program of Study for Associate of Applied Science Degree (2 years)

FIRST YEAR

Fall Semester

Course	Credits
BIOS 2250 Intro to Human Anatomy & Physiology I	4
ENGL 1010 English Composition I*	3
MATH 2170 Applied Statistics*	3
PTAS 1010 Medical Terminology for Physical Therapist Assistants	1.5
PTAS 1020 Introduction to Physical Therapy	1
COMM 1010 Fundamentals of Communication* **OR** COMM 1110 Public Speaking*	3
Social Science/Exploratory Studies*	2
	17.5

Spring Semester

Course	Credits
BIOS 2260 Intro to Human Anatomy & Physiology II	4
PSYC 1810 Introduction to Psychology*	3
PTAS 2550 Basic Physical Therapy Procedures	2
PTAS 2551 Basic Physical Therapy Procedures Lab	2
PTAS 2570 Exercise Principles	2
PTAS 2571 Exercise Principles Lab	1
PTAS 2520 Introduction to Clinical Management	1
	15

*See general education requirements.

Suggested Social Science/Exploratory Studies: ECON/BSAD 1040 Personal Finance, SOCI 2150 Exploring Unity and Diversity, LNSK 1010 First Year Experience

SECOND YEAR

Fall Semester

Course	Credits
PTAS 2620 Clinical Management	3
PTAS 2650 Physical Agents	2
PTAS 2651 Physical Agents Lab	2
PTAS 2670 Orthopedic Assessment & Intervention I	3.5
PTAS 2671 Ortho Assessment & Intervention I Lab	2.5
PTAS 2690 Clinical Pathophysiology	3.5
PTAS 2691 Clinical Pathophysiology Lab	0.5
	17

Spring Semester

Course	Credits
PTAS 2700 Clinical Affiliation I	3.5
PTAS 2720 Advanced Clinical Management	0.5
PTAS 2770 Orthopedic Assessment & Intervention II	2.5
PTAS 2771 Ortho Assessment & Intervention II Lab	1.5
PTAS 2790 Neurologic Rehabilitation	3
PTAS 2791 Neurologic Rehabilitation Lab	2
	13

Summer

Course	Credits
PTAS 2800 Clinical Affiliation II	5
PTAS 2900 Clinical Affiliation III	5
	10

Total Credit Hours 72.5

PHYSICAL THERAPIST ASSISTANT

Students starting the program in Fall 2025.

The Northeast Physical Therapist Assistant (PTA) program is designed to prepare qualified individuals for employment as entry-level physical therapist assistants. The program utilizes engaged teaching and interactive learning to promote student success in both lab and lecture. Students are trained with current technology and innovative exercise equipment to simulate realistic clinical settings.

As a condition of admission to the College, students are subject to placement testing for general education courses. Students interested in the PTA program will apply to the Health Sciences Field of Study, Career Pathway, and select the Physical Therapist Assistant program. Students then complete the PTA Application Packet as part of the program's competitive selection process. See Special Admission Guidelines for details.

Program graduates will be earn an AAS PTA degree and are eligible to take the National Physical Therapy Examination (NPTE) for PTAs. Upon successful completion of the NPTE, the graduate will be eligible for employment as a PTA under the supervision of a licensed physical therapist. Additional testing on state laws and regulations will vary based on the specific requirements for the state where the PTA intends to practice.

CAPTE
Commission on Accreditation in Physical Therapy Education

The Physical Therapist Assistant Program at Northeast Community College is accredited by:
The Commission on Accreditation in Physical Therapy Education (CAPTE),
3030 Potomac Avenue, Suite 100, Alexandria, Virginia 22305-3085
telephone: 703-706-3245 | email: accreditation@apta.org | website: capteonline.org
To contact the program/institution directly, call 402-844-7326 or email PTA@northeast.edu.

Required Program of Study for Associate of Applied Science Degree (2 years)

FIRST YEAR

Fall Semester

Course	Credits
BSAD 2050 Business Communications	3
PTAS 1225 Introduction to Physical Therapy	1
LNSK 1010 First Year Experience	2
BIOS 2250 Intro to Human Anatomy & Physiology I*	4
PTAS 1110 Functional A&P	3
PTAS 1115 Functional A&P Lab	0.5
PTAS 1120 Rehab Skills I	2
PTAS 1125 Rehab Skills I Lab	1
	16.5

Spring Semester

Course	Credits
MATH 2170 Applied Statistics	3
HLTH 1060 Comprehensive Medical Terminology	3
PTAS 1220 Pathophysiology	2
PTAS 1230 Therapeutic Exercise	3
PTAS 1235 Therapeutic Exercise Lab	0.5
PTAS 1240 Rehab Skills II	2
PTAS 1245 Rehab Skills II Lab	1
PTAS 1250 Introduction to Kinesiology	1
PTAS 1255 Introduction to Kinesiology Lab	0.5
	16

SECOND YEAR

Fall Semester

Course	Credits
PSYC 1810 Introduction to Psychology	3
PTAS 2310 Clinical Practice I	2
PTAS 2320 Cardiopulmonary Rehabilitation	1
PTAS 2325 Cardiopulmonary Rehabilitation Lab	1
PTAS 2330 Physical Rehabilitation I	2
PTAS 2335 Physical Rehabilitation I Lab	1
PTAS 2340 Orthopedic Rehabilitation I	3
PTAS 2345 Orthopedic Rehabilitation I Lab	1
PTAS 2300 Clinical Affiliation I	1.5
	15.5

Spring Semester

Course	Credits
PTAS 2410 Clinical Practice II	2
PTAS 2420 Therapeutic Modalities	3
PTAS 2425 Therapeutic Modalities Lab	0.5
PTAS 2430 Orthopedic Rehabilitation II	3
PTAS 2435 Orthopedic Rehabilitation II Lab	1
PTAS 2440 Physical Rehabilitation II	3
PTAS 2445 Physical Rehabilitation II Lab	1
PTAS 2400 Clinical Affiliation II	1.5
	15

Summer

Course	Credits
PTAS 2500 Clinical Affiliation III	5
PTAS 2600 Clinical Affiliation IV	4.5
	9.5

Total Credit Hours 72.5

ATHLETIC TRAINING

Students pursuing this career are able to complete an Associate of Science degree with a concentration in Athletic Training. The curriculum is designed to integrate the educational and practical training skills needed to be a professional in the field of athletic training. Students continue their education at a transfer institution to obtain a master's degree in Athletic Training or a related allied health field.

Suggested Program of Study for Associate of Science Degree (2 years)

FIRST YEAR

First Semester

Course	Credits
ENGL 1010 English Composition I*	3
PSYC 1810 Introduction to Psychology*	3
MATH 1150 College Algebra*	3
BIOS 1010 General Biology**	4
HPER 1700 Introduction to Athletic Training	3
	16

Second Semester

Course	Credits
English/Literature*	3
Oral Communication*	3
BIOS 2250 Intro to Anatomy & Physiology I*	4
English/Literature,* Fine Arts and Language,* **OR** Behavioral or Social Science*	3-4
HPER 1550 Lifetime Wellness	3
	16-17

SECOND YEAR

First Semester

Course	Credits
HPER 1510 Introduction to Health, Physical Education and Recreation	3
HPER 2400 Care and Prevention of Athletic Injuries	3
BIOS 2260 Intro to Anatomy & Physiology II*	4
MATH 2170 Applied Statistics*	3
HPER 1520 Nutrition for Fitness and Sport	3
	16

Second Semester

Course	Credits
HPER 2310 Community Health	3
HPER 1245 Weight Management	1
Elective(s)*	12
	16

Total Credit Hours	64-65

To earn an associate of science degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

*See general education requirements.

***Students with appropriate placement scores are not required to take BIOS 1010 General Biology prior to BIOS 2250 Introduction to Anatomy and Physiology I or BIOS 2460 Microbiology.*

EXERCISE SCIENCE

Students pursuing a career in the fitness industry are able to complete an Associate of Science degree with a concentration in Exercise Science. Exercise Science has been identified as a rapidly growing industry at both the state and national levels. The curriculum is designed to integrate the educational and practical skills necessary to become an exercise professional. Exercise science professionals work and study in commercial, clinical, and workplace settings increasing awareness of health, fitness, and improved quality of life for the general population. Upon completion of the Associate of Science degree, students will be prepared to take a national certifying exam. They may choose to enter the workforce as a certified personal trainer or continue their education at a transfer institution to obtain a bachelor's degree in a health-related field.

Suggested Program of Study for Associate of Science Degree (2 years)

FIRST YEAR

First Semester

Course	Credits
ENGL 1010 English Composition I*	3
PSYC 1810 Introduction to Psychology*	3
MATH 1150 College Algebra*	3
BIOS 1010 General Biology**	4
HPER 1510 Introduction to Health, Physical Education, and Recreation	3
HPER 1325 Introduction to Yoga	1
	17

Second Semester

Course	Credits
English/Literature*	3
Oral Communication*	3
BIOS 2250 Intro to Anatomy & Physiology I*	4
English/Literature,* Fine Arts and Language,* **OR** Behavioral and Social Science*	3-4
HPER 1520 Nutrition for Fitness and Sport	3
	16-17

SECOND YEAR

First Semester

Course	Credits
BIOS 2260 Anatomy and Physiology II*	4
HPER 2210 Introduction to Exercise Science	4
HPER 2400 Care and Prevention of Athletic Injuries	3
HPER 1550 Lifetime Wellness	3
HPER 1326 Introduction to Pilates	1
HPER 1270 Aerobic Fitness	1
	16

Second Semester

Course	Credits
MATH 2170 Applied Statistics*	3
HPER 2300 Stress Management	3
HPER 1245 Weight Management	1
HPER 2410 Advanced Exercise Science	4
HPER 2310 Community Health	3
Elective(s)*	3
	17

Total Credit Hours	66-67

To earn an associate of science degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

*See general education requirements.

***Students with appropriate placement scores are not required to take BIOS 1010 General Biology prior to BIOS 2250 Introduction to Anatomy and Physiology I or BIOS 2460 Microbiology.*

NURSING: PRE-PROFESSIONAL

The pre-professional nursing program consists of general education course work required to obtain an Associate of Science Degree or an Associate of Arts Degree from Northeast Community College and prepare students for admission to a nursing program (practical nursing program or associate degree in nursing). Course work may also be transferred to a four-year institution in pursuit of a Bachelor of Science in nursing. Please see advisor for individual advising.

Suggested Program of Study for Associate of Science Degree (2 years)

(*Preferred Pathway*)

FIRST YEAR

First Semester

Course	Credits
ENGL 1010 English Composition I*	3
PSYC 1810 Introduction to Psychology*	3
MATH 1150 College Algebra*	3
BIOS 2250 Intro to Anatomy & Physiology I*	4
BIOS 2460 Microbiology*	4
	17

Second Semester

Course	Credits
ENGL 1020 English Composition II*	3
Oral Communication*	3
BIOS 2260 Intro to Anatomy & Physiology II*	4
SOCI 1010 Introduction to Sociology	3
MATH 1025 Math for Healthcare Professionals	3
	16

SECOND YEAR

First Semester

Course	Credits
MATH 2170 Applied Statistics*	3
Social Science*	3
Elective(s)**	10
	16

Second Semester

Course	Credits
HOEC 1050 Nutrition	3
NURS 2100 Health Care Ethics	3
CHEM 1090 General Chemistry I*	4
Elective(s)**	3
	13

Total Credit Hours 62

To earn an associate of science degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

*See general education requirements.

**Recommended electives: HLTH 1060 Comprehensive Medical Terminology, NURA 1110 Nurse Aide, PSYC 2200 Human Development. Additional program electives may be required. See program advisor.

Students with appropriate placement scores are not required to take BIOS 1010 General Biology prior to BIOS 2250 Introduction to Anatomy and Physiology I or BIOS 2460 Microbiology.

Suggested Program of Study for Associate of Arts Degree (2 years)

FIRST YEAR

First Semester

Course	Credits
ENGL 1010 English Composition I*	3
PSYC 1810 Introduction to Psychology*	3
MATH 1150 College Algebra*	3
BIOS 2250 Intro to Anatomy & Physiology I*	4
Elective(s)**	3-4
	16-17

Second Semester

Course	Credits
ENGL 1020 English Composition II*	3
Oral Communication*	3
Fine Arts and Language*	3-4
SOCI 1010 Introduction to Sociology*	3
Elective(s)**	3-4
	15-17

SECOND YEAR

First Semester

Course	Credits
MATH 1025 Math for Healthcare Professionals	3
Social Science*	3
Elective(s)**	10
	16

Second Semester

Course	Credits
History*	3
CHEM 1090 General Chemistry I*	4
HOEC 1050 Nutrition	3
Elective(s)**	6
	16

Total Credit Hours 63-66

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

*See general education requirements.

**Recommended electives: BIOS 2260 Intro to Anatomy & Physiology II, BIOS 2460 Microbiology, HLTH 1060 Comprehensive Medical Terminology, NURA 1110 Nurse Aide, PSYC 2200 Human Development, NURS 2100 Health Care Ethics, MATH 2170 Applied Statistics.

Students with appropriate placement scores are not required to take BIOS 1010 General Biology prior to BIOS 2250 Introduction to Anatomy and Physiology I or BIOS 2460 Microbiology.

NURSING: PRE-PROFESSIONAL UNMC TRANSFER

The unique partnership between Northeast Community College and the University Nebraska Medical Center allows students interested in pursuing a bachelor's degree in nursing the opportunity to complete general education requirements at Northeast and continue to attend classes for nursing in Norfolk at UNMC's College of Nursing - Northern Division. Students must earn a grade of "C" or above in all courses listed below to ensure eligibility of transfer credit. A current CNA certification is also required by UNMC.

Admission into the UNMC BSN program is selective and very competitive. A separate application is required for admission to UNMC. Minimum pre-requisite grade point average of 3.0 is required for admission; however, priority admission to the traditional BSN program is 3.3 or higher on a 4.0 scale. Contact diana.rizzo@unmc.edu with any admission or application questions.

Northeast Suggested Program of Study for Associate of Science Degree (2 years)

FIRST YEAR

First Semester

Course	Credits
ENGL 1010 English Composition I*	3
PSYC 1810 Introduction to Psychology*	3
MATH 1150 College Algebra*/**	3
BIOS 2250 Intro to Anatomy & Physiology I*/**	4
BIOS 2460 Microbiology**/***	4
	17

Second Semester

Course	Credits
ENGL 1020 English Composition II*	3
Oral Communication*	3
BIOS 2260 Intro to Anatomy & Physiology II*/**	4
SOCI 1010 Introduction to Sociology	3
MATH 2170 Applied Statistics*/**	3
	16

SECOND YEAR

First Semester

Course	Credits
PSYC 2200 Human Development**	3
Group III Course**	3
Elective(s)	7
	13

Second Semester

Course	Credits
HOEC 1050 Nutrition**	3
Group II Course***	3
Group IV Course***	3
Elective(s)	6
	15

Total Credit Hours 61

*See general education requirements.

To earn an associate of science degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

Students planning to apply to the UNMC nursing program may complete MATH 1025 Math for Health Care Professionals in lieu of MATH 1150 College Algebra. MATH 1025 does not meet mathematics general education requirements for the Associate of Science Degree at Northeast.

*Electives: CHEM 1090 General Chemistry I, **NURS 2100 Health Care Ethics. Additional program electives may be required. See program advisor.

**Courses must be completed within 7 years of start at UNMC. (*Seven-year rule is waived for RN to BSN students.*)

***UNMC Electives:

Group II: GEOG 1020 World Regional Geography, ECON 2110 Principles of Macroeconomics, POLS 1000 American Government, AGRI 1290 International Agriculture-Agribusiness, AGRI 1310 Agricultural Marketing System, AGRI 1410 Intro to the Economics of Agriculture, BRDC 1010/JOUR 1010 Introduction to Mass Media, BSAD 2140 Principles of Banking, BSAD 2250 International Business, CRIM 1010 Intro to Criminal Justice, CRIM 1020 Introduction to Corrections, CRIM 2000 Criminal Law, CRIM 2030 Police and Society, CRIM 2100 Juvenile Justice, CRIM 2200/SOCI 2200 Criminology, ECON 2120 Principles of Microeconomics, ENTR 1050 Intro to Entrepreneurship, HIST 1030 Premodern Europe, HIST 1040 The History of Modern Europe, HIST 1050 World History to 1500 CE, HIST 1060 World History since 1500 CE, HIST 2010 American History I, HIST 2020 American History II, POLS 1200 Intro to Political Science, SOCI 2320 Social Problems.

Group III: SOCI 2300 Sociology of Deviant Behavior, PSYC 2110 Child and Adolescent Psychology, PSYC 2500 Social Psychology, PSYC 2800 Abnormal Psychology, CRIM 2300 Sociology of Deviant Behavior, ECED 1110 Infant/Toddler Development, ECED/EDUC 2070 Family and Community Relationships, SOCI 1100 Introduction to Family Living, CRIM 2200/SOCI 2200 Criminology, COMM 1100 Small Group Communication, COMM 2010 Interpersonal Communication.

Group IV: ECED/EDUC 2070 Family and Community Relationships, SOCI 2150 Exploring University and Diversity, SOCI 2320 Social Problems, or Foreign Language courses (SPAN 1200, 1210, FREN 1200, 1210).

Students with appropriate placement scores are not required to take BIOS 1010 General Biology prior to BIOS 2250 Introduction to Anatomy and Physiology I or BIOS 2460 Microbiology.

PARAMEDICINE: PRE-PROFESSIONAL

The Pre-Professional Paramedicine program consists of general education course work required to obtain an Associate of Science Degree or a Associate of Arts Degree from Northeast Community College and prepare students for admission to the Paramedicine program. Please see advisor for individual advising.

Suggested Program of Study for Associate of Science Degree (2 years)

FIRST YEAR

First Semester

Course	Credits
ENGL 1010 English Composition I*	3
PSYC 1810 Introduction to Psychology	3
Mathematics*	3
BIOS 2250 Intro to Anatomy & Physiology I*	4
EMTL 1840 Emergency Medical Technician Part I	4.5
	17.5

Second Semester

Course	Credits
ENGL 1020 English Composition II*	3
Oral Communication*	3
BIOS 2260 Intro to Anatomy & Physiology II*	4
SOCI 1010 Introduction to Sociology	3
EMTL 1840 Emergency Medical Technician Part II	4.5
	17.5

SECOND YEAR

First Semester

Course	Credits
HLTH 1060 Comprehensive Medical Terminology**	3
Fine Arts and Language*	3
MATH 1600 **OR** Higher*	3-5
Elective(s)**	6
	15-17

Second Semester

Course	Credits
CHEM 1090 General Chemistry I*	4
NURS 2100 Health Care Ethics**	3
Elective(s)**	8
	15

Total Credit Hours 65-67

*See general education requirements.

To earn an associate of science degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

**Recommended electives: : HLTH 1060 Comprehensive Medical Terminology, BIOS 2260 Intro to Anatomy & Physiology II, BIOS 2460 Microbiology, HOEC 1050 Nutrition, HPER 2300 Stress Management, NURA 1110 Nurse Aide, NURS 2100 Health Care Ethics, PSYC 2200 Human Development, MATH 1025 Math for Health Care.

Students with appropriate placement scores are not required to take BIOS 1010 General Biology prior to BIOS 2250 Introduction to Anatomy and Physiology I or BIOS 2460 Microbiology

Suggested Program of Study for Associate of Arts Degree (2 years)

FIRST YEAR

First Semester

Course	Credits
ENGL 1010 English Composition I*	3
PSYC 1810 Introduction to Psychology*	3
Mathematics*	3
BIOS 2250 Intro to Anatomy & Physiology I*	4
EMTL 1840 Emergency Medical Technician Part I	4.5
	17.5

Second Semester

Course	Credits
ENGL 1020 English Composition II*	3
Oral Communication*	3
Fine Arts and Language*	3
Social Science*	3
EMTL 1840 Emergency Medical Technician Part II	4.5
	16.5

SECOND YEAR

First Semester

Course	Credits
HLTH 1060 Comprehensive Medical Terminology**	3
Fine Arts and Language*	3
Elective(s)**	9
	15

Second Semester

Course	Credits
History*	3
SOCI 1010 Introduction to Sociology	3
NURS 2100 Health Care Ethics**	3
Elective(s)**	6
	15

Total Credit Hours 64

*See general education requirements.

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

**Recommended electives: HLTH 1060 Comprehensive Medical Terminology, BIOS 2260 Intro to Anatomy & Physiology II, BIOS 2460 Microbiology, HOEC 1050 Nutrition, HPER 2300 Stress Management, NURA 1110 Nurse Aide, NURS 2100 Health Care Ethics, PSYC 2200 Human Development.

Students with appropriate placement scores are not required to take BIOS 1010 General Biology prior to BIOS 2250 Introduction to Anatomy and Physiology I or BIOS 2460 Microbiology

PERSONAL TRAINING

Students pursuing a career in the fitness industry are able to complete an Associate of Arts degree with a concentration in Personal Training. Personal Training has been identified as a rapidly growing industry at both the state and national levels. The curriculum is designed to integrate the educational and practical skills necessary to become an exercise professional. Upon completion of this Associate of Arts degree, students will be prepared to take a national certifying exam. They may choose to enter the workforce as a certified personal trainer or continue their education at a transfer institution to obtain a bachelor's degree in a fitness related area.

Suggested Program of Study for Associate of Arts Degree (2 years)

FIRST YEAR

First Semester

Course	Credits
ENGL 1010 English Composition I*	3
PSYC 1810 Introduction to Psychology*	3
MATH 1100 Topics and Ideas in Mathematics*	3
BIOS 2250 Intro to Anatomy & Physiology I*	4
HPER 1550 Lifetime Wellness	3
	16

Second Semester

Course	Credits
English/Literature*	3
Oral Communication*	3
Fine Arts and Language*	3-4
Social Science*	3
HPER 1510 Introduction to Health, Physical Education and Recreation	3
	15-16

SECOND YEAR

First Semester

Course	Credits
HPER 2300 Stress Management	3
HPER 2210 Introduction to Exercise Science	4
History*	3
HPER 1325 Introduction to Yoga	1
HPER 1326 Introduction to Pilates	1
Elective(s)*	5
	17

Second Semester

Course	Credits
HPER 2410 Advanced Exercise Science	4
HPER 1245 Weight Management	1
HPER 2310 Community Health	3
HPER 2400 Care and Prevention of Athletic Injuries	3
HPER 1240 Circuit Training	1
HPER 1270 Aerobic Fitness	1
HPER 1520 Nutrition for Fitness and Sport	3
	16

Total Credit Hours 64-65

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

*See general education requirements.

Students with appropriate placement scores are not required to take BIOS 1010 General Biology prior to BIOS 2250 Introduction to Anatomy and Physiology I or BIOS 2460 Microbiology.

PHYSICAL THERAPY: PRE-PROFESSIONAL

If interested in the field of Physical Therapy, a student can take general education courses at Northeast and transfer into a bachelor's degree program at a four-year college or university.

Suggested Program of Study for Associate of Science Degree (2 years)

FIRST YEAR

First Semester

Course	Credits
ENGL 1010 English Composition I	3
PSYC 1810 Introduction to Psychology	3
MATH 1150 College Algebra	3
BIOS 2250 Intro to Anatomy & Physiology I	4
PTAS 1225 Introduction to Physical Therapy	3
	~~16~~

Second Semester

Course	Credits
ENGL 1020 English Composition II	3
Oral Communication*	3
BIOS 2260 Intro to Anatomy & Physiology II	4
MATH 2170 Applied Statistics	3
HLTH 1060 Comprehensive Medical Terminology	3
	~~16~~

SECOND YEAR

First Semester

Course	Credits
PHYS 1410 Elementary General Physics I with Algebra and Trigonometry	5
Humanities*	3
Electives	8
	~~16~~

Second Semester

Course	Credits
CHEM 1090 General Chemistry I	4
Electives	12
	~~16~~

Total Credit Hours 64

*See general education requirements.

Suggested Program of Study for Associate of Arts Degree (2 years)

FIRST YEAR

First Semester

Course	Credits
ENGL 1010 English Composition I	3
PSYC 1810 Introduction to Psychology	3
MATH 1150 College Algebra	3
BIOS 2250 Intro to Anatomy & Physiology I	4
PTAS 1225 Introduction to Physical Therapy	3
	~~16~~

Second Semester

Course	Credits
English/Literature*	3
Oral Communication*	3
Fine Arts and Language*	3-4
Social Science*	3
BIOS 2260 Intro to Anatomy & Physiology II	4
	~~16-17~~

SECOND YEAR

First Semester

Course	Credits
MATH 2170 Applied Statistics	3
PHYS 1410 Elementary General Physics I with Algebra and Trigonometry	5
HLTH 1060 Comprehensive Medical Terminology	3
Electives	5
	~~16~~

Second Semester

Course	Credits
CHEM 1090 General Chemistry I	4
History*	3
Electives	9
	~~16~~

Total Credit Hours 64-65

To earn an associate of arts or an associate of science degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

PUBLIC HEALTH COLLEGE TRANSFER

Students interested in pursuing academic transfer in public health to other colleges can obtain an associate of science degree from Northeast Community College. This degree includes several general education classes as well as health related elective classes that transfer easily into baccalaureate programs at other colleges and universities.

Northeast has articulated agreements with the University of Nebraska-Lincoln, University of Nebraska- Omaha, and Concordia University. Individual program plans to transfer to other four-year institutions can be developed with the help of an advisor. Students can obtain specific plans of study for these colleges from the Health and Public Services Division Dean's office.

Public Health degree seeking students are strongly encouraged to meet with an advisor regularly to ensure transferability of elective courses to student identified transfer institution.

Suggested Program of Study for Associate of Science Degree (2 years)

FIRST YEAR

First Semester

Course	Credits
ENGL 1010 English Composition I*	3
PSYC 1810 Introduction to Psychology*	3
MATH 1150 College Algebra*	3
BIOS 2250 Intro to Anatomy & Physiology I*	4
HPER 1550 Lifetime Wellness**	3
	16

Second Semester

Course	Credits
ENGL 1020 English Composition II*	3
Oral Communication*	3
BIOS 2260 Intro to Anatomy & Physiology II*	4
English/Literature,* Fine Arts and Language,* **OR** Behavioral **OR** Social Science*	3-4
MATH 2170 Applied Statistics*	3
	16-17

SECOND YEAR

First Semester

Course	Credits
HLTH 1210 Community Health Worker**	3
HLTH 1060 Comprehensive Medical Terminology**	3
Elective(s)**	10
	16

Second Semester

Course	Credits
HPER 2310 Community Health**	3
Elective(s)**	13
	16

Total Credit Hours 64-65

To earn an associate of science degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

*See general education requirements.

**Recommended electives: BIOS 2460 Microbiology, HOEC 1050 Nutrition, HPER 2300 Stress Management, HUSR 1010 Introduction to Human Services and Counseling, HUSR 2020 Social Problems, MATH 1025 Math for Health Care Professionals, NURA 1110 Nurse Aide, NURS 2100 Health Care Ethics.

Students with appropriate placement scores are not required to take BIOS 1010 General Biology prior to BIOS 2250 Introduction to Anatomy and Physiology I or BIOS 2460 Microbiology.

RECREATION

The recreation program is designed to provide students with the basic knowledge, skills, and strategies for opportunities in recreation. The student majoring in recreation will work to promote recreational activities within communities and engage those communities through social relationships and promotion of health. Successful graduates may choose to complete a bachelor's degree at a four-year college or university.

Suggested Program of Study for Associate of Arts Degree (2 years)

FIRST YEAR

First Semester

Course	Credits
ENGL 1010 English Composition I*	3
PSYC 1810 Introduction to Psychology*	3
MATH 1100 **OR** Higher*	3-5
PHYS 1100 Physical Science*	4
HPER 1510 Introduction to Health, Physical Education, and Recreation**	3
	16-18

Second Semester

Course	Credits
ENGL 1020 English Composition II*	3
Oral Communication*	3
Fine Arts and Language*	3-4
SOCI 1010 Introduction to Sociology*	3
HPER 1550 Lifetime Wellness**	3
	15-16

SECOND YEAR

First Semester

Course	Credits
HPER 2300 Stress Management**	3
HPER 1350 Recreational Games**	2
History*	3
Elective(s)**	8
	16

Second Semester

Course	Credits
HPER 1245 Weight Management**	1
HPER 2110 Individual and Dual Sports**	3
HPER 2400 Care & Prevention of Athletic Injuries**	3
HPER 2310 Community Health**	3
HPER 2160 Team Sports**	3
Elective(s)**	3
	16

Total Credit Hours 63-66

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

*See general education requirements.

**Recommended electives: HPER 1150 Sports Officiating, HPER 1191 Spinning, HPER 1240 Circuit Training, HPER 1270 Aerobic Fitness, HPER 1272 TRX/BOSU Training, HPER 1325 Introduction to Yoga, HPER 1326 Introduction to Pilates, HPER 1360 Body Conditioning, HPER 2060 Weight Training, HPER 1271 Fitness for Aging Population, HPER 1521 Nutrition for Aging Population, HPER 1210 Badminton, HPER 1260 Golf, HPER 1290 Racquetball, HPER 1320 Water Aerobic Fitness.

HUMAN SERVICES AND EDUCATION

Human Services career fields will prepare a student for social or human service agency work. In addition to classroom study, students will have the opportunity to gain job-relevant skills, knowledge of the field, and clinical experiences while working with local educational and human services agencies.

Teacher education is an essential part of Northeast Community College. Our education faculty work in partnership with the campus community and area public and private schools to provide academic coursework and hands-on experiences in early childhood, elementary, paraprofessional, and secondary settings.

YEAR ONE PATHWAY

First Semester

Course	Credits
ENGL 1010 English Composition I*	3
Behavioral Science*	3
Fine Arts and Language*	3-4
Social Science*	3
Program Course(s)**	3
	15-16

Second Semester

Course	Credits
COMM 1110 Public Speaking*	3
MATH 1100 **OR** Higher*	3-5
(ECED/EDUC ONLY MATH 1010 Math for Elementary Teachers)	
History*	3
English/Literature*	3
Program Course(s)**	3
	15-17

*See general education requirements. **See program of study catalog page and/or advisor for assistance choosing Program Course(s) based on professional goals and transfer institution.

CAREER AND TRANSFER PATHWAYS

Career Pathways offer students the opportunity to complete coursework toward earning a Certificate, Diploma, or Associate of Applied Science Degree and enter the workforce having acquired the skills necessary to succeed in their chosen area of interest.

Transfer Pathways afford students with opportunities to complete coursework toward an Associate of Arts or an Associate of Science Degree, then transfer to a four-year institution with the first two years on their path to a bachelor's degree completed.

HUMAN SERVICES AND EDUCATION FIELD OF STUDY

CAREER

Education and Social Sciences Pathway

Early Childhood Education	AAS
Early Childhood Education	CERT

Human Services Pathway

Drug and Alcohol Counseling	CERT

TRANSFER

Criminal Justice Pathway

Criminal Justice-Corrections	AA
Criminal Justice-Law Enforcement	AA

Education and Social Sciences Pathway

Early Childhood Education	AA
Elementary Education	AA
Global Studies	AA
History	AA
Paraprofessional Education	AA
Physical Education Teacher Education	AA
Secondary Education	AA
Skilled & Technical Sciences Education	AA
Social Science	AA

Human Services Pathway

Human Services	AA
Psychology	AA
Social Work	AA

DRUG AND ALCOHOL COUNSELING CERTIFICATE

Northeast Community College offers the following coursework to meet the 270 clock hours of education required for initial licensure of alcohol and drug counselors in Nebraska. The following courses have been approved by the State of Nebraska Division of Public Health. In addition to the coursework, licensure requires a 300-hour practicum (*see Statutes Relating to Alcohol and Drug Counseling at: dhhs.ne.gov/licensure for more information).*

All coursework in the Drug and Alcohol Counseling Certificate program will apply as full credit towards the Associate of Arts Degree or the Associate of Science Degree.

Required Program of Study for Certificate (16 weeks)

Course	Credits
HUSR 1010 Introduction to Human Services and Counseling	3
HUSR 1220 Group Theory and Practice*	3
HUSR 1230 Multicultural Counseling*	2
HUSR 2010 Introduction to Case Management and Professional Ethics*	3
HUSR 2020 Medical and Psycho-Social Aspects of Chemical Use	3
HUSR 2030 Treatment Issues in Chemical Dependency	2
PSYC 2200 Human Development**	3
Total Credit Hours	19

**Prerequisite: HUSR 1010 with minimum grade of C or PSYC 1810 with minimum grade of C.

*Prerequisite: HUSR 1010 with minimum grade of C (Waived for those with LIMHP, LMHP or PLMHP).

EARLY CHILDHOOD EDUCATION CERTIFICATE

The Early Childhood Education Certificate prepares students for entry-level positions in childcare and satisfies the 120 clock hours of professional early childhood education required for CDA® credentialing awarded by the Council for Professional Recognition.

To earn a CDA® in Infant and Toddler (Birth-36 months), Preschool (3-5 years), or Family Child Care candidates must also obtain 480 hours of experience working with young children and prepare a CDA® professional portfolio.

See www.cdacouncil.org for additional information about CDA® credential requirements. Students are encouraged to complete HLTH 5131 Pediatric Basic Life Support & First Aid which is required for childcare providers.

All coursework in the Early Childhood Education Certificate program will apply as full credit towards the Early Childhood Education Associate of Applied Science Degree or the Associate of Arts Degree.

Required Program of Study for Certificate (16 weeks)

Course	Credits
ECED 1110 Infant and Toddler Development	3
ECED 1120 Preschool Child Development	2
ECED 1150 Introduction to Early Childhood Education	3
ECED 1260 Early Childhood Health, Safety, & Nutrition	3
ENGL 1050 Workplace Communications **OR** BSAD 2050 Business Communications	3
Elective(s)*	3
Total Credit Hours	17

*Recommended electives: Any Early Childhood Education 3 credit course or EDUC 2250 Children's Literature

EARLY CHILDHOOD EDUCATION

An Associate of Applied Science degree in Early Childhood Education will prepare students to directly enter the workforce as a nanny, paraprofessional, or child care provider in a child care center or home. The Associate of Applied Science degree will prepare graduates for employment opportunities that allow for advancement to leadership positions in child care centers or start their own child care business. Students are encouraged to complete HLTH 5131 Pediatric Basic Life Support & First Aid which is required for childcare providers.

In addition to lecture classes, students gain experience by working in child care centers and schools. Child care providers require a criminal background check prior to employment. Students will be required to submit a background check in ECED 1220 prior to enrolling in early childhood education practicum courses. Individuals with a criminal record may not be eligible for employment. Please check with advisor.

Required Program of Study for Associate of Applied Science Degree (2 years)

FIRST YEAR

Fall Semester

Course	Credits
ECED 1050 Expressive Arts	3
ECED 1150 Introduction to Early Childhood Education	3
ECED 1110 Infant/Toddler Development	3
ECED 2070 Family and Community Relationships	3
BSAD 2050 Business Communications*	3
	15

Spring Semester

Course	Credits
ECED 1060 Observation, Assessment, and Guidance	3
ECED 1120 Preschool Child Development	2
ECED 1220 Pre-Practicum	1
ECED 1230 School Age Child Development and Programming	2
ECED 1260 Early Childhood Health, Safety, & Nutrition	3
MATH 1010 Math for Elementary Teachers*	3
Program Elective(s)**	3
	17

SECOND YEAR

Fall Semester

Course	Credits
ECED 1160 Early Language and Literacy	3
ECED 1610 Infant Practicum	1
ECED 1620 Toddler Practicum	1
ECED 2060 Early Childhood Education Curriculum Planning	3
BSAD 1000 Human Relations and Ethics* **OR** PSYC 1810 Introduction to Psychology*	3
BSAD 1040 Personal Finance*	3
	14

Spring Semester

Course	Credits
ECED 1630 Preschool Practicum	1
ECED 1640 School Age Practicum	1
ECED 2050 Children with Exceptionalities	3
ECED 2450 Early Childhood Administration	3
EDUC 2250 Children's Literature	3
OFFT 1500 Microsoft Office*	3
	14

Total Credit Hours 60

*See general education requirements.

NOTE: *All Practicum courses require a minimum grade of "C".*

**Program Elective(s): EDUC 1110 Introduction to Professional Education, EDUC 2000 Educational Psychology, EDUC 1100 Human Relations in a Pluralistic Society, SIGN 1000 Conversational Sign Language, SPAN 1200 Elementary Spanish I, SPAN 1210 Elementary Spanish II, SOCI 2150 Exploring Unity and Diversity.

CRIMINAL JUSTICE

An associate of arts degree in criminal justice can be the first step to an exciting and rewarding career in public safety. Students may choose the corrections or law enforcement concentration. These concentrations take an interdisciplinary approach that provides a knowledge base and encourages initiative and integrity. After completing an associate of arts degree, students may choose to transfer to a four-year college. Career fields include law enforcement, probation and parole, education, social services, security, and counseling.

Individuals considering employment in the criminal justice profession must be aware of strict admission qualifications. Factors that usually disqualify candidates from employment in the profession include a criminal record (i.e., theft, assault, murder), history of drug/alcohol abuse, significant psychological/ personal disorders, physiological disorders, neuromuscular dysfunction, dishonesty, etc. Law enforcement agencies hire only the best qualified individuals available in order to obtain and maintain public trust and confidence at all times.

Suggested Program of Study for Associate of Arts Degree (2 years)

Criminal Justice - Corrections

FIRST YEAR

First Semester

Course	Credits
ENGL 1010 English Composition I*	3
Behavioral Science*	3
Fine Arts and Language*	3-4
Social Science*	3
CRIM 1010 Introduction to Criminal Justice	3
	15-16

Second Semester

Course	Credits
COMM 1110 Public Speaking*	3
MATH 1100 **OR** Higher*	3-5
History*	3
English/Literature*	3
CRIM 1020 Introduction to Corrections	3
	15-17

SECOND YEAR

First Semester

Course	Credits
CRIM 2250 Community Based Corrections	3
CRIM 2100 Juvenile Justice	3
CRIM 2200 Criminology	3
CRIM 2000 Criminal Law	3
Elective(s)**	3
	15

Second Semester

Course	Credits
CRIM 2300 Sociology of Deviant Behavior	3
CRIM 2580 Communication Skills in Criminal Justice	3
CRIM 2330 Management of Behavioral Issues in Criminal Justice	3
Natural Science*	4-5
Elective(s)**	3
	16-17

Total Credit Hours 61-65

Criminal Justice - Law Enforcement

FIRST YEAR

First Semester

Course	Credits
ENGL 1010 English Composition I*	3
Behavioral Science*	3
Fine Arts and Language*	3-4
Social Science*	3
CRIM 1010 Introduction to Criminal Justice	3
	15-16

Second Semester

Course	Credits
COMM 1110 Public Speaking*	3
MATH 1150 **OR** Higher*	3-5
History*	3
English/Literature*	3
CRIM 1270 Intro to Forensic Crime Scene Investigation	3
	15-17

SECOND YEAR

First Semester

Course	Credits
CRIM 2030 Police and Society	3
CRIM 2000 Criminal Law	3
CRIM 2260 Criminal Investigation	3
Elective(s)**	6
	15

Second Semester

Course	Credits
CRIM 2080 Criminal Procedures	3
CRIM 2330 Management of Behavioral Issues in Criminal Justice	3
CRIM 2580 Communication Skills in Criminal Justice	3
Natural Science*	4-5
Elective(s)**	3
	16-17

Total Credit Hours 61-65

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements listed.

*See general education requirements.

**Recommended electives: CRIM 1030 Courts and Judicial Process , CRIM 1800 Criminal Justice Practicum, CRIM 2100 Juvenile Justice, CRIM 2400 Jail Management Certification Training, CRIM 2700 Issues in Criminal Justice (to enroll in CRIM 2700, student must have earned a minimum of 18 credit hours of criminal justice coursework), SOCI 2320 Social Problems, SOCI 2150 Exploring Unity and Diversity, SPAN 1200 Elementary Spanish I, PSYC 1810 Introduction to Psychology, PSYC 2800 Abnormal Psychology (Pre-requisite: PSYC 1810).

EARLY CHILDHOOD EDUCATION

Students who intend to pursue a career working with children and wish to continue their education at a four-year college will pursue the Associate of Arts degree, which includes early childhood courses as well as general education classes that meet bachelor's degree requirements for careers in early childhood, early childhood inclusive education, or elementary education with an endorsement in early childhood.

In addition to lecture classes, students may gain experience by working in child care centers and schools. Child care providers require a criminal background check prior to employment. Students will be required to submit a background check in ECED 1220 prior to enrolling in early childhood education practicum courses. Individuals with a criminal record may not be eligible for employment. Please check with advisor.

Suggested Program of Study for Associate of Arts Degree (2 years)

FIRST YEAR

First Semester

Course	Credits
ENGL 1010 English Composition I*	3
Behavioral Science*	3
Fine Arts and Language*	3-4
Social Science*	3
ECED 1150 Intro to Early Childhood Education	3
	15-16

Second Semester

Course	Credits
COMM 1110 Public Speaking*	3
MATH 1010 Math for Elementary Teachers	3
History*	3
English/Literature*	3
ECED 2070 Family and Community Relationships	3
	15

SECOND YEAR

First Semester

Course	Credits
EDUC 1110 Introduction to Professional Education	3
ECED 1050 Expressive Arts	3
ECED 2060 Early Childhood Education Curriculum Planning	3
Elective(s)**	6
	15

Second Semester

Course	Credits
ECED 2050 Children with Exceptionalities	3
Natural Science*	4-5
EDUC 1100 Human Relations in a Pluralistic Society **OR** SOCI 2150 Exploring Unity and Diversity	1-3
Elective(s)**	7-8
	15-19

Total Credit Hours	60-65

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

*See general education requirements.

**Recommended electives: ECED 1060 Observation, Assessment, and Guidance, ECED 1110 Infant and Toddler Development, ECED 1120 Preschool Child Development, ECED 1160 Early Language and Literacy, ECED 1220 Pre-Practicum, ECED 1260 Early Childhood Health, Safety, and Nutrition, ECED 1610 Infant Practicum, ECED 1620 Toddler Practicum, ECED 1630 Preschool Practicum, ECED 2450 Early Childhood Administration, EDUC 2000 Educational Psychology, EDUC 2250 Children's Literature, MATH 1015 Geometry for Elementary Teachers.

Sixty credit hours and evidence of Human Relations training (*verified through documentation of relevant work experience, successful completion of EDUC 1100 Human Relations in a Pluralistic Society, SOCI 2150 Exploring Unity and Diversity, or Human Relations coursework taken from a four-year institution*) will meet the requirements to apply for local substitute teaching certification from the Nebraska Department of Education. Check online at www.education.ne.gov/tcert/ for more information.

EDUCATION - ELEMENTARY

Teacher education students take three types of courses at Northeast Community College. General courses are required of all associate of arts degree candidates and promote general knowledge. Subject courses help students learn the subjects they will be teaching. For an understanding of the teaching profession, students take professional education courses that instruct students how to teach. Teacher education students have opportunities for practical experience in elementary classrooms while completing course work. To become an elementary teacher, students may complete a two-year liberal arts program at Northeast and then transfer credits to a four-year college offering the bachelor's degree in teacher education. Employers include K-6, and in some cases K-8, school systems, correctional institutions, hospitals, vocational services, and community organizations.

Students should work closely with Northeast advisors and transfer colleges in planning specific course schedules because requirements vary, depending on the choice of transfer.

Schools require a background check prior to employment. Students will be required to submit a background check prior to completing any classroom field experience. Individuals with a criminal record may not be eligible for employment as an educator. Please check with advisor.

Suggested Program of Study for Associate of Arts Degree (2 years)

FIRST YEAR

First Semester

Course	Credits
ENGL 1010 English Composition I*	3
PSYC 1810 Introduction to Psychology*	3
Fine Arts and Language*	3-4
Social Science*	3
EDUC 1110 Introduction to Professional Education	3
	15-16

Second Semester

Course	Credits
COMM 1110 Public Speaking*	3
MATH 1010 Math for Elementary Teachers	3
History*	3
English/Literature*	3
EDUC 2070 Family and Community Relationships	3
	15

SECOND YEAR

First Semester

Course	Credits
MUSC 2350 Elementary School Music	3
ARTS 2250 Elementary School Art	3
MATH 1015 Geometry for Elementary Teachers	3
EDUC 2000 Educational Psychology	3
Elective(s)**	3
	15

Second Semester

Course	Credits
EDUC 2250 Children's Literature	3
EDUC 2800 Professional Practicum	1
HPER 2150 Physical Education in Elementary School with Practicum	3
Natural Science*	4-5
EDUC 1100 Human Relations in a Pluralistic Society **OR** SOCI 2150 Exploring Unity and Diversity	1-3
Elective(s)**	3-4
	15-19

Total Credit Hours 60-65

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

*See general education requirements.

**Recommended electives: ECED 2050 Children with Exceptionalities, PHYS 1100 Physical Science, SIGN 1000 Conversational Sign Language, SOCI 2150 Exploring Unity and Diversity, SPAN 1200 Elementary Spanish I, SPAN 1210 Elementary Spanish II. See advisor to determine which option works best.

Sixty credit hours and evidence of Human Relations training (*verified through documentation of relevant work experience, successful completion of EDUC 1100 Human Relations in a Pluralistic Society, SOCI 2150 Exploring Unity and Diversity, or Human Relations coursework taken from a four-year institution*) will meet the requirements to apply for local substitute teaching certification from the Nebraska Department of Education. Check online at www.education.ne.gov/tcert for more information.

EDUCATION - PARAPROFESSIONALS

Education paraprofessionals perform duties that are instructional in nature or that deliver direct services to students or parents. Paraprofessionals serve in positions for which a teacher or another professional has ultimate responsibility for the design and implementation of educational programs and services. Substitute teaching opportunities may also be available.

A combination of general education requirements, selected education-related courses, and suggested electives will lead to an associate of arts degree with a concentration in paraprofessional education.

Schools require a criminal background check prior to employment. Students will be required to submit a background check prior to completing any classroom field experience. Individuals with a criminal record may not be eligible for employment as an educator. Please check with advisor.

Suggested Program of Study for Associate of Arts Degree (2 years)

FIRST YEAR

First Semester

Course	Credits
ENGL 1010 English Composition I*	3
PSYC 1810 Introduction to Psychology*	3
Fine Arts and Language*	3-4
Social Science*	3
EDUC 1110 Introduction to Professional Education	3
	15-16

Second Semester

Course	Credits
COMM 1110 Public Speaking*	3
MATH 1010 Math for Elementary Teachers	3
History*	3
English/Literature*	3
EDUC 2070 Family and Community Relationships	3
	15

SECOND YEAR

First Semester

Course	Credits
EDUC 1100 Human Relations in a Pluralistic Society **OR** SOCI 2150 Exploring Unity and Diversity	1-3
EDUC 2000 Educational Psychology	3
Elective(s)**	10
	14-16

Second Semester

Course	Credits
ECED 2050 Children with Exceptionalities	3
Natural Science*	4-5
Elective(s)**	9
	16-17

Total Credit Hours	60-64

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

*See general education requirements.

**Recommended electives: ECED 1150 Introduction to Early Childhood Education, EDUC 2250 Children's Literature, MATH 1015 Geometry for Elementary Teachers, SIGN 1000 Conversational Sign Language, or a second history, science, or fine arts course of a different focus than first taken.

Sixty credit hours and evidence of Human Relations training (*verified through documentation of relevant work experience, successful completion of EDUC 1100 Human Relations in a Pluralistic Society, SOCI 2150 Exploring Unity and Diversity, or Human Relations coursework taken from a four-year institution*) will meet the requirements to apply for local substitute teaching certification from the Nebraska Department of Education. Check online at www.education.ne.gov/tcert/ for more information.

EDUCATION - SECONDARY

To become a secondary teacher, students may complete a two-year liberal arts program at Northeast and then transfer credits to a four-year college offering the bachelor's degree in teacher education. Teacher education students take three types of courses at Northeast Community College. General courses are required of all associate of arts degree candidates and promote general knowledge. Subject courses help students learn the subjects they will be teaching. For an understanding of the teaching profession, students take professional education courses that instruct students how to teach. Teacher education students have opportunities for practical experience in secondary classrooms while completing course work. Employers include 7-12 school systems, correctional institutions, hospitals, vocational services, and community organizations.

Students should work closely with Northeast advisors and transfer colleges in planning specific course schedules because requirements vary, depending on the choice of transfer.

Schools require a background check prior to employment. Students will be required to submit to a background check prior to completing any classroom field experience. Individuals with a criminal record may not be eligible for employment as an educator. Please check with advisor.

Suggested Program of Study for Associate of Arts Degree (2 years)

FIRST YEAR

First Semester

Course	Credits
ENGL 1010 English Composition I*	3
PSYC 1810 Introduction to Psychology*	3
Fine Arts and Language*	3-4
Social Science*	3
EDUC 1110 Introduction to Professional Education	3
	15-16

Second Semester

Course	Credits
COMM 1110 Public Speaking*	3
MATH 1150 **OR** Higher*	3-5
History*	3
English/Literature*	3
Elective(s)**	3
	15-17

SECOND YEAR

First Semester

Course	Credits
EDUC 2000 Educational Psychology	3
Elective(s)**	12
	15

Second Semester

Course	Credits
EDUC 2800 Professional Practicum	1
Natural Science*	4-5
Elective(s)**	11
	16

Total Credit Hours	61-65

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

* See general education requirements.

**Recommended electives: EDUC 1100 Human Relations in a Pluralistic Society, SOCI 2150 Exploring Unity and Diversity, and others depending on educational goals and transfer requirements. See advisor for assistance choosing elective(s) based on professional goals and transfer institution.

Sixty credit hours and evidence of Human Relations training (*verified through documentation of relevant work experience, successful completion of EDUC 1100 Human Relations in a Pluralistic Society, SOCI 2150 Exploring Unity and Diversity, or Human Relations coursework taken from a four-year institution*) will meet the requirements to apply for local substitute teaching certification from the Nebraska Department of Education. Check online at www.education.ne.gov/tcert/ for more information.

GLOBAL STUDIES

A Global Studies concentration provides students with the knowledge, critical thinking, communication, and analytical skills necessary to be successful in an increasingly complex and inter-connected world. This is an interdisciplinary program of study designed to give students a framework that can lead them into various and diverse career fields that require a global perspective, such as government, international trade, international banking and economics, diplomacy, non-profits, international security, travel and tourism, and the like.

Suggested Program of Study for Associate of Arts Degree (2 years)

FIRST YEAR

First Semester

Course	Credits
ENGL 1010 English Composition I*	3
Behavioral Science*	3
Fine Arts and Language*	3-4
Social Science*	3
GEOG 1020 World Regional Geography	3
	15-16

Second Semester

Course	Credits
COMM 1110 Public Speaking*	3
MATH 1150 **OR** Higher*	3-5
History*	3
English/Literature*	3
COMM 2300 Intercultural Communications	3
	15-17

SECOND YEAR

First Semester

Course	Credits
POLS 1600 International Relations	3
SOCI 2150 Exploring Unity and Diversity	3
Elective(s)**	9
	15

Second Semester

Course	Credits
GLBS 2900 Global Capstone Project	3
Natural Science*	4-5
Elective(s)**	9
	16-17

Total Credit Hours	61-65

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

*See general education requirements.

**See advisor for assistance choosing elective(s) based on professional goals and transfer institution.

HISTORY

A concentration in History is, at its core, a course of study meant to develop wisdom. Just as individual humans rely on the analysis of their past in order to plot a course forward in their life, so too does a society require people who will act as custodians and analysts of its collective memory to continually improve itself. The History concentration trains students in the use of critical reasoning to recognize and analyze causality through time as well as develop their communication skills (*both in writing and speaking*) to fulfill the traditional role of Historians as storytellers. These skills will be particularly useful to students pursuing a career in law, government, diplomacy, and international business, as well as those who wish to become teachers and/or professional historians.

Suggested Program of Study for Associate of Arts Degree (2 years)

FIRST YEAR

First Semester

Course	Credits
ENGL 1010 English Composition I*	3
Behavioral Science*	3
ARTS 1060 Introduction to Art History & Criticism II	3
Social Science*	3
HIST 2010 American History I*	3
	15

Second Semester

Course	Credits
COMM 1110 Public Speaking*	3
MATH 1100 **OR** Higher*	3-5
English/Literature*	3
Elective(s)**	6
	15-17

SECOND YEAR

First Semester

Course	Credits
HIST 1030 Premodern Europe	3
HIST 1050 World History to 1500 CE	3
SOCI 2150 Exploring Unity and Diversity	3
THEA 1340 Introduction to Acting	3
ARTS 1050 Introduction to Art History & Criticism I	3
	15

Second Semester

Course	Credits
HIST 1040 The History of Modern Europe	3
HIST 1060 World History since 1500 CE	3
PHIL 1010 Introduction to Philosophy	3
Natural Science*	4-5
Elective(s)**	3
	16-17

Total Credit Hours 61-64

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

*See general education requirements.

**See advisor for assistance choosing elective(s) based on professional goals and transfer institution.

HUMAN SERVICES

Completion of the associate of arts degree with a concentration in human services will provide students with a foundation of knowledge and skills to understand and meet human need. Employees in human services occupations facilitate an overall improvement in the quality of life for a diverse population. Entry- level employment opportunities are available with an associate degree, and with appropriate continued education, students are prepared to pursue careers in mental health, developmental disabilities, alcohol/ drug counseling, social work, long-term care administration, and many areas related to caring for youth.

Suggested Program of Study for Associate of Arts Degree (2 years)

FIRST YEAR

First Semester

Course	Credits
ENGL 1010 English Composition I*	3
Behavioral Science*	3
Fine Arts and Language*	3-4
Social Science*	3
HUSR 1010 Introduction to Human Services and Counseling	3
	15-16

Second Semester

Course	Credits
COMM 1110 Public Speaking*	3
MATH 1150 **OR** Higher*	3-5
History*	3
English/Literature*	3
HUSR 1220 Group Theory and Practice**	3
	15-17

SECOND YEAR

First Semester

Course	Credits
HUSR 2010 Introduction to Case Management and Professional Ethics	3
HUSR 2020 Medical and Psycho-Social Aspects of Chemical Use	3
Elective(s)**	9
	15

Second Semester

Course	Credits
HUSR 1230 Multicultural Counseling**	2
PSYC 2200 Human Development	3
HUSR 2030 Treatment Issues in Chemical Dependency**	2
HUSR 2040 Human Services Practicum	1
Natural Science*	4-5
Elective(s)**	3
	15-16

Total Credit Hours	60-64

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that includes the general education requirements.

*See general education requirements.

**See advisor for assistance choosing elective(s) based on professional goals and transfer institution.

**Recommended electives for Drug and Alcohol Counseling: HUSR 1220 Group Therapy and Practice, HUSR 1230 Multicultural Counseling, HUSR 2030 Treatment Issues in Chemical Dependency. **Recommended Human Services Electives for Other Fields: SOCI 1010 Introduction to Sociology, SOCI 2320 Social Problems, HPER 2300 Stress Management, SOCI 2300 Sociology of Deviant Behavior, CRIM 2100 Juvenile Justice, SOWK 2000 Introduction to Social Work, PSYC 2500 Social Psychology, PSYC 2800 Abnormal Psychology, PSYC 2110 Child and Adolescent Psychology, or PSYC 2900 Research Methods, SOCI 2150 Exploring Unity and Diversity and COMM 2010 Interpersonal Communication.

PHYSICAL EDUCATION-TEACHER EDUCATION

Students pursuing a career in the Physical Education-Teacher Education field are able to complete an Associate of Arts degree with a concentration in Physical Education-Teacher Education. The curriculum is designed to integrate the educational and practical training skills needed to be a Physical Education teacher. Upon completion of this Associate of Arts degree, students will continue their education at a transfer institution to obtain a bachelor's degree in Education.

Suggested Program of Study for Associate of Arts Degree (2 years)

FIRST YEAR

First Semester

Course	Credits
ENGL 1010 English Composition I*	3
Behavioral Science*	3
Fine Arts and Language*	3-4
Social Science*	3
HPER 1510 Introduction to Health, Physical Education, and Recreation	3
	15-16

Second Semester

Course	Credits
COMM 1110 Public Speaking*	3
MATH 1150 **OR** Higher*	3-5
History*	3
English/Literature*	3
EDUC 1110 Introduction to Professional Education	3
	15-17

SECOND YEAR

First Semester

Course	Credits
HPER 2110 Individual and Dual Sports	3
HPER 2510 Physical Education in the Elementary School I with Practicum	3
EDUC 2000 Educational Psychology	3
Elective(s)**	6
	15

Second Semester

Course	Credits
HPER 2400 Care and Prevention of Athletic Injuries	3
HPER 2200 First Aid and CPR for the Health Care Provider	3
EDUC 2800 Professional Practicum	1-2
Natural Science*	4-5
Elective(s)**	5
	16-18

Total Credit Hours 61-66

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

*See general education requirements.

**See advisor for assistance choosing elective(s) based on professional goals and transfer institution.

PSYCHOLOGY

Completion of the associate of arts degree with a concentration in psychology will introduce students to the field of psychology and provide students the foundation to transfer into a psychology program at a four-year institution. Occupations can be obtained with associates, bachelor's, master's, or PhD degrees. A degree with a concentration in psychology can prepare students for career opportunities in teaching, human services, human resources, psychology, counseling, social work, and a variety of other professional careers.

Suggested Program of Study for Associate of Arts Degree (2 years)

FIRST YEAR

First Semester

Course	Credits
ENGL 1010 English Composition I*	3
PSYC 1810 Introduction to Psychology*	3
Fine Arts and Language*	3-4
Social Science*	3
SOCI 2150 Exploring Unity and Diversity	3
	15-16

Second Semester

Course	Credits
COMM 1110 Public Speaking*	3
MATH 1100 **OR** Higher*	3-5
History*	3
English/Literature*	3
PSYC 2200 Human Development	3
	15-17

SECOND YEAR

First Semester

Course	Credits
SOCI 1010 Introduction to Sociology	3
PSYC 2500 Social Psychology	3
Elective(s)**	9
	15

Second Semester

Course	Credits
SOCI 2320 Social Problems	3
Natural Science*	4-5
Elective(s)**	9
	16-17

Total Credit Hours 61-65

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

*See general education requirements.

**Recommended electives: CRIM 2100 Juvenile Justice, HUSR 1010 Introduction to Human Services and Counseling, PSYC 2900 Research Methods, SOCI 2200 Criminology, SOWK 2000 Introduction to Social Work, SOCI 2300 Sociology of Deviant Behavior, or SOCI 2320 Social Problems. See advisor for assistance choosing elective(s) based on professional goals and transfer institution.

SKILLED AND TECHNICAL SCIENCES EDUCATION TRANSFER TO UNIVERSITY OF NEBRASKA-LINCOLN

Northeast Community College has partnered with the University of Nebraska-Lincoln to offer a transfer program for students interested in becoming a skilled and technical sciences (STS) high school teacher. Students who meet entry requirements in the STS Teaching Option will have completed a variety of course work from Northeast Community College. See website www.alec.unl.edu/home/skilled-and-technical-sciences-teaching-option. Courses within the Northeast catalog have direct equivalencies with the ACE program at UNL. Following a comprehensive transfer analysis, students will be provided an accurate degree audit of the remaining ACE courses needed at UNL along with the professional program in agricultural education. The minimum requirements of the College of Agricultural Sciences and Natural Resources reflect the common core of courses that apply to students pursuing degrees in the college. Students should work with a Northeast advisor to satisfy ACE requirements and the program career and technical education courses.

Suggested Program of Study for Associate of Science Degree (2 years)

FIRST YEAR

First Semester

Course	Credits
ENGL 1010 English Composition I*	3
Social Science*	3
Behavioral Science*	3
Fine Arts and Language*	3-4
Elective(s)**	3
	15-16

Second Semester

Course	Credits
COMM 1110 Public Speaking*	3
English/Literature*	3
MATH 1100 **OR** Higher*	3-5
History*	3
Elective(s)**	3
	15-17

SECOND YEAR

First Semester

Course	Credits
Mathematics*	3-5
Elective(s)**	12
	15-17

Second Semester

Course	Credits
Natural Science*	4-5
Elective(s)**	11
	15-16

Total Credit Hours	60-66

To earn an associate of science degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

*See general education requirements.

**Recommended electives: AUTT 1010 Suspension, Steering, and Brake Systems Theory, AUTT 1015 Suspension, Steering, and Brake Systems Lab, CNST 1000 Building Construction Fundamentals, CNST 1005 Building Construction Fundamentals Lab, CNST 1065 Principles of Light-Frame Structure Technology, CNST 1075 Principles of Light-Frame Structure Technology Lab, CNST 1050 Residential Blueprint Reading, ELMC/ELTR 1010 Fundamentals of Electricity, ELMC/ELTR 1020 Fundamentals of Electricity Lab, INDT 1025 Introduction to Industrial Safety, INDT 1085 Industrial Maintenance Fundamentals, INDT 1170 Introduction to Total Quality Management, AUTT 1110 Electrical Systems Theory, AUTT 1125 Electrical Systems Lab, AUTT 1210 Electrical Tune-Up and Fuel Systems Theory, SOCI 2150 Exploring Unity and Diversity, CNST 1030 Construction Drafting, CNST 1040 Construction Drafting Lab, INDT 1015 Introduction to Manufacturing, INDT 1055 Print Reading for the Industrial Trades, INDT 1065 Manufacturing Technologies and Measurement, ELMC 1090 Mechanical Matter and Energy, ENGR 1010 Introduction to Engineering Design, WELD 1030 Shielded Metal Arc Welding Basic Theory (SMAW), WELD 1035 Shielded Metal Arc Welding Basic Lab, WELD 1040 Gas Metal and Flux Cored Arc Welding Theory, WELD 1045 Gas Metal Arc and Flux Cored Arc Welding Lab. See advisor for assistance choosing elective(s) based on professional goals and transfer institution.

SOCIAL SCIENCE

Today's workplace requires skills in decision-making, problem-solving, and flexibility. Participation in classes in the social sciences promotes development of these skills through encouragement of intellectual curiosity and appreciation of human diversity. Most careers in the social sciences require a bachelor's degree. Students may complete the first two years of their education at Northeast and then transfer to a four-year college to complete their bachelor's. A degree with a concentration in social science prepares students for a career in teaching, economics, politics, geography, history, non-profit organizations, urban planning, and a wide variety of other professional careers.

Suggested Program of Study for Associate of Arts Degree (2 years)

FIRST YEAR

First Semester

Course	Credits
ENGL 1010 English Composition I*	3
Behavioral Science*	3
Fine Arts and Language*	3-4
Social Science*	3
GEOG 1020 World Regional Geography	3
	15-16

Second Semester

Course	Credits
COMM 1110 Public Speaking*	3
MATH 1100 **OR** Higher*	3-5
History*	3
English/Literature*	3
Additional History Course	3
	15-17

SECOND YEAR

First Semester

Course	Credits
POLS 1600 International Relations	3
ECON 2110 Principles of Macroeconomics	3
SOCI 2150 Exploring Unity and Diversity	3
Elective(s)**	6
	15

Second Semester

Course	Credits
ECON 2120 Principles of Microeconomics	3
Natural Science*	4-5
Elective(s)**	9
	16-17

Total Credit Hours	61-65

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

* See general education requirements.

**See advisor for assistance choosing elective(s) based on professional goals and transfer institution.

SOCIAL WORK

Completion of the associate of arts degree with a concentration in social work will introduce students to the field of social work and provide students the foundation to transfer into a social work program at a four-year institution. Students entering the field of social work may choose to work in areas such as aging, alcoholism, child welfare, corrections, family services, and schools.

Suggested Program of Study for Associate of Arts Degree (2 years)

FIRST YEAR

First Semester

Course	Credits
ENGL 1010 English Composition I*	3
Behavioral Science*	3
Fine Arts and Language*	3-4
Social Science*	3
SOWK 2000 Introduction to Social Work	3
	15-16

Second Semester

Course	Credits
COMM 1110 Public Speaking*	3
MATH 1100 **OR** Higher*	3-5
History*	3
English/Literature*	3
SOCI 1010 Introduction to Sociology	3
	15-17

SECOND YEAR

First Semester

Course	Credits
PSYC 2200 Human Development	3
SOCI 2150 Exploring Unity and Diversity	3
Elective(s)**	9
	15

Second Semester

Course	Credits
SOWK 2100 Social Work Ethics and Skills	3
SOWK 2110 Social Work Practicum	1
SOCI 2320 Social Problems	3
Natural Science*	4-5
Elective(s)**	5
	16-17

Total Credit Hours	61-65

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

*See general education requirements.

**See advisor for assistance choosing elective(s) based on professional goals and transfer institution.

SCIENCE, TECHNOLOGY, ENGINEERING, & MATHEMATICS (STEM) AND PRE-PROFESSIONAL HEALTH

These four fields share an emphasis on innovation, problem-solving, and critical thinking. Together they make up a popular and fast-growing industry. Most STEM workers use computers and other technology in their day-to-day jobs. Many also use the scientific method to test hypotheses and theories.

YEAR ONE PATHWAY - AS DEGREE

First Semester		Second Semester	
Course	**Credits**	**Course**	**Credits**
ENGL 1010 English Composition I* **OR** ENGL 2070 Technical Communications I*	3	English/Literature*	3
Mathematics*	3-5	Natural Science*	4-5
Natural Science*	4-5	Mathematics*	3-5
Program Course(s)**	4-5	Program Course(s)**	4-5
	14-18		14-18

YEAR ONE PATHWAY - AA DEGREE

First Semester		Second Semester	
Course	**Credits**	**Course**	**Credits**
ENGL 1010 English Composition I*	3	English/Literature*	3
Mathematics*	3-5	Natural Science*	4-5
History*	3	Social Science*	3
Program Course(s)**	7-8	Program Course(s)**	4-5
	16-19		14-16

*See general education requirements. **See program of study catalog page and/or advisor for assistance choosing Program Course(s) based on professional goals and transfer institution.

CAREER AND TRANSFER PATHWAYS

Career Pathways offer students the opportunity to complete coursework toward earning a Certificate, Diploma, or Associate of Applied Science Degree and enter the workforce having acquired the skills necessary to succeed in their chosen area of interest.

Transfer Pathways afford students with opportunities to complete coursework toward an Associate of Arts or an Associate of Science Degree, then transfer to a four-year institution with the first two years on their path to a bachelor's degree completed.

STEM AND PRE-PROFESSIONAL HEALTH FIELD OF STUDY

CAREER

Information Technology Pathway

Cisco Networking & Information Security	AAS
Cisco Networking & System Administration	AAS
Cisco Networking & Tech Services Support	AAS
Info Security & System Administration	AAS
Info Security & Tech Services Support	AAS
System Admin & Tech Services Support	AAS
Web/Visual App Devl & Cisco Networking	AAS
Web/Visual App Devl & Info Security	AAS
Web/Visual App Devl & Tech Services Support	AAS
Cisco Networking Academy	CERT
Information Security	CERT
Information Technology-General	CERT
System Administration	CERT
Technical Services Support	CERT
Web & Visual Application Development	CERT

TRANSFER

Math & Science Pathway

Biology	AA/AS
Chemistry	AS
Mathematics	AS
Physics	AS

Information Technology Pathway

Information Tech-Computer Info Systems	AA
Information Tech-Computer Science	AA

Engineering Pathway

Pre-Engineering	AA/AS

Pre-Professional Health Pathway

Pre-Professional Health Science	AA/AS

INFORMATION TECHNOLOGY

To earn an associate of applied science degree in Information Technology, a student must successfully complete the following general education and core requirements, in addition to one of the specific concentrations listed in the following pages. Students are encouraged to seek advisement to build a program consistent with their career goals.

There are many career opportunities in Information Technology career fields. Students will study in a wide range of programs that expose them to innovative technologies that impact the world.

Required Program of Study for Associate of Applied Science Degree (2 years)

Core Requirements

Course	Credits
ACCT 1100 Survey of Accounting	3
INFO 1020 Introduction to Information Technology	3
INFO 1420 Introduction to Programming in C#	4
INFO 1170 Operating Systems I	3
INFO 2330 Database Concepts, Design and Application	4
INFO 1725 HTML, CSS, and JavaScript	3
INFO 2040 Project Management	3
	23

General Education Requirements

Course	Credits
BSAD 1000 Human Relations and Ethics **OR** PSYC 1810 Introduction to Psychology	3
BSAD 2050 Business Communications	3
ECON 2110 Principles of Macroeconomics	3
INFO 1100 Microcomputer Applications	3
MATH 1100 Topics and Ideas in Mathematics	3
	15

Core Requirements	23
General Education Requirements	15
Approved Concentration Electives	25-35
Total Credit Hours	**63-73**

BUILD YOUR INFORMATION TECHNOLOGY DEGREE

The information technology career field has many areas of specialization. In order to give students the ability to choose their areas of specialization, the information technology department has developed several AAS degree concentrations which focus on a wide variety of topics.

STEP ONE:

Choose any two of the following career concentrations:

- Cisco Networking Academy
- Information Security
- System Administration
- Web and Visual Application Development
- Technical Services Support

STEP TWO:

Match two chosen concentrations from each row and column to find the page for unique AAS degree concentration.

(*For example, if you chose Cisco Networking and Technical Services Support, you would find your AAS program of study on page 120.*)

STEP THREE:

Go to the page listed with your AAS Concentration.

	Cisco Networking	Information Security	System Administration	Technical Services Support	Web and Visual Application Devl
Cisco Networking		pg. 121	pg. 122	pg. 123	pg. 127
Information Security	pg. 121		pg. 124	pg. 125	pg. 128
System Administration	pg. 122	pg. 124		pg. 126	
Technical Services Support	pg. 123	pg. 125	pg. 126		pg. 129
Web and Visual Application Devl	pg. 127	pg. 128		pg. 129	

CISCO NETWORKING ACADEMY AND INFORMATION SECURITY CONCENTRATION

This degree concentration combines the information technology core and general education requirements plus the courses from Cisco networking academy certificate and the information security certificate. A student completing this degree will have the necessary skills to be an entry-level networking engineer with the skills necessary to help the organization ensure continuous operation by safeguarding data from attacks and disasters

The National Security Agency and Department of Homeland Security has designated Northeast Community College as an institution for CAE-2Y - National Centers of Academic Excellence in Cyber Defense 2-Year Education

Required Program of Study for Associate of Applied Science Degree (2 years)

FIRST YEAR

Fall Semester

Course	Credits
BSAD 2050 Business Communications*	3
INFO 1020 Introduction to Information Technology	3
INFO 1100 Microcomputer Applications*	3
INFO 1170 Operating Systems I	3
INFO 1420 Introduction to Programming in C#	4
	16

Spring Semester

Course	Credits
BSAD 1000 Human Relations and Ethics* **OR** PSYC 1810 Introduction to Psychology*	3
INFO 1725 HTML, CSS, and JavaScript	3
INFO 1850 Operating Systems II	3
INFO 2330 Database Concepts, Design and Application	4
MATH 1100 Topics and Ideas in Mathematics*	3
	16

SECOND YEAR

Fall Semester

Course	Credits
ACCT 1100 Survey of Accounting	3
INFO 2040 Project Management	3
INFO 2650 Network Servers	3
INFO 2700 Cisco Networking I	4
INFO 2710 Cisco Networking II	4
	17

Spring Semester

Course	Credits
ECON 2110 Principles of Macroeconomics*	3
INFO 2720 Principles of Information Security	3
INFO 2730 Information Security Lab	1
INFO 2750 Cisco Networking III	4
INFO 2760 Cisco Networking IV	4
INFO 2800 CompTIA Security+ Certification	1
	16

Total Credit Hours 65

*See general education requirements.

CISCO NETWORKING ACADEMY AND SYSTEM ADMINISTRATION CONCENTRATION

This degree concentration combines the information technology core and general education requirements plus the courses from the Cisco networking academy certificate and system administration certificate. A student completing this degree will have the necessary skills to be an entry-level system administrator and the skills necessary to be an entry-level networking engineer.

**For a student to continue in the System Administration program they must meet the requirement of a cumulative GPA of 3.0 or higher at the completion of the courses necessary for the General IT Certificate. Please refer to the System Administration Program Grade requirement.*

Required Program of Study for Associate of Applied Science Degree (2 years)

FIRST YEAR

Fall Semester

Course	Credits
BSAD 2050 Business Communications*	3
INFO 1020 Introduction to Information Technology	3
INFO 1100 Microcomputer Applications*	3
INFO 1170 Operating Systems I	3
INFO 1420 Introduction to Programming in C#	4
	16

Spring Semester

Course	Credits
BSAD 1000 Human Relations and Ethics* **OR** PSYC 1810 Introduction to Psychology*	3
INFO 1600 PC Systems Maintenance and Repair	3
INFO 1610 PC Systems Maintenance and Repair Lab	1
INFO 1725 HTML, CSS, and JavaScript	3
INFO 1850 Operating Systems II	3
INFO 2330 Database Concepts, Design and Application	4
MATH 1100 Topics and Ideas in Mathematics*	3
	20

Summer

Course	Credits
ECON 2110 Principles of Macroeconomics*	3
	3

Internship Options**

Course	Credits
Select one of the following options:	**3**
INFO 2820 Internship (*summer only*)	3
OR	
INFO 2020 Systems Analysis and Design (*final semester only*)	3

SECOND YEAR

Fall Semester

Course	Credits
ACCT 1100 Survey of Accounting	3
INFO 2040 Project Management	3
INFO 2650 Network Servers	3
INFO 2700 Cisco Networking I	4
INFO 2710 Cisco Networking II	4
	17

Spring Semester

Course	Credits
INFO 1750 Info Tech Infrastructure Management	3
INFO 2770 System Security and Compliance	3
INFO 2750 Cisco Networking III	4
INFO 2760 Cisco Networking IV	4
	14

Total Credit Hours 73

*See general education requirements.

**Students are encouraged to enroll in summer internships. (3.0 GPA and permission of instructors required)

**If the student does not meet internship requirements, they must enroll in INFO 2020 Systems Analysis and Design in their final semester.

CISCO NETWORKING ACADEMY AND TECHNICAL SERVICES SUPPORT CONCENTRATION

This degree concentration combines the information technology core and general education requirements plus the courses from the cisco networking academy certificate and the technical services support certificate. A student completing this degree will have the necessary skills to be an entry-level networking engineer and provide necessary technical services support within an organization.

Required Program of Study for Associate of Applied Science Degree (2 years)

FIRST YEAR

Fall Semester

Course	Credits
BSAD 2050 Business Communications*	3
INFO 1020 Introduction to Information Technology	3
INFO 1100 Microcomputer Applications*	3
INFO 1170 Operating Systems I	3
INFO 1420 Introduction to Programming in C#	4
	16

Spring Semester

Course	Credits
ACCT 1100 Survey of Accounting	3
ECON 2110 Principles of Macroeconomics*	3
INFO 1725 HTML, CSS, and JavaScript	3
INFO 1850 Operating Systems II	3
INFO 2330 Database Concepts, Design and Application	4
MATH 1100 Topics and Ideas in Mathematics*	3
	19

SECOND YEAR

Fall Semester

Course	Credits
INFO 1600 PC Systems Maintenance and Repair	3
INFO 1610 PC Systems Maintenance and Repair Lab	1
INFO 2040 Project Management	3
INFO 2650 Network Servers	3
INFO 2700 Cisco Networking I	4
INFO 2710 Cisco Networking II	4
	18

Spring Semester

Course	Credits
BSAD 1000 Human Relations and Ethics* **OR** PSYC 1810 Introduction to Psychology*	3
INFO 1800 Microcomputer Applications II	3
INFO 2610 Computer Support Technology	3
INFO 2750 Cisco Networking III	4
INFO 2760 Cisco Networking IV	4
	17

Total Credit Hours 70

*See general education requirements.

INFORMATION SECURITY AND SYSTEM ADMINISTRATION CONCENTRATION

This degree concentration combines the information technology core and general education requirements plus the courses from the information security certificate and the system administration certificate. A student completing this degree will have the necessary skills to be an entry-level system administrator and have the skills necessary to help the organization ensure continuous operation by safeguarding data from attacks and disasters.

**For a student to continue in the System Administration program they must meet the requirement of a cumulative GPA of 3.0 or higher at the completion of the courses necessary for the General IT Certificate. Please refer to the System Administration Program grade requirement.*

Required Program of Study for Associate of Applied Science Degree (2 years)

FIRST YEAR

Fall Semester

Course	Credits
BSAD 2050 Business Communications*	3
INFO 1020 Introduction to Information Technology	3
INFO 1100 Microcomputer Applications*	3
INFO 1170 Operating Systems I	3
INFO 1420 Introduction to Programming in C#	4
	16

Spring Semester

Course	Credits
BSAD 1000 Human Relations and Ethics* **OR** PSYC 1810 Introduction to Psychology*	3
INFO 1600 PC Systems Maintenance and Repair	3
INFO 1610 PC Systems Maintenance and Repair Lab	1
INFO 1725 HTML, CSS, and JavaScript	3
INFO 1850 Operating Systems II	3
INFO 2330 Database Concepts, Design and Application	4
	17

Internship Options**

Course	Credits
Select one of the following options:	**3**
INFO 2820 Internship (*summer only*)	3
OR	
INFO 2020 Systems Analysis and Design (*final semester only*)	3

SECOND YEAR

Fall Semester

Course	Credits
ACCT 1100 Survey of Accounting	3
INFO 2040 Project Management	3
INFO 2650 Network Servers	3
INFO 2700 Cisco Networking I	4
MATH 1100 Topics and Ideas in Mathematics*	3
	16

Spring Semester

Course	Credits
INFO 1750 Info Tech Infrastructure Management	3
ECON 2110 Principles of Macroeconomics*	3
INFO 2720 Principles of Information Security	3
INFO 2730 Information Security Lab	1
INFO 2770 System Security and Compliance	3
INFO 2800 CompTIA Security+ Certification	1
	14

Total Credit Hours 66

*See general education requirements.

**Students are encouraged to enroll in summer internships (3.0 GPA and permission of instructors required).

**If the student does not meet internship requirements, they must enroll in INFO 2020 Systems Analysis and Design in their final semester.

INFORMATION SECURITY AND TECHNICAL SERVICES SUPPORT CONCENTRATION

This degree concentration combines the information technology core and general education requirements plus the courses from the information security certificate and the technical services support certificate. A student completing this degree will have the necessary skills to provide technical services support within an organization and have the skills necessary to help the organization ensure continuous operation by safeguarding data from attacks and disasters.

The National Security Agency and Department of Homeland Security has designated Northeast Community College as an institution for CAE-2Y - National Centers of Academic Excellence in Cyber Defense 2-Year Education.

Required Program of Study for Associate of Applied Science Degree (2 years)

FIRST YEAR

Fall Semester

Course	Credits
BSAD 2050 Business Communications*	3
INFO 1020 Introduction to Information Technology	3
INFO 1100 Microcomputer Applications*	3
INFO 1170 Operating Systems I	3
INFO 1420 Introduction to Programming in C#	4
	16

Spring Semester

Course	Credits
ECON 2110 Principles of Macroeconomics*	3
INFO 1725 HTML, CSS, and JavaScript	3
INFO 1850 Operating Systems II	3
INFO 2330 Database Concepts, Design and Application	4
MATH 1100 Topics and Ideas in Mathematics*	3
	16

*See general education requirements.

SECOND YEAR

Fall Semester

Course	Credits
ACCT 1100 Survey of Accounting	3
INFO 1600 PC Systems Maintenance and Repair	3
INFO 1610 PC Systems Maintenance and Repair Lab	1
INFO 2040 Project Management	3
INFO 2650 Network Servers	3
INFO 2700 Cisco Networking I	4
	17

Spring Semester

Course	Credits
BSAD 1000 Human Relations and Ethics* **OR** PSYC 1810 Introduction to Psychology*	3
INFO 1800 Microcomputer Applications II	3
INFO 2610 Computer Support Technology	3
INFO 2720 Principles of Information Security	3
INFO 2730 Information Security Lab	1
INFO 2800 CompTIA Security+ Certification	1
	14

Total Credit Hours 63

SYSTEM ADMINISTRATION AND TECHNICAL SERVICES SUPPORT CONCENTRATION

This degree concentration combines the information technology core and general education requirements plus the courses from the system administration certificate option and the technical services support option. A student completing this degree will have the necessary skills to be a system administrator and provide necessary technical support within an organization.

**For a student to continue in the System Administration program they must meet the requirement of a cumulative GPA of 3.0 or higher at the completion of the courses necessary for the General IT Certificate. Please refer to the System Administration Program Grade requirement.*

Required Program of Study for Associate of Applied Science Degree (2 years)

FIRST YEAR

Fall Semester

Course	Credits
BSAD 2050 Business Communications*	3
INFO 1020 Introduction to Information Technology	3
INFO 1100 Microcomputer Applications*	3
INFO 1170 Operating Systems I	3
INFO 1420 Introduction to Programming in C#	4
	16

Spring Semester

Course	Credits
INFO 1725 HTML, CSS, and JavaScript	3
INFO 2330 Database Concepts, Design and Application	4
INFO 1850 Operation Systems II	3
INFO 1600 PC System Maintenance and Repair	3
INFO 1610 PC System Maintenance and Repair Lab	1
MATH 1100 Topics and Ideas in Mathematics*	3
	17

Internship Options**

Course	Credits
Select one of the following options:	**3**
INFO 2820 Internship (*summer only*)	3
OR	
INFO 2020 Systems Analysis and Design (*final semester only*)	3

SECOND YEAR

Fall Semester

Course	Credits
ACCT 1100 Survey Accounting	3
BSAD 1000 Human Relations and Ethics* **OR** PSYC 1810 Introduction to Psychology*	3
INFO 2040 Project Management	3
INFO 2650 Network Servers	3
INFO 2660 Network +	3
	15

Spring Semester

Course	Credits
ECON 2110 Principles of Macroeconomics*	3
INFO 1800 Microcomputer Applications II	3
INFO 1750 Info Tech Infrastructure Management	3
INFO 2610 Computer Support Technology	3
INFO 2770 System Security and Compliance	3
	15

Total Credit Hours 66

*See general education requirements.

**Students are encouraged to enroll in summer internships (*3.0 GPA and permission of instructors required*).
If student does not meet internship requirements, they must enroll in INFO 2020 System Analysis and Design in the final semester.

WEB AND VISUAL APPLICATION DEVELOPMENT AND CISCO NETWORKING ACADEMY CONCENTRATION

This degree concentration combines the information technology core and general education requirements plus the courses from the web and visual application development certificate as well as the cisco networking academy certificate. A student completing this degree will have the necessary skills to be an entry-level application developer in multiple environments and the skills necessary to be an entry-level networking engineer.

Required Program of Study for Associate of Applied Science Degree (2 years)

FIRST YEAR

Fall Semester

Course	Credits
BSAD 2050 Business Communications*	3
INFO 1020 Introduction to Information Technology	3
INFO 1100 Microcomputer Applications*	3
INFO 1170 Operating Systems I	3
INFO 1420 Introduction to Programming in C#	4
	16

Spring Semester

Course	Credits
ECON 2110 Principles of Macroeconomics*	3
INFO 1725 HTML, CSS, and JavaScript	3
MATH 1100 Topics and Ideas in Mathematics*	3
INFO 2330 Database Concepts, Design and Application	4
INFO 2550 Programming in Java	4
	17

*See general education requirements.

SECOND YEAR

Fall Semester

Course	Credits
ACCT 1100 Survey of Accounting	3
INFO 1440 Advanced Programming in C#	3
INFO 2040 Project Management	3
INFO 2700 Cisco Networking I	4
INFO 2710 Cisco Networking II	4
	17

Spring Semester

Course	Credits
BSAD 1000 Human Relations and Ethics* **OR** PSYC 1810 Introduction to Psychology*	3
INFO 2020 Systems Analysis and Design	3
INFO 2400 Advanced Web Programming	4
INFO 2750 Cisco Networking III	4
INFO 2760 Cisco Networking IV	4
	18

Total Credit Hours 68

WEB AND VISUAL APPLICATION DEVELOPMENT AND INFORMATION SECURITY CONCENTRATION

This degree concentration combines the information technology core and general education requirements plus the courses from the information security certificate and the web and visual application development certificate. A student completing this degree will have the necessary skills to be an entry-level application developer in multiple environments and have the skills necessary to help the organization ensure continuous operation by safeguarding data from attacks and disasters.

The National Security Agency and Department of Homeland Security has designated Northeast Community College as an institution for CAE-2Y - National Centers of Academic Excellence in Cyber Defense 2-Year Education.

Required Program of Study for Associate of Applied Science Degree (2 years)

FIRST YEAR

Fall Semester

Course	Credits
BSAD 2050 Business Communications*	3
INFO 1020 Introduction to Information Technology	3
INFO 1100 Microcomputer Applications*	3
INFO 1170 Operating Systems I	3
INFO 1420 Introduction to Programming in C#	4
	16

Spring Semester

Course	Credits
INFO 1725 HTML, CSS, and JavaScript	3
INFO 1850 Operating Systems II	3
INFO 2330 Database Concepts, Design and Application	4
INFO 2550 Programming in Java	4
MATH 1100 Topics and Ideas in Mathematics*	3
	17

*See general education requirements.

SECOND YEAR

Fall Semester

Course	Credits
ACCT 1100 Survey of Accounting	3
BSAD 1000 Human Relations and Ethics* **OR** PSYC 1810 Introduction to Psychology*	3
INFO 1440 Advanced Programming in C#	3
INFO 2040 Project Management	3
INFO 2650 Network Servers	3
INFO 2700 Cisco Networking I	4
	19

Spring Semester

Course	Credits
ECON 2110 Principles of Macroeconomics*	3
INFO 2020 Systems Analysis and Design	3
INFO 2720 Principles of Information Security	3
INFO 2730 Information Security Lab	1
INFO 2400 Advanced Web Programming	4
INFO 2800 CompTIA Security+ Certification	1
	15

Total Credit Hours 67

WEB AND VISUAL APPLICATION DEVELOPMENT AND TECHNICAL SERVICES SUPPORT CONCENTRATION

This degree concentration combines the information technology core and general education requirements plus the courses from the web and visual application development certificate and the technical services support certificate. A student completing this degree will have the necessary skills to be an entry-level application developer in multiple environments and provide necessary technical services support within an organization.

Required Program of Study for Associate of Applied Science Degree (2 years)

FIRST YEAR

Fall Semester

Course	Credits
BSAD 2050 Business Communications*	3
INFO 1020 Introduction to Information Technology	3
INFO 1100 Microcomputer Applications*	3
INFO 1170 Operating Systems I	3
INFO 1420 Introduction to Programming in C#	4
	16

Spring Semester

Course	Credits
ECON 2110 Principles of Macroeconomics*	3
INFO 1725 HTML, CSS, and JavaScript	3
INFO 1850 Operating Systems II	3
INFO 2330 Database Concepts, Design and Application	4
INFO 2550 Programming in Java	4
	17

*See general education requirements.

SECOND YEAR

Fall Semester

Course	Credits
ACCT 1100 Survey of Accounting	3
INFO 1440 Advanced Programming in C#	3
INFO 1600 PC Systems Maintenance and Repair	3
INFO 1610 PC Systems Maintenance and Repair Lab	1
INFO 2040 Project Management	3
INFO 2650 Network Servers	3
MATH 1100 Topics and Ideas in Mathematics*	3
	19

Spring Semester

Course	Credits
BSAD 1000 Human Relations and Ethics* **OR** PSYC 1810 Introduction to Psychology*	3
INFO 1800 Microcomputer Applications II	3
INFO 2020 Systems Analysis and Design	3
INFO 2400 Advanced Web Programming	4
INFO 2610 Computer Support Technology	3
	16

Total Credit Hours 68

CISCO NETWORKING ACADEMY CERTIFICATE

This certificate provides students with a foundation in networking skills using the Cisco Networking curriculum. Instruction includes concepts related to networking terminology and protocols, LANs and WANs, the OSI model layers, network cabling, routers, network topologies, IP addressing, switching, and network management practices. This certificate is designed to prepare students to successfully pass the Cisco Certified Network (CCNA) Certification.

All coursework in the Cisco Networking Academy Certificate program will apply as full credit towards the Information Technology Associate of Applied Science Degree.

Required Program of Study for
Certificate (32 weeks)

FALL SEMESTER

Course	Credits
BSAD 2050 Business Communications	3
INFO 2700 Cisco Networking I	4
INFO 2710 Cisco Networking II	4
	11

SPRING SEMESTER

Course	Credits
INFO 2750 Cisco Networking III	4
INFO 2760 Cisco Networking IV	4
	8
Total Credit Hours	19

INFORMATION SECURITY CERTIFICATE

This certificate provides students with entry-level skills to assess the security needs of computer and networks systems, recommend safeguard solutions, and manage the implementation and maintenance of security devices, systems, and procedures. This certificate is designed to prepare students to successfully pass the CompTIA Security+ Certification.

All coursework in the Information Security Certificate program will apply as full credit towards the Information Technology Associate of Applied Science Degree.

Required Program of Study for
Certificate (32 weeks)

FALL SEMESTER

Course	Credits
BSAD 2050 Business Communications	3
INFO 2650 Network Servers	3
INFO 2700 Cisco Networking I	4
	10

SPRING SEMESTER

Course	Credits
INFO 1850 Operating Systems II	3
INFO 2720 Principles of Information Security	3
INFO 2730 Information Security Lab	1
INFO 2800 CompTIA Security+ Certification	1
	8
Total Credit Hours	18

INFORMATION TECHNOLOGY - GENERAL CERTIFICATE

Students who complete the first semester of an Information Technology degree offering will be eligible for the general certificate.

All coursework in the Information Technology General Certificate program will apply as full credit towards the Information Technology Associate of Applied Science Degree.

Required Program of Study for Certificate (16 weeks)

Required Courses

Course	Credits
BSAD 2050 Business Communications	3
INFO 1020 Introduction to Information Technology	3
INFO 1100 Microcomputer Applications	3
INFO 1170 Operating Systems I	3
INFO 1420 Introduction to Programming in C#	4
Total Credit Hours	16

SYSTEM ADMINISTRATION CERTIFICATE

This certificate provides students with a foundation in system administration. Students gain an understanding of IT infrastructure, network and inter networking operating systems software and hardware, local area network administration and management, the use of troubleshooting techniques.

All coursework in the System Administration Certificate program will apply as full credit towards the Information Technology Associate of Applied Science Degree.

Required Program of Study for Certificate (48 weeks)

SPRING SEMESTER I

Course	Credits
INFO 1850 Operating Systems II	3
Choose One Group:	
INFO 1600 PC Systems Maintenance and Repair	3
AND	
INFO 1610 PC Systems and Maintenance and Repair Lab	1
OR	
INFO 2720 Principles of Information Security	3
AND	
INFO 2730 Information Security Lab	1
	7

FALL SEMESTER

Course	Credits
BSAD 2050 Business Communications	3
INFO 2660 Network +	3
INFO 2650 Network Servers	3
	9

SPRING SEMESTER II

Course	Credits
INFO 2770 System Security and Compliance	3
INFO 1750 Infrastructure Management	3
	6
Total Credit Hours	22

TECHNICAL SERVICES SUPPORT CERTIFICATE

This certificate provides the fundamentals of computer hardware and operating system support. Graduates have the skills necessary to problem-solve for a variety of end users and are prepared for entry-level support and help desk positions. This certificate is designed to prepare students to successfully pass the CompTIA A+ Certification.

All coursework in the Technical Services Support Certificate program will apply as full credit towards the Information Technology Associate of Applied Science Degree.

Required Program of Study for
Certificate (32 weeks)

FALL SEMESTER

Course	Credits
INFO 1170 Operating Systems I	3
INFO 1600 PC Systems Maintenance and Repair	3
INFO 1610 PC Systems Maintenance and Repair Lab	1
INFO 2650 Network Servers	3
	10

SPRING SEMESTER

Course	Credits
BSAD 2050 Business Communications	3
INFO 1850 Operating Systems II	3
INFO 2610 Computer Support Technology	3
	9
Total Credit Hours	19

WEB AND VISUAL APPLICATION DEVELOPMENT CERTIFICATE

This certificate provides students with a foundation in the latest GUI and web application development and design using programming languages that are needed in today's business world. Students gain hands-on experience in system design, HTML and programming.

All coursework in the Web and Visual Application Development Certificate program will apply as full credit towards the Information Technology Associate of Applied Science Degree.

Required Program of Study for
Certificate (2 years)

FALL SEMESTER I

Course	Credits
BSAD 2050 Business Communications	3
INFO 1420 Introduction to Programming in C#	4
	7

SPRING SEMESTER I

Course	Credits
INFO 1725 HTML, CSS and JavaScript	3
	3

FALL SEMESTER II

Course	Credits
INFO 1440 Advanced Programming in C#	3
	3

SPRING SEMESTER II

Course	Credits
INFO 2020 Systems Analysis and Design	3
	3
Total Credit Hours	16

BIOLOGY

Students planning a concentration in biological sciences may complete a two-year liberal arts program at Northeast. Upon completion of the two years, students may choose to transfer and continue to work toward a four-year degree. A biological science concentration is appropriate for students considering careers in the health field, agriculture, teaching, research and plant and wildlife biology. Either the associate of science or the associate of arts degree would be appropriate.

Suggested Program of Study for Associate of Science Degree (2 years)

FIRST YEAR

First Semester

Course	Credits
ENGL 1010 English Composition I*	3
BIOS 1010 General Biology*	4
MATH 1150 College Algebra*	3
MATH 1220 Trigonometry	3
CHEM 1090 General Chemistry I* **OR** CHEM 1140 General Chemistry I for Majors	4-5
	17-18

Second Semester

Course	Credits
English/Literature*	3
BIOS 1090 General Zoology **OR** BIOS 1050 General Botany	4
CHEM 1100 General Chemistry II **OR** CHEM 1160 General Chemistry II for Majors	4-5
MATH 1600 **OR** Higher*	3-5
	14-17

SECOND YEAR

First Semester

Course	Credits
Behavioral and Social Sciences*	3
PHYS 1410 Elementary General Physics I with Algebra and Trigonometry	5
Oral Communication*	3
BIOS 2020 Intro to Environmental Issues	4
	15

Second Semester

Course	Credits
PHYS 1420 Elementary General Physics II with Algebra and Trigonometry	5
BIOS 1090 General Zoology **OR** BIOS 1050 General Botany	4
English/Literature,* Fine Arts and Language,* **OR** Behavioral or Social Science*	3-4
BIOS 2460 Microbiology	4
	16-17

Total Credit Hours 62-67

Suggested Program of Study for Associate of Arts Degree (2 years)

FIRST YEAR

First Semester

Course	Credits
ENGL 1010 English Composition I*	3
MATH 1140 **OR** Higher*	3-5
History*	3
BIOS 1010 General Biology*	4
CHEM 1090 General Chemistry I	4
	17-19

Second Semester

Course	Credits
English/Literature*	3
BIOS 1090 General Zoology **OR** BIOS 1050 General Botany	4
Social Science*	3
CHEM 1100 General Chemistry II **OR** CHEM 1160 General Chemistry II for Majors	4-5
	14-15

SECOND YEAR

First Semester

Course	Credits
Oral Communication*	3
BIOS 2460 Microbiology	4
PSYC 1810 Introduction to Psychology* **OR** SOCI 1010 Introduction to Sociology*	3
Elective(s)*	5
	15

Second Semester

Course	Credits
Fine Arts and Language*	3
BIOS 1090 General Zoology **OR** BIOS 1050 General Botany	4
Elective(s)**	7-8
	14-15

Total Credit Hours 60-64

To earn an associate of arts or associate of science degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

*See general education requirements.

**See advisor for assistance choosing elective(s) based on professional goals and transfer institution.

CHEMISTRY

The two-year liberal arts curriculum is designed for students who want to include chemistry in their general education and for students who plan to concentrate in a STEM field for professional careers after transferring to a four-year college or university.

Suggested Program of Study for Associate of Science Degree (2 years)

FIRST YEAR

First Semester

Course	Credits
ENGL 1010 English Composition I* **OR**	
ENGL 2070 Technical Communications I	3
MATH 1600 Analytic Geometry and Calculus I*	5
CHEM 1090 General Chemistry I* **OR**	
CHEM 1140 General Chemistry I for Majors*	4-5
Elective**	4-5
	16-18

Second Semester

Course	Credits
English/Literature*	3
CHEM 1100 General Chemistry II* **OR**	
CHEM 1160 General Chemistry II for Majors*	4-5
MATH 2010 Analytic Geometry and Calculus II*	5
PHYS 2110 General Physics I with Calculus	5
	17-18

SECOND YEAR

First Semester

Course	Credits
Oral Communication*	3
PHYS 2120 General Physics II with Calculus	5
Behavioral and Social Sciences*	3
CHEM 2510 Organic Chemistry I**	4
	15

Second Semester

Course	Credits
English/Literature,*	
Fine Arts and Language,* **OR**	
Behavioral or Social Science*	3-4
CHEM 2520 Organic Chemistry II**	4
Elective(s)**	8
	15-16

Total Credit Hours 63-67

To earn an associate of science degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

* See general education requirements.

**See advisor for assistance choosing elective(s) based on professional goals and transfer institution.

INFORMATION TECHNOLOGY - TRANSFER PROGRAMS

The information technology transfer program is a two-year liberal arts curriculum with emphasis in information technology classes. Through an articulation agreement with Wayne State College, these classes are designed to meet requirements for the first two years of a four-year computer information systems or computer science program. For transfer to other institutions, students should seek advice from the institutions where they intend to transfer.

Suggested Program of Study for Associate of Arts Degree (2 years)

Computer Information Systems

FIRST YEAR

First Semester

Course	Credits
ENGL 1010 English Composition I*	3
MATH 1150 College Algebra*	3
History*	3
INFO 1020 Introduction to Information Technology	3
INFO 1170 Operating Systems I	3
	15

Second Semester

Course	Credits
English/Literature*	3
Natural Science*	4-5
ECON 2110 Principles of Macroeconomics*	3
INFO 2500 Programming in C++	3
Elective(s)**	3
	16-17

SECOND YEAR

First Semester

Course	Credits
INFO 2550 Programming in JAVA	4
INFO 2700 Cisco Networking I	4
Oral Communication*	3
INFO 1100 Microcomputer Applications	3
	14

Second Semester

Course	Credits
PSYC 1810 Introduction to Psychology* **OR** SOCI 1010 Introduction to Sociology*	3
INFO 2330 Database Concepts, Design and Application	4
INFO 1725 HTML, CSS, and Java Script	3
ACCT 1100 Survey of Accounting	3
Fine Arts and Language*	3-4
	16-17

Total Credit Hours 61-63

Computer Science

FIRST YEAR

First Semester

Course	Credits
ENGL 1010 English Composition I*	3
MATH 1150 College Algebra*	3
History*	3
INFO 1020 Introduction to Information Technology	3
INFO 1170 Operating Systems I	3
	15

Second Semester

Course	Credits
English/Literature*	3
Natural Science*	4-5
ECON 2110 Principles of Macroeconomics*	3
INFO 2500 Programming in C++	3
Elective(s)**	3
	16-17

SECOND YEAR

First Semester

Course	Credits
Oral Communication*	3
INFO 2550 Programming in JAVA	4
INFO 2700 Cisco Networking I	4
INFO 2710 Cisco Networking II	4
	15

Second Semester

Course	Credits
Fine Arts and Language*	3-4
PSYC 1810 Introduction to Psychology* **OR** SOCI 1010 Introduction to Sociology*	3
INFO 2330 Database Concepts, Design and Application	4
Elective(s)**	4
	14-15

Total Credit Hours 60-62

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

*See general education requirements.

**See advisor for assistance choosing elective(s) based on professional goals and transfer institution.

MATHEMATICS

The mathematics curriculum is designed to provide students with a sound working base in mathematics, develop the student's ability to apply mathematical symbolism, enhance the student's problem solving and critical thinking skills, increase the student's ability to think abstractly, increase the student's ability to work independently on mathematics, and create a positive outlook toward mathematics.

The various mathematics courses provide the necessary foundation for vocational programs, as well as the requirements for the two-year liberal arts programs and preprofessional programs. They also provide preparation for mathematics majors who plan to transfer to a four-year institution.

Suggested Program of Study for Associate of Science Degree (2 years)

FIRST YEAR

First Semester

Course	Credits
ENGL 1010 English Composition I*	3
MATH 1600 Analytic Geometry and Calculus I*	5
CHEM 1090 General Chemistry I* **OR**	
CHEM 1140 General Chemistry I for Majors*	4-5
Elective**	3
	15-16

Second Semester

Course	Credits
English/Literature*	3
CHEM 1100 General Chemistry II* **OR**	
CHEM 1160 General Chemistry II for Majors*	4-5
MATH 2010 Analytic Geometry and Calculus II*	5
PHYS 2110 General Physics I with Calculus	5
	17-18

SECOND YEAR

First Semester

Course	Credits
MATH 2100 Ordinary Differential Equations	3
Behavioral & Social Sciences*	3
Oral Communication*	3
PHYS 2120 General Physics II with Calculus	5
	14

Second Semester

Course	Credits
English/Literature,*	
Fine Arts and Language,* **OR**	
Behavioral or Social Science*	3-4
MATH 2020 Analytic Geometry and Calculus III	5
MATH 2170 Applied Statistics	3
Elective(s)**	3-6
	14-18

Total Credit Hours 60-66

To earn an associate of science degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

* See general education requirements.

**See advisor for assistance choosing elective(s) based on professional goals and transfer institution.

PHYSICS

The two-year liberal arts curriculum is designed for students who want to include physics in their general education and for students who plan to concentrate in a STEM field for professional careers by transferring to a four-year college or university.

Suggested Program of Study for Associate of Science Degree (2 years)

FIRST YEAR

First Semester

Course	Credits
ENGL 2070 Technical Communications I*	3
CHEM 1090 General Chemistry I* **OR** CHEM 1140 General Chemistry I for Majors*	4-5
MATH 1600 Analytic Geometry and Calculus I*	5
Elective**	3
	15-16

Second Semester

Course	Credits
English/Literature*	3
PHYS 2110 General Physics I with Calculus*	5
MATH 2010 Analytic Geometry and Calculus II*	5
Elective(s)**	3-5
	16-18

SECOND YEAR

First Semester

Course	Credits
Behavioral and Social Sciences*	3
MATH 2100 Ordinary Differential Equations	3
PHYS 2120 General Physics II with Calculus	5
Oral Communication*	3
	14

Second Semester

Course	Credits
MATH 2020 Analytic Geometry and Calculus III	5
English/Literature,* Fine Arts and Language,* **OR** Behavioral or Social Science*	3-4
Science Course	3-5
Elective(s)**	4
	15-18

Total Credit Hours 60-66

To earn an associate of science degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

* See general education requirements.

**See advisor for assistance choosing elective(s) based on professional goals and transfer institution.

PRE-ENGINEERING

Get started on a degree in engineering at Northeast Community College. We offer an Associate of Science degree that will transfer to many engineering schools in the region.

Suggested Program of Study for Associate of Science Degree (2 Years)

FIRST YEAR

First Semester

Course	Credits
ENGL 2070 Technical Communications I*	3
MATH 1600 Analytic Geometry and Calculus I*	5
CHEM 1090 General Chemistry I* **OR** CHEM 1140 General Chemistry I for Majors*	4-5
ENGR 1010 Introduction to Engineering Design	3
ENGR 1015 Engineering Design Fabrication Lab for Pre-Engineers	1
	16-17

Second Semester

Course	Credits
English/Literature*	3
MATH 2010 Analytic Geometry and Calculus II*	5
PHYS 2110 General Physics I with Calculus*	5
Elective(s)**	4-5
	17-18

SECOND YEAR

First Semester

Course	Credits
PHYS 2120 General Physics II with Calculus	5
ENGR 2020 Engineering Statics	3
MATH 2100 Differential Equations	3
Behavioral and Social Sciences*	3
	14

Second Semester

Course	Credits
English/Literature,* Fine Arts and Language,* **OR** Behavioral or Social Science*	3-4
MATH 2020 Analytic Geometry and Calculus III	5
Oral Communication*	3
Elective(s)**	3-6
	14-18

Total Credit Hours 61-67

To earn an associate of science degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

*See general education requirements.

**See advisor for assistance choosing elective(s) based on professional goals and transfer institution.

PRE-PROFESSIONAL HEALTH SCIENCE PROGRAMS

The pre-professional health science program makes a perfect starting point for a career goal in dentistry, dietetics, medicine, mortuary science, pharmacy, radiology, radiologic technology, respiratory care, surgical technology, or another health science option. This pathway prepares students for transfer to earn an associate of applied science (AAS) or bachelor's (BA or BS) degree. As transfer requirements vary by institution, it is essential to work closely with an advisor to select courses that align with the intended transfer school.

Suggested Program of Study for Associate of Science Degree (2 Years)

FIRST YEAR

First Semester

Course	Credits
ENGL 1010 English Composition I*	3
Mathematics*	3-5
BIOS 2250 Introduction to Anatomy and Physiology I*	4
CHEM 1090 General Chemistry I*	4
	14-16

Second Semester

Course	Credits
English/Literature*	3
BIOS 2260 Introduction to Anatomy and Physiology II*	4
MATH 2170 Applied Statistics*	3
CHEM 1100 General Chemistry II*	4
Electives(s)**	3
	17

SECOND YEAR

First Semester

Course	Credits
Behavioral and Social Sciences*	3
PHYS 1410 Elementary General Physics I*	5
Program Course**	4-5
Oral Communication*	3
	15-16

Second Semester

Course	Credits
English/Literature,* Fine Arts and Language,* **OR** Behavioral or Social Science*	3-4
Program Course(s)**	8-10
Elective(s)**	3-6
	14-20

Total Credit Hours 60-69

Suggested Program of Study for Associate of Arts Degree (2 Years)

FIRST YEAR

First Semester

Course	Credits
ENGL 1010 English Composition I*	3
HLTH 1060 Comprehensive Medical Terminology**	3
BIOS 2250 Introduction to Anatomy and Physiology I*	4
Mathematics*	3-5
History*	3
	16-18

Second Semester

Course	Credits
English/Literature*	3
BIOS 2260 Introduction to Anatomy and Physiology II*	4
Social Science*	3
Electives(s)**	4-5
	14-15

SECOND YEAR

First Semester

Course	Credits
Oral Communication*	3
Behavioral Science*	3
Elective(s)**	9
	15

Second Semester

Course	Credits
Fine Arts and Language*	3-4
Electives(s)**	12
	15-16

Total Credit Hours 60-64

To earn an associate of arts or an associate of science degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

*See general education requirements.

**See advisor for assistance choosing elective(s) based on professional goals and transfer institution.

Students with appropriate placement scores are not required to take BIOS 1010 General Biology prior to BIOS 2250 Introduction to Anatomy and Physiology I or BIOS 2460 Microbiology.

SKILLED AND TECHNICAL TRADES

The Skilled and Technical Trades fields of study provide opportunities for students to deepen their understanding of topics in areas such as drafting, construction, electricity/electronics, maintenance, welding, manufacturing, energy, technical education, and transportation, distribution, and logistics. Through hands-on learning, classrooms and labs prepare students with the knowledge and skills that are desperately needed to advance to postsecondary education and/or to enter in to business and industry. Many of the top 10 High Skill, High Wage, High Demand (H3) jobs depend on workers from this career field. Visit www.education.ne.gov/nce/sts/ for more information.

CAREER AND TRANSFER PATHWAYS

Career Pathways offer students the opportunity to complete coursework toward earning a Certificate, Diploma, or Associate of Applied Science Degree and enter the workforce having acquired the skills necessary to succeed in their chosen area of interest.

Transfer Pathways afford students with opportunities to complete coursework toward an Associate of Arts or an Associate of Science Degree, then transfer to a four-year institution with the first two years on their path to a bachelor's degree completed.

SKILLED AND TECHNICAL TRADES FIELD OF STUDY

CAREER	
Construction Pathway	
Building Construction	AAS
Drafting-Architectural	AAS
Drafting	DIPL/CERT
Drafting-Structural	AAS
Heating, Ventilation, and Air Conditioning	AAS
Plumbing Technology	DIPL
Electrical & Energy Pathway	
Electrical Construction and Control	AAS
Electromechanical Technology	AAS
Utility Line	AAS
Wind Energy	AAS
Wind Energy	DIPL
Transportation Pathway	
Auto Body Repair Technology	AAS
Automotive Technology	AAS
Automotive Technology	DIPL
Automotive Light Service Technician	CERT
Diesel Technology-Agriculture	AAS
Diesel Technology-Truck	AAS
Manufacturing Pathway	
Drafting-Mechanical	AAS
Drafting-Mechanical	DIPL/CERT
Machining & Manufacturing Automtn	DIPL/CERT
Welding	DIPL/CERT

TRANSFER	
General Studies: Pre-Skilled & Technical	AA

AUTO BODY REPAIR TECHNOLOGY

The auto body repair technology program teaches students the basic elements of metal finish repair, frame alignment, panel replacement, major body damage, and unibody technologies for today's automobiles using the very latest equipment and training materials available. Students develop skills in welding, metalworking, refinishing, straightening and alignment, installation of glass, hardware, and trim, as well as estimating and shop management skills. Graduates are prepared for jobs in independent body shops or new and used car dealerships. With additional education, opportunities also exist for careers in insurance adjusting and teaching.

(*Enrollment in this program is limited and is based on the date of application.*)

Required Program of Study for Associate of Applied Science Degree (2 years)

FIRST YEAR

Fall Semester

Course	Credits
AUTB 1015 Glass, Trim, and Welding Theory	2.5
AUTB 1025 Glass, Trim, and Welding Lab	3.5
AUTB 1050 Panel Adjustment and Metalworking Theory	2.5
AUTB 1055 Panel Adjustment and Metalworking Lab	3.5
ENGL 1050 Workplace Communication*	3
	15

Spring Semester

Course	Credits
AUTB 1210 Major Body Damage Repair Theory	5
AUTB 1225 Major Damage and Metalworking Lab	7
CAPL 1290 Introduction to Job Search and Employment*	1
INFO 1000 Basic Computer Applications*	2
MATH 1020 Technical Mathematics I*	3
	18

Summer

Course	Credits
AUTB 1300 Cooperative Internship I	6
	6

SECOND YEAR

Fall Semester

Course	Credits
AUTB 2015 Paint Care and Refinishing Theory	5
AUTB 2035 Paint Care and Refinishing Lab	7
PSYC 1000 Human Relations*	2
INDT 1040 Industrial Process Dynamics* **OR** HVAC 2230 Physics of Building Science*	2
	16

Spring Semester

Course	Credits
AUTB 2215 Frame and Heavy Collision Theory	5
AUTB 2235 Frame and Heavy Collision Lab	3.5
AUTB 2245 Applied Body Repair Lab	3.5
ECON 1010 Personal and Business Finance*	2
	14

Total Credit Hours 69

*See general education requirements.

AUTOMOTIVE LIGHT SERVICE TECHNICIAN CERTIFICATE

Automotive light service technicians conduct basic repairs and maintenance on automobiles and light truck systems. They employ high-tech skills and use computerized equipment and traditional tools to complete routine service work and diagnostic tests. Students in this certificate program of study are prepared for jobs such as lube technicians, brake and alignment technicians, and tire technicians by gaining the knowledge and skills needed to perform work on a variety of systems such as brakes, tires, electrical systems, steering and suspensions, and drive trains.

(*Enrollment into this program is limited to and is based on the date of application.*)

All coursework in the Automotive Light Service Technician Certificate program will apply as full credit toward the Automotive Technology Associate of Applied Science Degree, the Associate of Arts Degree, or the Associate of Science Degree.

Required Program of Study for Certificate (16 weeks)

FALL SEMESTER

Course	Credits
AUTT 1010 Suspension, Steering and Brake Systems Theory	2.5
AUTT 1015 Suspension, Steering and Brake Systems Lab	3.5
AUTT 1110 Electrical Systems Theory	2.5
AUTT 1125 Electrical Systems Lab	3.5
WELD 1010 Related Welding	0.5
WELD 1020 Related Welding Lab	1
MATH 1020 Technical Mathematics I	3
Total Credit Hours	16.5

AUTOMOTIVE TECHNOLOGY DIPLOMA

Successful completion of the freshman year of the Automotive Technology Associate of Applied Science Degree program and the Summer Cooperative Internship I. All coursework in the Automotive Technology Diploma program will apply as full credit towards the Automotive Technology Associate of Applied Science Degree, the Associate of Arts Degree, or the Associate of Science Degree.

(*Enrollment into this program is limited to and is based on the date of application.*)

The Automotive Technology program is accredited through the National Automotive Technicians Education Foundation: ASE Education Foundation
1503 Edwards Ferry Rd., NE Suite 401 | Leesburg, VA 20176
Phone: (703) 669-6650 | www.aseeducationfoundation.org/program-accreditation

Required Program of Study for Diploma (1 year)

FALL SEMESTER

Course	Credits
AUTT 1010 Suspension, Steering and Brake Systems Theory	2.5
AUTT 1015 Suspension, Steering, and Brake Systems Lab	3.5
AUTT 1110 Electrical System Theory	2.5
AUTT 1125 Electrical System Lab	3.5
CAPL 1290 Intro to Job Search and Employment	1
MATH 1020 Technical Mathematics I	3
WELD 1010 Related Welding	0.5
WELD 1020 Related Welding Lab	1
	17.5

SPRING SEMESTER

Course	Credits
AUTT 1210 Electrical Tune-up and Fuel Systems Theory	2.5
AUTT 1225 Electrical Tune-up and Fuel Systems Lab	3.5
AUTT 1310 Automotive Electronics Theory	2.5
AUTT 1325 Automotive Electronics Lab	3.5
ENGL 1050 Workplace Communication	3
	15

SUMMER

Course	Credits
AUTT 1300 Cooperative Internship I	6
	6
Total Credit Hours	38.5

AUTOMOTIVE TECHNOLOGY

The automotive technology program provides the necessary training to diagnose, test, and repair the complicated workings of modern automobiles. Specific systems are covered in the classroom and then applied on automobiles in the lab and during the summer internship program. This training includes the latest electronic computer control ignition and fuel systems and front wheel drive automobiles. Graduates are ready for entry level positions as line technicians, service writers, and with experience, service managers and auto repair business owners.

(Enrollment into this program is limited and is based on the date of application.)

The Automotive Technology program is accredited through the National Automotive Technicians Education Foundation.

ASE Education Foundation
1503 Edwards Ferry Rd., NE Suite 401 | Leesburg, VA 20176
Phone: (703) 669-6650 | www.aseeducationfoundation.org/program-accreditation

Required Program of Study for Associate of Applied Science Degree (2 years)

FIRST YEAR

Fall Semester

Course	Credits
AUTT 1010 Suspension, Steering and Brake Systems Theory	2.5
AUTT 1015 Suspension, Steering, and Brake Systems Lab	3.5
AUTT 1110 Electrical System Theory	2.5
AUTT 1125 Electrical System Lab	3.5
CAPL 1290 Introduction to Job Search and Employment*	1
MATH 1020 Technical Mathematics I*	3
WELD 1010 Related Welding	0.5
WELD 1020 Related Welding Lab	1
	17.5

Spring Semester

Course	Credits
AUTT 1210 Electrical Tune-up and Fuel Systems Theory	2.5
AUTT 1225 Electrical Tune-up and Fuel Systems Lab	3.5
AUTT 1310 Automotive Electronics Theory	2.5
AUTT 1325 Automotive Electronics Lab	3.5
ENGL 1050 Workplace Communication*	3
	15

Summer

Course	Credits
AUTT 1300 Cooperative Internship I	6
	6

SECOND YEAR

Fall Semester

Course	Credits
AUTT 2010 Clutch, Manual Transmission and Transaxle, Drive Shaft and Differential Theory	2.5
AUTT 2015 Clutch, Manual Transmission and Transaxle, Drive Shaft and Differential Lab	3.5
AUTT 2110 Automatic Transmission and Transaxle Theory	2.5
AUTT 2125 Automatic Transmission and Transaxle Lab	3.5
INFO 1000 Basic Computer Applications*	2
PSYC 1000 Human Relations*	2
	16

Spring Semester

Course	Credits
AUTT 2210 Major Engine Theory	2.5
AUTT 2215 Major Engine Lab	3.5
AUTT 2310 Automotive Environmental Systems Theory	2.5
AUTT 2325 Automotive Environmental Systems Lab	3.5
ECON 1010 Personal and Business Finance*	2
INDT 1040 Industrial Process Dynamics* **OR** HVAC 2230 Physics of Building Science*	2
	16

Total Credit Hours 70.5

*See general education requirements.

BUILDING CONSTRUCTION

The building construction program gives students a basic knowledge of carpentry and related fields. By learning classroom theory and applying skills with on-the-job construction projects, students become familiar with tools of the trade, subcontracting, estimating, record keeping, and other building trade competencies. Upon completion of the program, students are prepared to begin careers working in construction.

(Enrollment into this program is limited and is based on the date of application.)

Required Program of Study for Associate of Applied Science Degree (2 years)

FIRST YEAR

Fall Semester

Course	Credits
CNST 1000 Building Construction Fundamentals	1.5
CNST 1005 Building Construction Fundamentals Lab	2.5
CNST 1030 Construction Drafting	2
CNST 1040 Construction Drafting Lab	1
CNST 1050 Residential Blueprint Reading	3
CNST 1065 Principles of Light-Frame Structure Technology	1.5
CNST 1075 Principles of Light-Frame Structure Tech Lab	2.5
MATH 1020 Technical Mathematics I*	3
CNST 1035 Construction Safety,* INDT 1025 Introduction to Industrial Safety,* **OR** HLTH 1710 First Aid*	1-2
	18-19

Spring Semester

Course	Credits
CNST 1210 Building Construction II	3
CNST 1220 Building Construction II Lab	5
CNST 1230 Construction and Architectural Drafting	2
CNST 1240 Construction and Architectural Drafting Lab	1
CNST 1250 Materials Estimating	2
CAPL 1290 Introduction to Job Search and Employment*	1
ENGL 1050 Workplace Communication*	3
	17

Summer

Course	Credits
CNST 1300 Cooperative Internship I	6
	6

SECOND YEAR

Fall Semester

Course	Credits
CNST 2010 Concrete Construction	2
CNST 2020 Concrete Construction Lab	1
CNST 2030 Cabinet and Finish Construction I	3
CNST 2040 Cabinet and Finish Construction I Lab	4
CNST 2050 Blueprint Reading and Estimating I	2
CNST 2060 Blueprint Reading and Estimating I Lab	1
ECON 1010 Personal and Business Finance*	2
PSYC 1000 Human Relations*	2
	17

Spring Semester

Course	Credits
CNST 2230 Millwork and Finish Construction II	4
CNST 2240 Millwork and Finish Construction II Lab	5
CNST 2250 Blueprint Reading and Estimating II	2
CNST 2260 Blueprint Reading and Estimating II Lab	1
CNST 2270 Construction Management	1
INFO 1000 Basic Computer Applications*	2
HVAC 2230 Physics of Building Science* **OR** INDT 1040 Industrial Process of Dynamics*	2
	17

Total Credit Hours 75-76

*See general education requirements.

DIESEL TECHNOLOGY

The diesel technology program will teach students the basic knowledge and skills needed to service and repair diesel and gas-powered equipment. As a student in the diesel technology program, will learn the latest diesel repair and diagnostic techniques using up-to-date equipment. Instruction is provided in state of the industry facilities using actual components and equipment.

(Enrollment into this program is limited and is based on the date of application.)

Required Program of Study for Associate of Applied Science Degree (2 years)

Core Requirements

Course	Credits
DESL 1095 Shop Processes and Safety	2
DESL 1300 Cooperative Internship I	6
WELD 1010 Related Welding	0.5
WELD 1020 Related Welding Lab	1
DESL 1010 Electrical Systems Theory	2.5
DESL 1015 Electrical Systems Lab	3.5
DESL 1065 Air Conditioning Theory	2.5
DESL 1072 Air Conditioning Lab	3.5
	21.5

General Education Requirements

Course	Credits
CAPL 1290 Introduction to Job Search and Employment*	1
INFO 1000 Basic Computer Applications*	2
MATH 1020 Technical Mathematics I*	3
ECON 1010 Personal and Business Finance*	2
PSYC 1000 Human Relations*	2
ENGL 1050 Workplace Communication*	3
INDT 1040 Industrial Process Dynamics **OR** HVAC 2230 Physics of Building*	2
	15

Core Requirements	21.5
General Education Requirements	15
Approved Electives	36-38
Total Credits	**72.5-74.5**

Approved Electives for Agriculture Concentration

Course	Credits
DESL 1055 Ag Power Trains and Farm Machines Theory	5
DESL 1082 Ag Power Trains and Farm Machines Lab	7
DESL 2015 Ag Electronics Theory	2.5
DESL 2035 Ag Electronics Lab	3.5
DESL 2070 Hydraulics Theory	2.5
DESL 2085 Hydraulics Lab	3.5
DESL 2030 Ag Engines and Fuel Systems Theory	5
DESL 2045 Ag Engines and Fuel Systems Lab	7
	36

Approved Electives for Truck Concentration

Course	Credits
DESL 1145 Truck Hydraulic Systems	2
DESL 1172 Truck Brakes, Suspension, and Steering Systems Theory	5
DESL 1182 Truck Brakes, Suspension, and Steering Systems Lab	7
DESL 2132 Truck Engines and Fuel Systems Theory	5
DESL 2135 Truck Engines and Fuel Systems Lab	7
DESL 2115 Truck Power Trains Theory	2.5
DESL 2125 Truck Power Trains Lab	3.5
DESL 2170 Transportation Refrigeration Theory	2.5
DESL 2185 Transportation Refrigeration Lab	3.5
	38

DIESEL TECHNOLOGY - AGRICULTURE CONCENTRATION

The diesel agriculture concentration will teach basic knowledge and skills needed to service and repair diesel and gas-powered equipment. In addition to classroom study, students receive over 1,000 hours of lab training and 360 hours of actual experience through a summer cooperative internship program.

Students will learn to repair and test diesel fuel systems, engines, hydraulic systems, electronic control systems, power trains, brakes, electrical systems, and air conditioning systems, as well as gaining experience with various hand tools and test equipment. Related courses in math, computers, communications, human relations, and personal and business finance are included to prepare students for the world of work and to enhance technical skills. Classes are held Monday through Thursday, allowing for a three-day weekend.

(Enrollment in this program is limited and is based on the date of application.)

Required Program of Study for Associate of Applied Science Degree (2 years)

FIRST YEAR

Fall Semester

Course	Credits
DESL 1010 Electrical Systems Theory	2.5
DESL 1015 Electrical Systems Lab	3.5
DESL 1065 Air Conditioning Theory	2.5
DESL 1072 Air Conditioning Lab	3.5
DESL 1095 Shop Processes and Safety	2
MATH 1020 Technical Mathematics I*	3
	17

Spring Semester

Course	Credits
DESL 1055 Ag Power Trains and Farm Machines Theory	5
DESL 1082 Ag Power Trains and Farm Machines Lab	7
CAPL 1290 Introduction to Job Search and Employment*	1
ENGL 1050 Workplace Communication*	3
WELD 1010 Related Welding	0.5
WELD 1020 Related Welding Lab	1
	17.5

Summer

Course	Credits
DESL 1300 Cooperative Internship I	6
	6

SECOND YEAR

Fall Semester

Course	Credits
DESL 2015 Ag Electronics Theory	2.5
DESL 2035 Ag Electronics Lab	3.5
DESL 2070 Hydraulics Theory	2.5
DESL 2085 Hydraulics Lab	3.5
PSYC 1000 Human Relations*	2
ECON 1010 Personal and Business Finance*	2
	16

Spring Semester

Course	Credits
DESL 2030 Ag Engines and Fuel Systems Theory	5
DESL 2045 Ag Engines and Fuel Systems Lab	7
INDT 1040 Industrial Process Dynamics **OR** HVAC 2230 Physics of Building*	2
INFO 1000 Basic Computer Applications*	2
	16

Total Credit Hours 72.5

*See general education requirements.

DIESEL TECHNOLOGY - TRUCK CONCENTRATION

The diesel truck concentration will teach basic knowledge and skills needed to service and repair diesel and gas-powered equipment. In addition to classroom study, students receive over 1,000 hours of lab training.

Students will learn to repair and test diesel fuel systems, engines, refrigeration, electronic control systems, power trains, brakes, electrical systems, suspension, and air conditioning systems, as well as gaining experience with various hand tools and test equipment. Related courses in math, welding, computers, communications, human relations, and personal and business finance are included to prepare students for the world of work and to enhance technical skills. Classes are held Monday through Thursday, allowing for a three-day weekend.

(Enrollment in this program is limited and is based on the date of application.)

Required Program of Study for Associate of Applied Science Degree (2 years)

FIRST YEAR

Fall Semester

Course	Credits
DESL 1095 Shop Processes and Safety	2
MATH 1020 Technical Mathematics I*	3
DESL 1145 Truck Hydraulic Systems	2
DESL 1172 Truck Brakes, Suspension, and Steering Systems Theory	5
DESL 1182 Truck Brakes, Suspension, and Steering Systems Lab	7
	19

Spring Semester

Course	Credits
DESL 1010 Electrical Systems Theory	2.5
DESL 1015 Electrical Systems Lab	3.5
DESL 1065 Air Conditioning Theory	2.5
DESL 1072 Air Conditioning Lab	3.5
CAPL 1290 Introduction to Job Search and Employment*	1
ENGL 1050 Workplace Communication*	3
WELD 1010 Related Welding	0.5
WELD 1020 Related Welding Lab	1
	17.5

Summer

Course	Credits
DESL 1300 Cooperative Internship I	6
	6

SECOND YEAR

Fall Semester

Course	Credits
DESL 2132 Truck Engines and Fuel Systems Theory	5
DESL 2135 Truck Engines and Fuel Systems Lab	7
ECON 1010 Personal and Business Finance*	2
PSYC 1000 Human Relations*	2
	16

Spring Semester

Course	Credits
DESL 2115 Truck Power Trains Theory	2.5
DESL 2125 Truck Power Trains Lab	3.5
DESL 2170 Transportation Refrigeration Theory	2.5
DESL 2185 Transportation Refrigeration Lab	3.5
INDT 1040 Industrial Process Dynamics **OR** HVAC 2230 Physics of Building*	2
INFO 1000 Basic Computer Applications*	2
	16

Total Credit Hours	74.5

*See general education requirements.

DRAFTING

To earn an associate of applied science degree in either architectural, structural, or mechanical drafting, a student must successfully complete the following general education and core requirements in addition to one of the specific concentrations listed.

Required Program of Study for Associate of Applied Science Degree (2 years)

Core Requirements

Course	Credits
ARCH 1160 Fundamentals of Drafting	3
ARCH 1270 Computer Assisted Drafting I	4
ARCH 1300 Cooperative Internship I	3
ARCH 2260 Introduction to Inventor	3
PHYS 2150 Structural Analysis	3
	16

General Education Requirements

Course	Credits
BSAD 2050 Business Communications	3
ECON 1010 Personal and Business Finance	2
MATH 1020 Technical Mathematics I	3
MATH 1060 Technical Mathematics II	3
OFFT 1500 Microsoft Office	3
PSYC 1000 Human Relations	2
	16

Core Requirements	16
General Education Requirements	16
Approved Electives	30-35
Total Credits Required	62-67

Approved Electives for Drafting-Architectural Concentration

Course	Credits
ARCH 1120 Materials of Construction	3
ARCH 1130 Introduction to Construction Documents	3
ARCH 1170 Introduction to Construction	3
ARCH 1220 Estimating for Construction	3
ARCH 1230 Introduction to Revit	4
ARCH 2020 Computer Assisted Drafting III	4
ARCH 2100 Survey and Site Planning	3
ARCH 2110 Architectural CAD I	4
ARCH 2150 Civil Drafting	2
ARCH 2210 Architectural CAD II	6
	35

Approved Electives for Drafting-Mechanical Concentration

Course	Credits
ARCH 1280 Introduction to SolidWorks	4
ARCH 1285 Geometric Dimensioning and Tolerancing	2
ARCH 1295 Engineering Materials and Processes	2
ARCH 2130 Mechanical Drafting I	4
ARCH 2230 Mechanical Drafting II	6
ENGR 1010 Introduction to Engineering Design	3
INDT 1015 Introduction to Manufacturing	2
INDT 1065 Manufacturing Technologies and Measurement	2
INDT 1170 Introduction to Total Quality Management	2
INDT 1090 Introduction to Machining	0.5
INDT 1095 Introduction to Machining Lab	1
WELD 1010 Related Welding	0.5
WELD 1020 Related Welding Lab	1
	30

Approved Electives for Drafting-Structural Concentration

Course	Credits
ARCH 1120 Materials of Construction	3
ARCH 1130 Introduction to Construction Documents	3
ARCH 1220 Estimating for Construction	3
ARCH 1230 Introduction to Revit	4
ARCH 2010 Structural CAD Drafting I	6
ARCH 2020 Computer Assisted Drafting III	4
ARCH 2200 Structural CAD Drafting II	6
ARCH 2220 Computer Assisted Drafting IV	4
	33

DRAFTING - ARCHITECTURAL CONCENTRATION

The architectural drafting concentration trains students to develop detailed working drawings for use in the construction of residential and commercial buildings. The program centers on the basic techniques of drafting – line work, lettering, and problem solving – and freehand sketching and calculations for measurements, columns, site preparation, energy needs and cost analysis. Successful graduates may find employment with architectural and engineering firms, general contractors, material suppliers, structural fabricators, or modular and component manufacturers of residential buildings.

(Enrollment in this program is limited and is based on the date of application.)

Required Program of Study for Associate of Applied Science Degree (2 years)

FIRST YEAR

Fall Semester

Course	Credits
ARCH 1160 Fundamentals of Drafting	3
ARCH 1130 Introduction to Construction Documents	3
ARCH 1270 Computer Assisted Drafting I	4
OFFT 1500 Microsoft Office*	3
MATH 1020 Technical Mathematics I*	3
	16

Spring Semester

Course	Credits
ARCH 1120 Materials of Construction	3
ARCH 1220 Estimating for Construction	3
ARCH 1230 Introduction to Revit	4
MATH 1060 Technical Mathematics II*	3
BSAD 2050 Business Communications*	3
	16

Summer

Course	Credits
ARCH 1300 Cooperative Internship I	3
	3

SECOND YEAR

Fall Semester

Course	Credits
ARCH 2110 Architectural CAD I	4
ARCH 1170 Introduction to Construction	3
ARCH 2100 Survey and Site Planning	3
ARCH 2150 Civil Drafting	2
ARCH 2020 Computer Assisted Drafting III	4
	16

Spring Semester

Course	Credits
ARCH 2210 Architectural CAD II	6
ARCH 2260 Introduction to Inventor	3
ECON 1010 Personal and Business Finance*	2
PSYC 1000 Human Relations*	2
PHYS 2150 Structural Analysis	3
	16

Total Credit Hours 67

*See general education requirements.

DRAFTING - MECHANICAL CONCENTRATION

The mechanical drafting concentration trains students in 3D solid modeling, simulation, prototype, and documentation creation for the production of parts and assemblies in multiple industries including: machinery, manufacturing, heavy equipment, consumer products, and medical devices. Students will take classes covering the fundamentals of engineering drawings, theory of design process, rapid prototyping, and learn multiple CAD software applications. Students will take courses offered by the "Machining and Manufacturing Automation" program and work side-by-side with manufacturing students participating in hands-on exercises and today's manufacturing technologies. Successful graduates may find employment in a variety of industries. Job titles may include: CAD Drafter, Mechanical Drafter, Design Drafter, Design Specialist, Engineering Technician, Design Technician, CAD Designer, CAD Technician, and CAD Operator.

(Enrollment in this program is limited and is based on the date of application.)

Required Program of Study for Associate of Applied Science Degree (2 years)

FIRST YEAR

Fall Semester

Course	Credits
ARCH 1160 Fundamentals of Drafting	3
ARCH 2260 Introduction to Inventor	3
ARCH 1270 Computer Assisted Drafting I	4
OFFT 1500 Microsoft Office*	3
MATH 1020 Technical Mathematics I*	3
	16

Spring Semester

Course	Credits
ARCH 1280 Introduction to SolidWorks	4
ARCH 1285 Geometric Dimensioning and Tolerancing	2
ARCH 1295 Engineering Materials and Processes	2
MATH 1060 Technical Mathematics II*	3
BSAD 2050 Business Communications*	3
	14

Summer

Course	Credits
ARCH 1300 Cooperative Internship I	3
	3

*See general education requirements.

SECOND YEAR

Fall Semester

Course	Credits
ARCH 2130 Mechanical Drafting I	4
ENGR 1010 Introduction to Engineering Design	3
INDT 1015 Introduction to Manufacturing	2
INDT 1065 Manufacturing Technologies and Measurement	2
INDT 1170 Introduction to Total Quality Management	2
INDT 1090 Introduction to Machining	0.5
INDT 1095 Introduction to Machining Lab	1
WELD 1010 Related Welding	0.5
WELD 1020 Related Welding Lab	1
	16

Spring Semester

Course	Credits
ARCH 2230 Mechanical Drafting II	6
ECON 1010 Personal and Business Finance*	2
PSYC 1000 Human Relations*	2
PHYS 2150 Structural Analysis	3
	13

Total Credit Hours 62

DRAFTING - STRUCTURAL CONCENTRATION

The structural drafting concentration prepares students to create technical drawings and construction documents used in the construction, maintenance, and modernization of industrial and commercial facilities. Students will be introduced to the principles of Building Information Management (BIM) utilizing computer-aided design processes to produce detailed architectural and structural drawings. Successful graduates may find employment with architectural and engineering firms, general contractors, material suppliers, manufacturers and structural fabricators.

(Enrollment in this program is limited and is based on the date of application.)

Required Program of Study for Associate of Applied Science Degree (2 years)

FIRST YEAR

Fall Semester

Course	Credits
ARCH 1160 Fundamentals of Drafting	3
ARCH 1130 Introduction to Construction Documents	3
ARCH 1270 Computer Assisted Drafting I	4
OFFT 1500 Microsoft Office*	3
MATH 1020 Technical Mathematics I*	3
	16

Spring Semester

Course	Credits
ARCH 1120 Materials of Construction	3
ARCH 1220 Estimating for Construction	3
ARCH 1230 Introduction to Revit	4
MATH 1060 Technical Mathematics II*	3
BSAD 2050 Business Communications*	3
	16

Summer

Course	Credits
ARCH 1300 Cooperative Internship I	3
	3

SECOND YEAR

Fall Semester

Course	Credits
ARCH 2010 Structural CAD Drafting I	6
ARCH 2260 Introduction to Inventor	3
ARCH 2020 Computer Assisted Drafting III	4
ECON 1010 Personal and Business Finance*	2
	15

Spring Semester

Course	Credits
ARCH 2200 Structural CAD Drafting II	6
ARCH 2220 Computer Assisted Drafting IV	4
PSYC 1000 Human Relations*	2
PHYS 2150 Structural Analysis	3
	15

Total Credit Hours 65

*See general education requirements.

DRAFTING CERTIFICATE

The drafting certificate provides interactive training in basic drafting technique, plan reading and CAD in order to gain the entry-level skills necessary to begin a career in the drafting field - with these skills, they will be able to begin employment as a drafting clerk or as a junior drafter.

All coursework in the Drafting Certificate program will apply as full credit towards the Drafting Associate of Applied Science Degree, the Associate of Arts Degree, or the Associate of Science Degree.

Required Program of Study for
Certificate (16 weeks)

FALL SEMESTER

Course	Credits
ARCH 1160 Fundamentals of Drafting	3
ARCH 1130 Introduction to Construction Documents	3
ARCH 1270 Computer Assisted Drafting I	4
OFFT 1500 Microsoft Office	3
MATH 1020 Technical Mathematics I	3
Total Credit Hours	16

DRAFTING DIPLOMA

The drafting diploma develops an understanding of materials used in construction, estimating for construction and an increased proficiency in CAD. Graduates of the program are prepared for entry level employment with architectural and engineering firms, general contractors, material suppliers, structural fabricators, or modular and component manufactures of buildings.

All coursework in the Drafting Diploma program will apply as full credit towards the Drafting Associate of Applied Science Degree, the Associate of Arts Degree, or the Associate of Science Degree.

Required Program of Study for
Diploma (32 weeks)

FALL SEMESTER

Course	Credits
ARCH 1160 Fundamentals of Drafting	3
ARCH 1130 Introduction to Construction Documents	3
ARCH 1270 Computer Assisted Drafting I	4
OFFT 1500 Microsoft Office	3
MATH 1020 Technical Mathematics I	3
	16

SPRING SEMESTER

Course	Credits
ARCH 1120 Materials of Construction	3
ARCH 1220 Estimating for Construction	3
ARCH 1230 Introduction to REVIT	4
MATH 1060 Technical Mathematics II	3
BSAD 2050 Business Communications	3
	16

Total Credit Hours 32

DRAFTING CERTIFICATE - MECHANICAL

The mechanical drafting certificate provides a basic understanding of print reading and the design process as well as an introduction to CAD using 2D AutoCAD. Graduates with a certificate will be able to begin employment as a drafting clerk or junior drafter.

All coursework in the Drafting Certificate- Mechanical program will apply as full credit towards the Drafting Associate of Applied Science Degree, the Associate of Arts Degree, or the Associate of Science Degree.

Required Program of Study for Certificate (16 weeks)

FALL SEMESTER

Course	Credits
ARCH 1160 Fundamentals of Drafting	3
ARCH 1270 Computer Assisted Drafting I	4
ARCH 2260 Introduction to Inventor	3
OFFT 1500 Microsoft Office	3
MATH 1020 Technical Mathematics I	3
Total Credit Hours	16

DRAFTING DIPLOMA - MECHANICAL

The mechanical drafting diploma develops a basic understanding of the design drafting process, materials, and theory of the manufacturing processes used in industry. Graduates of the program are prepared for entry level employment in the mechanical drafting fields. Students will take the "CSWA" exam and become a Certified SolidWorks Associate upon completion of the Diploma.

All coursework in the Drafting Diploma – Mechanical program will apply as full credit towards the Drafting Associate of Applied Science Degree, the Associate of Arts Degree, or the Associate of Science Degree.

Required Program of Study for Diploma (32 weeks)

FALL SEMESTER

Course	Credits
ARCH 1160 Fundamentals of Drafting	3
ARCH 1270 Computer Assisted Drafting I	4
ARCH 2260 Introduction to Inventor	3
OFFT 1500 Microsoft Office	3
MATH 1020 Technical Mathematics I	3
	16

SPRING SEMESTER

Course	Credits
ARCH 1280 Introduction to SolidWorks	4
ARCH 1285 Geometric Dimensioning and Tolerancing	2
ARCH 1295 Engineering Materials & Processes	2
BSAD 2050 Business Communications	3
MATH 1060 Technical Mathematics II	3
	14
Total Credit Hours	30

ELECTRICAL CONSTRUCTION AND CONTROL

Students in the electrical construction and control program learn the basics of electrical wiring used in the installation and maintenance of lighting, appliances, motors, heating, and air conditioning. Training includes the operation, testing, and maintenance of electrical equipment and electronics for skills in electrical controls and solid-state devices, as well as computer experience using a programmable controller. Power distribution, industrial maintenance, electrical and service work, installation and service of irrigation equipment, and new construction are some of the areas with employment opportunities for graduates of the two-year electrical program.

(Enrollment into this program is limited and based on the date of application.)

Required Program of Study for Associate of Applied Science Degree (2 years)

FIRST YEAR

Fall Semester

Course	Credits
ELTR 1010 Basic Electricity	3
ELTR 1020 Basic Electricity Lab	2
ELTR 1030 Electrical Wiring I	3
ELTR 1040 Electrical Wiring I Lab	3
ELTR 1050 National Electrical Code I	3
ECON 1010 Personal and Business Finance*	2
MATH 1020 Technical Mathematics I*	3
	19

Spring Semester

Course	Credits
ELTR 1200 National Electrical Code II	3
ELTR 1210 Electrical Wiring II	3
ELTR 1220 Electrical Wiring II Lab	2
ELTR 1230 Motor Control	2
ELTR 1240 Motor Control Lab	2
ELTR 1250 Blueprint and Cost Estimating	3
MATH 1060 Technical Mathematics II*	3
	18

Summer

Course	Credits
ELTR 1300 Cooperative Internship I	6
	6

SECOND YEAR

Fall Semester

Course	Credits
ELTR 2000 Motor Theory and Application	2
ELTR 2010 Motor Theory and Application Lab	1
ELTR 2020 Automation Fundamentals	2
ELTR 2030 Automation Fundamentals Lab	2
ELTR 2045 Electrical Energy Conservation I	3
ELTR 2055 Electrical Troubleshooting	2
ELTR 2065 Electrical Troubleshooting Lab	2
ENGL 1050 Workplace Communication*	3
	17

Spring Semester

Course	Credits
ELTR 2210 Control Wiring	3
ELTR 2215 Control Wiring and Solid State Lab	2.5
ELTR 2235 Electrical Energy Systems	3
ELTR 2245 Electrical Energy Systems Lab	2
ELTR 2260 Solid State Fundamentals	2
PSYC 1000 Human Relations*	2
HLTH 1710 First Aid	2
	16.5

Total Credit Hours 76.5

*See general education requirements.

ELECTROMECHANICAL TECHNOLOGY

The electromechanical technology program will allow students to learn the skills and knowledge to install, maintain, and repair complex industrial equipment. The students will focus on electrical principles, circuitry, electrical controls, robotics, print reading, programming, computer-aided drafting, mechanical systems, and other components related to electromechanical repair. Students will acquire the knowledge and skills through concentrated classroom and hands-on learning. Successful graduates are placed in industrial plants, hospitals, schools, apartment complexes, office buildings, and other building maintenance positions.

(Enrollment into this program is limited and is based on the dote of application.)

Before admission to this program, students will need to attain the following minimum placement test scores or equivalent. MAP: Math 216+, Reading 216+, Language 216+; ACT: Math 17+, Reading 14+, English 14+.

Required Program of Study for Associate of Applied Science Degree (2 years)

FIRST YEAR

Fall Semester

Course	Credits
ELMC 1010 Fundamentals of Electricity	3
ELMC 1020 Fundamentals of Electricity Lab	2
ELMC 1030 Orientation and Safety	2
INDT 1090 Introduction to Machining	0.5
INDT 1095 Introduction to Machining Lab	1
WELD 1010 Related Welding	0.5
WELD 1020 Related Welding Lab	1
ELMC 1070 Automation Fundamentals	3
ELMC 1090 Mechanical Matter and Energy	3
MATH 1020 Technical Mathematics I*	3
	19

Spring Semester

Course	Credits
ELMC 1110 Motor Control	2
ELMC 1120 Motor Control Lab	2
ELMC 1150 Introduction to Mechanics	3
ELMC 1160 Introduction to Mechanics Lab	3
ELMC 1170 Total Quality Management	2
CAPL 1290 Introduction to Job Search and Employment	1
ECON 1010 Personal and Business Finance*	2
MATH 1060 Technical Mathematics II*	3
	18

Summer

ELMC 1300 Cooperative Internship I	6
	6

*See general education requirements.

SECOND YEAR

Fall Semester

Course	Credits
ELMC 2010 Introduction to Automated Controls	2
ELMC 2020 Introduction to Automated Controls Lab	2
ELMC 2030 Motor Repair	2
ELMC 2040 Motor Repair Lab	1
ELMC 2052 Fluid Fundamentals	3
ELMC 2062 Fluid Fundamentals Lab	1
ELMC 2070 Machine Repair	2
ELMC 2080 Machine Repair Lab	2.5
ENGL 1050 Workplace Communication*	3
	18.5

Spring Semester

Course	Credits
ELMC 2110 Control Systems	3
ELMC 2120 Control Systems Lab	2.5
ELMC 2150 Solid State Fundamentals	4
ELMC 2170 Electromechanical Systems	1
ELMC 2190 Electromechanical Systems Lab	2
PSYC 1000 Human Relations*	2
	14.5

Total Credit Hours 76

HEATING, VENTILATION, AND AIR CONDITIONING

In the heating, ventilation, and air conditioning program students study the physical, mechanical, and chemical principles of refrigeration and air conditioning with emphasis on electrical controls and motors. Students gain proficiency in blueprint reading, sheet metal construction, proper ventilation installation, heating and cooling diagnosis, and installation of residential and commercial equipment. The program prepares students for skilled positions installing and servicing electrical, heating, and cooling systems.

(Enrollment into this program is limited and is based on the date of application.)

Required Program of Study for Associate of Applied Science Degree (2 years)

FIRST YEAR

Fall Semester

Course	Credits
HVAC 1010 Electricity for HVAC	2.5
HVAC 1020 Electricity for HVAC Lab	4
HVAC 1110 Basic Refrigeration Principles	2.5
HVAC 1120 Basic Refrigeration Principles Lab	4
HVAC 1130 Sheet Metal	3
INFO 1000 Basic Computer Applications*	2
	18

Spring Semester

Course	Credits
HVAC 1210 HVAC Controls	3
HVAC 1220 HVAC Controls Lab	4
HVAC 1250 Residential Air Conditioning	3
HVAC 1260 Residential Air Conditioning Lab	4
MATH 1020 Technical Mathematics I*	3
CAPL 1290 Introduction to Job Search and Employment*	1
	18

Summer

Course	Credits
HVAC 1300 Cooperative Internship I	6
	6

*See general education requirements.

SECOND YEAR

Fall Semester

Course	Credits
HVAC 2010 Heating Technology	2.5
HVAC 2020 Heating Technology Lab	4
HVAC 2210 Heat Pump Technology	2.5
HVAC 2220 Heat Pump Technology Lab	4
ECON 1010 Personal and Business Finance*	2
HVAC 2230 Physics of Building Science* **OR** INDT 1040 Industrial Process Dynamics*	2
	17

Spring Semester

Course	Credits
HVAC 2110 Commercial Refrigeration	3
HVAC 2120 Commercial Refrigeration Lab	4
HVAC 2310 Commercial Air Conditioning and Refrigeration	3
HVAC 2320 Commercial Air Conditioning and Refrigeration Lab	4
ENGL 1050 Workplace Communication*	3
PSYC 1000 Human Relations*	2
	19

Total Credit Hours 78

MACHINING AND MANUFACTURING AUTOMATION CERTIFICATE

The machining and manufacturing automation certificate program provide students the opportunity to acquire highly valued skills in an innovative, hands-on learning environment. The program features integrating experiences through which students participate in all aspects of a manufacturing organization, from materials and processes to safety, quality, maintenance, to personal relations. Armed with a high level of both technical and nontechnical skills, program graduates are prepared for employment in a rewarding, growth-oriented, and highly competitive career in today's manufacturing. *(Enrollment in the program is limited and is based on the date of application.)*

All coursework in the Machining and Manufacturing Automation Certificate program will apply as full credit towards the Machining and Manufacturing Automation Diploma and the Associate of Arts Degree or the Associate of Science Degree.

Required Program of Study for Certificate (16 weeks)

FALL SEMESTER

Course	Credits
INDT 1015 Introduction to Manufacturing	2
INDT 1025 Introduction to Industrial Safety	2
INDT 1170 Introduction to Total Quality Management	2
INDT 1055 Print Reading for the Industrial Trades	2
INDT 1065 Manufacturing Technologies and Measurement	2
INDT 1150 Machining Fundamentals	2
INDT 1160 Machining Fundamentals Lab	2
MATH 1020 Technical Mathematics I	3
Total Credit Hours	17

MACHINING AND MANUFACTURING AUTOMATION DIPLOMA

The machining and manufacturing automation diploma program provide students the opportunity to acquire highly valued skills in an innovative, hands-on learning environment. In addition to developing basic knowledge, skills, and abilities for successful integration into manufacturing industries, the diploma program features integrating experiences through which students participate in middle skills training in introductory welding and fabrication, precision measurements, basic machining, and the operation and programming of computerized manufacturing technologies including Computer Numerical Control (CNC) and robotics. *(Enrollment in this program is limited and is based on the date of application.)*

All coursework in the Machining and Manufacturing Automation Diploma program will apply as full credit towards the Associate of Arts Degree or the Associate of Science Degree.

Required Program of Study for Diploma (32 weeks)

FALL SEMESTER

Course	Credits
INDT 1015 Introduction to Manufacturing	2
INDT 1025 Introduction to Industrial Safety	2
INDT 1170 Introduction to Total Quality Management	2
INDT 1055 Print Reading for the Industrial Trades	2
INDT 1065 Manufacturing Technologies and Measurement	2
INDT 1150 Machining Fundamentals	2
INDT 1160 Machining Fundamentals Lab	2
MATH 1020 Technical Mathematics I	3
	17

SPRING SEMESTER

Course	Credits
WELD 1010 Related Welding	0.5
WELD 1020 Related Welding Lab	1
INDT 1085 Industrial Maintenance Fundamentals	3
INDT 1200 Fabrication Fundamentals Lab	1
INDT 1140 Metrology	2
INDT 1180 Computerized Manufacturing Technologies	1
INDT 1190 Computerized Manufacturing Technologies Lab	1
INDT 1040 Industrial Process Dynamics	2
INDT 1230 Manufacturing Technology Applications	1
INFO 1000 Basic Computer Applications	2
BSAD 2050 Business Communications **OR** ENGL 1050 Workplace Communications	3
	17.5
Total Credit Hours	34.5

PLUMBING TECHNOLOGY DIPLOMA

The plumbing technology program prepares individuals for careers in plumbing and pipefitting through the application of technical knowledge and skills in piping selection and layout procedures, plumbing systems and materials, plumbing codes and print reading, and plumbing and pipe installation and maintenance for residential and commercial applications. This program provides training in communications and math critical to the plumbing profession.

(Enrollment in this program is limited and is based on the date of application.)

All coursework in the Plumbing Technology Diploma program will apply as full credit towards the Associate of Arts Degree or the Associate of Science Degree.

Required Program of Study for Diploma (32 weeks)

FALL SEMESTER

Course	Credits
PLMB 1025 Plumbing Safety **OR** INDT 1025 Introduction to Industrial Safety	2
PLMB 1030 Plumbing Code and Print Reading	2
PLMB 1040 Plumbing and Pipefitting Fundamentals	3
PLMB 1050 Plumbing and Pipefitting Fundamentals Lab	5
PLMB 1060 Plumbing Tools and Processes	2
PLMB 1070 Trenching and Shoring	1
MATH 1020 Technical Mathematics I	3
	18

SPRING SEMESTER

Course	Credits
PLMB 1010 Electricity and Mechanics for Plumbers	3
PLMB 1020 Electricity and Mechanics for Plumbers Lab	2
PLMB 1110 Advanced Plumbing and Pipefitting	3
PLMB 1120 Advanced Plumbing and Pipefitting Lab	3
PLMB 1130 Gas Operations and Maintenance	2
PLMB 1140 Gas Operations and Maintenance Lab	2
PSYC 1000 Human Relations	2
	17

Total Credit Hours 35

UTILITY LINE

The utility line program teaches students skills in the installation, operation, and maintenance of electrical utilities. Instruction includes practical application of power line construction and maintenance, mathematics, sciences, electrical theory, and electrical apparatus. Successful completion of the program prepares students for highly marketable careers in installation, replacement, and maintenance of electrical power lines and equipment. In order for students to progress to the next term, they must successfully complete all required classes for the previous term. Students in the Utility Line program are required to have a "C" grade or better in second year UTIL coursework to graduate. (*See admission guidelines in the Admissions and Records section of this catalog. Individuals with a criminal record may not be eligible for employment in some settings.)* (*Enrollment into this program is limited and is based on the date of application.*)

Before admission to this program, students will need to attain the following minimum placement test scores or equivalent. MAP: Math 216+, Reading 216+, Language 216+; ACT: Math 17+, Reading 14+, English 14+.

Required Program of Study for Associate of Applied Science Degree (2 years)

FIRST YEAR – GROUP A

Fall Semester

Course	Credits
UTIL 1010 Concepts of Electricity I	4
UTIL 1020 Concepts of Electricity I Lab	1
UTIL 1030 Line Construction I	4
UTIL 1040 Line Construction I Lab	3
UTIL 1100 Commercial Driver's License	1
UTIL 1110 Commercial Driver's License Lab	1
UTIL 1280 Computer Literacy*	2
MATH 1020 Technical Mathematics I*	3
	19

Spring Semester

Course	Credits
UTIL 1120 Power Transformer Theory	2
UTIL 1140 Line Construction II	4
UTIL 1150 Line Construction II Lab	3
UTIL 1240 Concepts of Electricity II	4
UTIL 1250 Concepts of Electricity II Lab	1
UTIL 1260 Ropes and Riggings	1
MATH 1060 Technical Mathematics II*	3
	18

FIRST YEAR – GROUP B

Fall Semester

Course	Credits
UTIL 1010 Concepts of Electricity I	4
UTIL 1020 Concepts of Electricity I Lab	1
UTIL 1030 Line Construction I	4
UTIL 1040 Line Construction I Lab	3
UTIL 1260 Ropes and Riggings	1
UTIL 1280 Computer Literacy*	2
MATH 1020 Technical Mathematics I*	3
	18

Spring Semester

Course	Credits
UTIL 1100 Commercial Driver's License	1
UTIL 1110 Commercial Driver's License Lab	1
UTIL 1120 Power Transformer Theory	2
UTIL 1140 Line Construction II	4
UTIL 1150 Line Construction II Lab	3
UTIL 1240 Concepts of Electricity II	4
UTIL 1250 Concepts of Electricity II Lab	1
MATH 1060 Technical Mathematics II*	3
	19

Summer

Course	Credits
UTIL 1300 Cooperative Internship I	6
	6

Prerequisite: *Utility Line students must successfully pass their summer internship prior to beginning their sophomore year. No students will be allowed to take second year classes or labs without successful completion of their summer internship. Students who do not successfully pass their summer internship may have the opportunity to complete an internship the following summer.*

SECOND YEAR

Fall Semester

Course	Credits
UTIL 2130 Advanced Power Line Construction and Maintenance	3
UTIL 2135 Advanced Power Line Construction and Maintenance Lab	3
UTIL 2150 Power Line Transformers II	3
UTIL 2155 Power Line Transformers II Lab	3
ENGL 1050 Workplace Communication*	3
HLTH 1710 First Aid	2
	17

Spring Semester

Course	Credits
UTIL 2400 National Electric Safety Code	2
UTIL 2140 Advanced Power Line Construction and Maintenance II	2
UTIL 2145 Advanced Power Line Construction and Maintenance II Lab	3
UTIL 2160 Power Line Substation, Metering, and Protective Devices	3
UTIL 2165 Power Line Substation, Metering, and Protective Devices Lab	3
ECON 1010 Personal and Business Finance*	2
PSYC 1000 Human Relations*	2
	17

Total Credit Hours 77

*See general education requirements.

WELDING CERTIFICATE

Welding processes are widely used in construction projects and in manufacturing facilities all over the world. These processes require precision, dexterity, and an understanding of metals. The program focuses on the major welding and cutting processes which includes Shielded Metal Arc Welding (SMAW), Gas Metal Arc Welding (GMAW), Gas Tungsten Arc Welding (GTAW), and Flux Cored Arc Welding (FCAW). The program also addresses safety, print reading, and mathematics. The welding coursework helps in the development of quality welds in all positions on plate and pipe. Successful completion of the course gives the student the technical information required for entry level employment.

(Enrollment into this program is limited and based on the date of application.)

All coursework in the Welding Certificate program will apply as full credit towards the Welding Diploma, the Associate of Arts Degree, or the Associate of Science Degree.

Required Program of Study for Certificate (16 weeks)

FALL SEMESTER

Course	Credits
WELD 1030 SMAW Basic Theory	1.5
WELD 1035 SMAW Basic Lab	3
WELD 1040 GMAW/FCAW Theory	1.5
WELD 1045 GMAW/FCAW Lab	3
WELD 1110 Introduction to Metals & Inspection	2
WELD 1140 Print Reading & Symbols	2
WELD 1155 Fabrication Equipment & Operation Lab	2
MATH 1020 Technical Mathematics I	3
Total Credit Hours	18

WELDING DIPLOMA

Welding processes are widely used in construction projects and in manufacturing facilities all over the world. These processes require precision, dexterity, and an understanding of metals. The program focuses on the major welding and cutting processes which includes Shielded Metal Arc Welding (SMAW), Gas Metal Arc Welding (GMAW), Gas Tungsten Arc Welding (GTAW), and Flux Cored Arc Welding (FCAW). The program also addresses safety, print reading, and math. The welding coursework helps in the development of quality welds in all positions on plate and pipe. Successful completion of the course gives the student the technical information required for entry level employment.

(Enrollment into this program is limited and based on the date of application.)

All coursework in the Welding Diploma program will apply as full credit towards the Associate of Arts Degree or the Associate of Science Degree.

Required Program of Study for Diploma (32 weeks)

FALL SEMESTER

Course	Credits
WELD 1030 SMAW Basic Theory	1.5
WELD 1035 SMAW Basic Lab	3
WELD 1040 GMAW/FCAW Theory	1.5
WELD 1045 GMAW/FCAW Lab	3
WELD 1110 Introduction to Metals & Inspection	2
WELD 1140 Print Reading & Symbols	2
WELD 1155 Fabrication Equipment and Operation Lab	2
MATH 1020 Technical Mathematics I	3
	18

SPRING SEMESTER

Course	Credits
WELD 1050 GTAW Theory	1.5
WELD 1055 GTAW Lab	3
WELD 1060 Pipe Applications Theory	1.5
WELD 1065 Pipe Applications Lab	3
WELD 1170 Print Reading and Fabrication Lab	2
ENGL 1050 Workplace Communication **OR** BSAD 2050 Business Communications	3
	14
Total Credit Hours	32

WIND ENERGY TECHNOLOGY

Wind energy is a rapidly growing industry in Nebraska and throughout the nation. Students in the wind energy program will learn the necessary safety skills and engage in higher skill levels needed to work in positions in the wind energy field. Students will develop their basic skills with courses in wind energy fundamentals, basic electricity, wind turbine systems, and continue with motor controls, mechanical systems, blueprint reading, and fluid fundamentals. The second year, students will engage in wind electronics for control systems that interface with programmable logic controllers and Supervisory Control and Data Acquisition (SCADA) systems. Students will understand rigging and climbing safety in and around a wind turbine. Wind turbine siting will be introduced for awareness of economic development compliance. Successful graduates will be prepared for a position in the wind energy industry.

(Enrollment into this program is limited and based on the date of application.)

Required Program of Study for Associate of Applied Science Degree (2 years)

FIRST YEAR

Fall Semester

Course	Credits
WIND 1015 Principles of Electricity I	3
WIND 1025 Principles of Electricity I Lab	2
WIND 1080 Wind Energy Fundamentals	3
WIND 1035 Wind Industrial Safety	2
WIND 1040 Wind Industrial Safety Lab	3
WIND 1255 Blue Print Reading	2
ENGL 1050 Workplace Communication*	3
	18

Spring Semester

Course	Credits
WIND 1150 Mechanical Systems I	1
WIND 1165 Mechanical Systems I Lab	3
WIND 2052 Fluid Fundamentals	2
WIND 2062 Fluid Fundamentals Lab	2
WIND 1230 Motor Control	2
WIND 1240 Motor Control Lab	2
MATH 1020 Technical Mathematics I*	3
INFO 1000 Basic Computer Applications*	2
	17

Summer

Course	Credits
WIND 1300 Cooperative Internship I	6
	6

SECOND YEAR

Fall Semester

Course	Credits
WIND 2210 Mechanical Systems II	1
WIND 2220 Mechanical Systems II Lab	3
WIND 2040 Programmable Controllers and Communication	2
WIND 2042 Programmable Controllers and Communication Lab	2
WIND 2115 Control Systems	2
WIND 2120 Control Systems Lab	2
MATH 1060 Technical Mathematics II*	3
	15

Spring Semester

Course	Credits
WIND 2015 Principles of Electricity II	2
WIND 2025 Principles of Electricity II Lab	2
WIND 2285 Power Generation and Distribution	3
WIND 2295 Power Generation and Distribution Lab	2
WIND 2095 Airfoils and Composite Repair Lab	2
WIND 2275 Wind Site Development and Operation	2
ECON 1010 Personal and Business Finance*	2
PSYC 1000 Human Relations*	2
	17

Total Credit Hours 73

*See general education requirements.

WIND ENERGY TECHNOLOGY DIPLOMA

The wind energy technology program will provide individuals with the necessary skills and knowledge needed to work in positions in the wind energy field. Students will acquire knowledge and skills through concentrated classroom and hands-on learning. Upon completion of the program, graduates are prepared for positions as wind energy technicians.
(Enrollment into this program is limited and based on the date of application.)

All coursework in the Wind Energy Technology Diploma program will apply as full credit towards the Wind Energy Associate of Applied Science Degree, the Associate of Arts Degree, or the Associate of Science Degree.

Required Program of Study for Diploma (1 year)

FALL SEMESTER

Course	Credits
WIND 1015 Principles of Electricity I	3
WIND 1025 Principles of Electricity I Lab	2
WIND 1080 Wind Energy Fundamentals	3
WIND 1035 Wind Industrial Safety	2
WIND 1040 Wind Industrial Safety Lab	3
WIND 1255 Blue Print Reading	2
ENGL 1050 Workplace Communication*	3
	18

*See general education requirements.

SPRING SEMESTER

Course	Credits
WIND 1150 Mechanical Systems I	1
WIND 1165 Mechanical Systems I Lab	3
WIND 2052 Fluid Fundamentals	2
WIND 2062 Fluid Fundamentals Lab	2
WIND 1230 Motor Control	2
WIND 1240 Motor Control Lab	2
MATH 1020 Technical Mathematics I*	3
INFO 1000 Basic Computer Applications*	2
	17

SUMMER

Course	Credits
WIND 1300 Cooperative Internship I	6
	6

Total Credit Hours 41

CERTIFICATION PREPARATION COURSES

BASIC NURSE AIDE AND MEDICATION AIDE

The basic nurse aide and medication aide programs train students in the knowledge and skills necessary to administer responsible health care to the ill and aged in nursing facilities, long-term care facilities, and assisted care facilities under qualified supervision. Northeast Community College is approved to conduct courses for Basic Nurse Aide and Medication Aide through the Nebraska Department of Health and Human Services.

Nurse Aide (NURA 1110 - 3.0 credit hours) – This course is designed to meet the Nebraska Health and Human Services System training requirements for nurse aide certification and employment in long-term care facilities. This course combines classroom lecture and laboratory application for the development of basic skills needed to provide safe, effective, and caring services to the elderly or chronically ill patient of any age, in a long-term care facility. Upon completion of this course, the student is eligible to take the state written and practical skills exam. After successfully passing this examination and completing the application procedure, the students name will be placed on the basic nurse aide registry at the Nebraska Health and Human Services Regulation and Licensure, Credentialing Division. (*30/45/0/0*)

Medication Aide (HLTH 1120 - 3.0 credit hours) – This course is designed to prepare the student to assume the role and responsibilities of a Medication Aide working in a nursing facility. This course includes information regarding medication administration, pharmacology rules and regulations, classification of drugs, orders, storage, abbreviations, and an overview of commonly used drugs and documentation. (*45/0/0/0*)

EMERGENCY MEDICAL RESPONDER AND EMERGENCY MEDICAL TECHNICIAN COURSES

The Emergency Medical Responder and Emergency Medical Technician courses are offered for students desiring to become an entry level EMS provider. Both courses will develop field ready EMS providers with the required knowledge and skills to care for patients who are injured due to trauma or suffering from a medical emergency.

The Emergency Medical Responder (EMTL 1515 - 3.5 credit hours) – This course is dedicated to the study and application of the knowledge and skills necessary to become and Emergency Medical Responder. The course contains the current information found in the National EMS Education Standards as outlined by the National Highway Traffic Safety Administration. The course will include applications/skills needed to qualify for the Emergency Medical Responder license in the State of Nebraska. Passing the cognitive and practical skills examination of the National Registry of Emergency Medical Technicians (NREMT) is required for certification. Student must have current CPR certification, American Heart Association-Healthcare Provider Level or equivalent. (*45/15/0/0*)

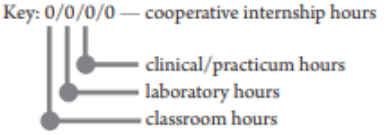
The Emergency Medical Technician Part 1 (EMTL 1840 - 4.5 credit hours) – This course is dedicated to the study and application of the knowledge and skills necessary for an individual to become an Emergency Medical Technician and provide emergency medical care at a basic life support level with an ambulance service or other specialized service. The course will include the first half of the applications/skills needed to apply for licensure as an EMT in the State of Nebraska. After successful completion of this course and EMTL-1845 the student will be eligible to apply to test for the National Registry of Emergency Medical Technician (NREMT) cognitive examination. Once the student has passed both the cognitive and practical skills examinations of the NREMT he/she can apply to obtain an EMT license in the State of Nebraska. This class contains the current information found in the National EMS Education Standards as outlined by the National Highway Traffic Safety Administration. Student must have current CPR certification, American Heart Association-Healthcare Provider Level or equivalent. (*60/15/0/0*)

The Emergency Medical Technician Part 2 (EMTL 1845 – 5.0 credit hours) – This course is dedicated to the study and application of the knowledge and skills necessary for an individual to become an Emergency Medical Technician and provide emergency medical care at a basic life support level with an ambulance service or other specialized service. Emergency Medical Technician Part 2 includes the assessment and treatment of a medical patient and the associated skills and medications an EMT can use. After successful completion of this course and EMTL 1840, the student will be eligible to apply to take the cognitive and practical skills examinations of the National Registry of Emergency Medical Technicians (NREMT). Once the student is successful, the student can apply to obtain an EMT license in the State of Nebraska. This class contains the current information found in the National EMS Education Standards as outlined by the National Highway Traffic Safety Administration. Student must have current CPR certification, American Heart Association – Healthcare Provider Level or equivalent. Prerequisite: EMTL 1840 with min. grade of C. (*67.5/15/0/0*)

COURSE DESCRIPTIONS

COURSE DESCRIPTIONS

Key: 0/0/0/0 — cooperative internship hours



The contact hours indicated are minimums for state aid reimbursement: actual hours may exceed those listed for each class.

Accounting (ACCT)

ACCT 1060 Basic Accounting Procedures **3 credits**
Study of fundamental accounting procedures including payroll preparation, banking practices, and the handling of cash. Includes preparation of end-of-period worksheets and financial statements. Not recommended for transfer or substitution for ACCT 1200. (45/0/0/0)

ACCT 1100 Survey of Accounting **3 credits**
Provides a solid overview of the basics of financial and managerial accounting with an emphasis on the relevance of accounting information. Focus of the course is on providing students with an understanding of the major financial statements, the information provided in the financial statements, and enhancing the student's decision making and problem solving abilities from a user perspective. (45/0/0/0)

ACCT 1200 Principles of Accounting I **3 credits**
This course is designed to provide introductory knowledge of accounting principles, concepts, and practices. Included topics are the balance sheet, the income statement, the statement of owner's equity, the statement of cash flows, journals, ledgers, accruals, adjusting and closing entries, internal controls, receivables, inventories, fixed and intangible assets, liabilities, equity, and financial statement analysis. This course provides a foundation for more advanced work in the fields of accounting and business. (45/0/0/0)

ACCT 1210 Principles of Accounting II **3 credits**
This course is a continuation of ACCT 1200 Principles of Accounting I and includes accounting for businesses organized as corporations, cash flow statements, accounting for manufacturing businesses, preparing and using accounting data for management decision making, and analyzing and interpreting financial statements. Prerequisites: ACCT 1200 with min grade of C (45/0/0/0)

ACCT 2010 Spreadsheet Accounting **3 credits**
Combines accounting with electronic spreadsheets. Projects are done on PCs and will include budgeting, financial statements, reports, graphics, depreciation schedules, what-if analysis and other aspects of accounting. Prerequisites: OFFT 1500 OR INFO 1010 OR INFO 1100 AND ACCT 1210 (45/0/0/0)

ACCT 2020 Accounting with QuickBooks **2 credits**
Accounting with QuickBooks is a comprehensive course in computerized accounting using QuickBooks software or cloud application. Topics will cover service and merchandising businesses. Students will create a company; manage customers and vendors; record receivables, payables, sales, sales tax, purchases, and inventory; maintain asset, liability and equity accounts; and perform routine company maintenance. Prerequisites: ACCT 1060 OR ACCT 1100 OR ACCT 1200 (30/0/0/0)

ACCT 2030 Payroll Accounting **3 credits**
An in-depth study of various payroll systems and includes the study of related law and practices. The student practices preparing payrolls and computing deductions. Emphasis is placed on actual preparation of payroll projects, including payroll tax returns. Prerequisites: ACCT 1060 OR ACCT 1200 OR ACCT 1100 (45/0/0/0)

ACCT 2200 Intermediate Accounting I **3 credits**
Review of financial accounting. Includes advanced financial statement construction and theory and practice relating to cash, receivables, inventory, investments, long-term assets, depreciation, cash flow, and revenue Prerequisites: ACCT 1200 with min grade of C (45/0/0/0)

ACCT 2260 Individual and Business Income Tax **3 credits**
Covers who must file tax returns, gross income inclusions and exclusions, tax deductions, determination of adjusted gross income, and taxable income. Includes preparation of both state and federal tax forms and declaration of estimated tax for individuals and business. Prerequisites: ACCT 1200 (45/0/0/0)

ACCT 2700 Accounting Capstone **3 credits**
The accounting capstone course is a comprehensive integration of various accounting and business competencies including accounting research, business and accounting knowledge, computer techniques and communication skills. Prerequisites: ACCT 2200 AND ACCT 2010 AND ACCT 2020 (45/0/0/0)

Agriculture (AGRI)

AGRI 1005 Precision Agriculture Systems **3 credits**
A study of methods and technology commonly used in precision agriculture. This course will focus on how precision agriculture is implemented as a management practice and the technologies available that make it possible. (45/0/0/0)

AGRI 1010 Animal Science **3 credits**
Introduction to the livestock industry and its role in food production, breeds and selection, reproduction and breeding systems, inheritance and genetics, shelter and facility requirements, nutrition, parasites and insects, diseases, and other aspects of meat, milk, wool, and poultry production. (45/0/0/0)

AGRI 1020 Introduction to Farm Management Records **4 credits**
Basic course in farm accounts, inventories, production records, machinery costs, and financial records. Includes depreciation, feed check, monthly inventory, and household expense. Prerequisites: AGRI 1410 (60/0/0/0)

AGRI 1026 Farm Equipment Operation 1 credit
In this experiential course, students will perform tasks associated with successful agriculture production on-site at the Northeast Community College Farm. Students will learn how to safely operate and maneuver common farm machinery and equipment, including as many of the following as possible: tractor and implement, skid steer, combine, UTV, pickup and trailer (bumper hitch and gooseneck), center plot irrigation, or others as available. This class will be beneficial in preparing students for an internship or employment in an agricultural setting. (7.5/22.5/0/0)

AGRI 1030 Soil Science 3 credits
The development, physics, chemistry, biology, and classification of soils with emphasis on the role of soils in the growth of plants. Corequisites: AGRI 1040 (45/0/0/0)

AGRI 1031 Soil Evaluation 1 credit
Students will learn how to effectively evaluate color and texture of each horizon of soil. Land classification of rangeland and fields will be evaluated. Students will be able to evaluate soil on various sites within northeast Nebraska. Course will be taken in preparation for competitions. (15/0/0/0)

AGRI 1032 Soil Evaluation II 1 credit
Students will utilize peer to peer instruction to determine parent material and landforms of pedons during competition preparations. Prerequisites: AGRI 1030 with min grade of B (15/0/0/0)

AGRI 1040 Soil Science Lab 1 credit
Lab for AGRI 1030, including soil samples, texture, soil surveys, nutrient deficiency, lime recommendations, cation exchange capacity, texture triangle, and acre furrow slice. (0/45/0/0)

AGRI 1050 Farm Welding 1 credit
Basics of the metallurgy of welding and making mechanically sound welds with shielded metal arc welding-SMAW and oxyacetylene welding-OAW. (15/0/0/0)

AGRI 1060 Farm Welding Lab 2 credits
Application of knowledge to create mechanically sound welds and efficient cuts with oxyacetylene welding-OAW. Make mechanically sound welds with shielded metal arc welding-SMAW in the flat, horizontal, vertical, and overhead positions. (0/90/0/0)

AGRI 1070 Introduction to Livestock Selection and Carcass Judging 0.5 credits
A preliminary study of selecting beef, swine, sheep, and dairy animals, including livestock type, conformation, and performance data. Instruction in livestock judging based on sound written and oral reasons. (7.5/0/0/0)

AGRI 1080 Introduction to Livestock Selection and Carcass Judging Lab 0.5 credits
An introduction to actual selection and judging experience, with an emphasis placed on evaluating livestock and defending evaluations through oral reasons. (0/22.5/0/0)

AGRI 1090 Livestock Selection and Carcass Judging I 1 credit
Study of selecting beef, swine, sheep, and dairy animals, including livestock type, conformation, and performance data. Instruction in livestock judging based on sound written and oral reasons. (15/0/0/0)

AGRI 1100 Livestock Selection and Carcass Judging I Lab 1 credit
Actual selection and judging experience. (0/45/0/0)

AGRI 1105 Issues in Agriculture I 1 credit
The purpose of this course is to expose students to the broad context of agriculture and critical issues facing the industry. A variety of experiences will provide an overview of agricultural and natural resources as well as the effects of human involvement. Connections will be made regarding coursework, experiences, and future expectations important for the development of an informed agricultural professional. (15/0/0/0)

AGRI 1115 Issues in Agriculture II 1 credit
The purpose of this course is to expose students to the broad context of agriculture and the critical issues facing the industry. Students will study the interrelationship and the impact of increased human involvement in agriculture and natural resources. Topics will include, but are not limited to, genetic engineering, food safety, ethics in animal agriculture, leadership, minority influences in the West, environmental issues such as endangered species and water, and other emerging issues. The course is intended to provide students with an appreciation of the divergent viewpoints of the stakeholders involved in the many issues confronting agriculture in Nebraska and the region. (15/0/0/0)

AGRI 1120 Food-Agriculture-Natural Resources Systems 3 credits
Exploration of careers in the agribusiness industry. Covers the various products available for agricultural use and the companies manufacturing these products. Includes numerous field trips to agricultural industries and visits with manufacturers' representatives as outside resources. (45/0/0/0)

AGRI 1130 Large Engine Maintenance 1 credit
Fundamentals of preventative maintenance of farm machines, including tune-ups, bearings and seals, belts and chains, tires and tracks, and belts and fasteners. (15/0/0/0)

AGRI 1131 Plant Science 3 credits
Study and evaluation of cultural practices, varieties, plant growth and development, planting rates, pests, and diseases, fertility and weather influences throughout the growing season. (45/0/0/0)

AGRI 1132 Plant Science Lab 1 credit
Plant growth and development of Monocot and Dicot plants; basic plant anatomy and growth stages; methods of plant reproduction and seed production; basic plant genetics and plant physiology; identification of uses of crops grown in the Midwest. (0/45/0/0)

AGRI 1140 Large Engine Maintenance Lab 2 credits
Lab experience for AGRI 1130. Applications of preventative maintenance of farm machines including: tune-ups, bearings and seals, belts and chains, tires and tracks, and belts and fasteners. Corequisites: AGRI 1130 (0/90/0/0)

AGRI 1145 Natural Resources 3 credits
A study of natural resources, and how they play an important part in the modern world. How resource management can assist with biodiversity and sustainability on the local/state/country/world platform will be evaluated. (45/0/0/0)

AGRI 1150 Introduction to Entomology 3 credits
Basic course in entomology and pest management to include: life processes of insects, classification, life cycle, ecology, sampling, populations, and management theory as they relate to man, plants, and animals. (45/0/0/0)

AGRI 1180 Livestock Selection and Carcass Judging II 2 credits
Evaluation, grading, and pricing, including beef, pork, and lamb carcass judging classes and retail cut identification. (30/0/0/0)

AGRI 1190 Livestock Selection and Carcass Judging II Lab 2 credits
Experience in evaluation, grading, and pricing of livestock carcasses and retail cut identification. (0/90/0/0)

AGRI 1230 Feeds and Feeding 3 credits
Balancing livestock feed rations and determining the correct rations for all types of livestock using nutrient needs, digestive systems, and feed nutrient compositions. Includes use of programmable calculators to analyze livestock rations. (45/0/0/0)

AGRI 1240 Advanced Farm Welding 1 credit
Mechanically sound welds in the overhead position with shielded metal arc welding and oxyacetylene, including bronze and braze welding, hard facing, basic engine lathe, and milling machine operations. Prerequisites: AGRI 1050 (15/0/0/0)

AGRI 1250 Advanced Farm Welding Lab 2 credits
Application of knowledge to create mechanically sound welds with advanced electrodes in all positions and types including the overhead position with SMAW (shielded metal-arc welding) and OAW (oxyacetylene welding), tool shaping, tool tempering, and measuring with various measuring devices. Prerequisites: AGRI 1060 (0/90/0/0)

AGRI 1280 Crop Chemicals 2 credits
Use of herbicides, insecticides, fungicides, and nematocides, identification of pests, types of pesticide materials and selection, handling and use of pesticides, and application equipment. (30/0/0/0)

AGRI 1281 Weed Science 2 credits
Fundamentals of weed control practices and factors affecting control. Herbicide classification and modes of action. Identification of common weeds, basic scouting and chemical resistance will also be addressed. (30/0/0/0)

AGRI 1290 International Agriculture and Agribusiness 3 credits
An overview of agriculture worldwide and its impact on production agriculture in the United States. An examination of production agriculture and agribusiness from a global perspective. (45/0/0/0)

AGRI 1300 Cooperative Internship I 1 - 6 credits
Work-study program for in-depth instruction on the job. The college gives both related and vocational instruction before and-or during this period, including seminars directly related to the work experience. These experiences are planned and supervised by the college and employers so that each contributes to the student's education and employability. (0/0/0/360)

AGRI 1310 Agricultural Marketing System 3 credits
This course will provide an introduction to agribusiness and food products marketing in the U.S. This course includes a background on the workings of the U.S. food marketing system and how this system affects farm producers, consumers, and middlemen such as processors, wholesalers, retailers, and food services. Students will gain an understanding of how food products move through a food marketing channel to the final point of consumption and how consumer demand, marketing, and information technology have shaped the agricultural food marketing industry over time. (45/0/0/0)

AGRI 1320 Animal Reproduction Physiology 3 credits
Study of the management of animal reproduction, breeding, genetics, natural conception, artificial insemination, and embryo transfer. (45/0/0/0)

AGRI 1340 Animal Science Lab 1 credit
Experience working with all types of livestock at the college farm. Includes branding, castration, vaccination, foot care, and semen collection. (0/45/0/0)

AGRI 1350 Tillage, Planting and Spraying Equipment 1 credit
Study of the fundamentals of setting and maintaining tillage, planting, and spraying equipment. Emphasizes the evaluation of different farming practices and methods used today to assist students in developing management tools leading to increased profitability and better soil and water conservation. (15/0/0/0)

AGRI 1360 Tillage, Planting and Spraying Equipment Lab 1 credit
Application of knowledge to set tillage equipment, set up planters, calibrate sprayers and operate corn planter. Corequisites: AGRI 1350 (0/45/0/0)

AGRI 1400 Farm and Environmental Safety 2 credits
Study of agriculture safety including farm and ranch safety, chemical safety, OSHA and Hazardous Occupation Laws, safe materials handling and CPR/AED certification. (30/0/0/0)

AGRI 1410 Introduction to the Economics of Agriculture 3 credits
Introductory course to help students develop a basic

understanding and appreciation for the role of economics in agriculture at the farm, national, and international levels. Students will learn to apply various economic principles and concepts relating to production agriculture, business management, consumer behavior, market price analysis and equilibrium, and policy information. (45/0/0/0)

AGRI 1420 Interpersonal Skills 3 credits
Designed to help students understand how positive interpersonal relationships contribute to the process of potentiality development. The course will include: self-awareness and awareness of others, values clarification, decision-making, appreciation for diversity, and development of healthy personal and professional relationships. (45/0/0/0)

AGRI 1430 Orientation to Irrigation 3 credits
Introductory course to help the student with familiarization of irrigation equipment, operations, and techniques in the Midwest with emphasis on pivot irrigation systems. (45/0/0/0)

AGRI 1450 Irrigation Troubleshooting I 2 credits
Fundamental electrical theory including electrical components and their effects on AC and DC circuits. Covers using Ohms law and circuit testing equipment. (30/0/0/0)

AGRI 1460 Irrigation Troubleshooting I Lab 1 credit
Lab experience for AGRI 1450. Fundamental electrical theory including electrical components and their effects on AC and DC circuits. Covers using Ohms law and circuit testing equipment. (0/45/0/0)

AGRI 1500 Microcomputer Applications in Agriculture 3 credits
This course covers basic applications of word processing, spreadsheet, data management, and online based programs and how they relate to agriculture. Students will utilize a variety of office and online programs to learn how to create, utilize, move, and manage data. (45/0/0/0)

AGRI 1520 Ag Electronics and Hydraulics 3 credits
The study of electrical and hydraulic systems used in agriculture. Covers basics of electricity and the laws of hydraulics in farm equipment. Corequisites: AGRI 1525 (45/0/0/0)

AGRI 1525 Ag Electronics and Hydraulics Lab 1 credit
Application of electrical and hydraulic law in relation to farm equipment. Includes assembly of these components and the basics of troubleshooting. Corequisites: AGRI 1520 (0/45/0/0)

AGRI 1530 Introduction to Water Resources 3 credits
Designed to help students develop an understanding and appreciation of the importance of water. The students will develop skills to analyze soil, plant, and water relationships; as well as understand water relationships to environment, economic, and sociological impacts to the public. The course will begin with a historical perspective of how water resources were formed in Nebraska and the Great Plains. The course will continue by examining the process of water development historically by society through the current status of water including water quality, water quantity, water laws, and regulations. (45/0/0/0)

AGRI 1540 Precision Irrigation Management 3 credits
A study of the technology used to manage irrigation and preserve water. The course will provide an overview of the hardware and software used to operate Variable Rate Irrigation and soil moisture monitoring. (45/0/0/0)

AGRI 1600 Drone Operations 1 credit
The course is designed to introduce students to the rules of small UAS (drone) operations as required by the Federal Aviation Administration. It is also intended to help students learn and understand the interworking of drones and proper flight planning and protocol for various drone missions. Another goal of this course is to prepare the student for the successful completion of the FAA Part 107 UAS Remote Pilot certification. This course is designed for those who want to become commercially licensed drone pilots, but also includes useful rules and information for the drone hobbyist. Corequisites: AGRI 1610 (15/0/0/0)

AGRI 1610 Drone Operations Lab 1 credit
Students will learn how to safely operate and pilot small UAS (drones) owned by Northeast Community College in controlled environments. This course will also cover proper mission planning. In addition, students will learn how to take aerial photos and videos and use them to relay data. They will also learn to think critically and responsibly about drone use. This course should be taken together with the Drone Operations classroom function or in a subsequent semester. It's vital that rules are understood before flying a drone. This course will be instructed by an FAA certified commercial drone pilot. Corequisites: AGRI 1600 (0/45/0/0)

AGRI 2000 Integrated Spreadsheet Applications 3 credits
A course that includes introductory through advanced spreadsheet applications, advanced word processing tools, and integrated software applications for agricultural business situations. (45/0/0/0)

AGRI 2005 Precision Agriculture Theory 3 credits
This course is a study of specific components that make precision agriculture work and how to apply them. Students will gain an understanding of these theories through hands-on and case study exercises. Prerequisites: AGRI 1005 (45/0/0/0)

AGRI 2010 Irrigation and Equipment 3 credits
Introduction to the management of irrigation systems. Includes water requirements, water resources, application methods, types and selection of irrigation equipment, application time and rates, irrigation well principles and operation, water rights and legal aspects, costs and returns. (45/0/0/0)

AGRI 2015 Farm and Ranch Management 4 credits
Basic course in economic principles and business management concepts which are involved in the decision-making process when organizing and operating a farming-

ranching operation. Includes production economics, record keeping systems, financial budgets and analysis, crop and livestock enterprise analysis, depreciation, farm business organizations, and farm investment analysis. Prerequisites: AGRI 1410 OR BSAD 1040 OR ECON 1040 (60/0/0/0)

AGRI 2020 Crops and Irrigation 3 credits
Weed identification and control, cultivation and fertilization, tissue testing, monitoring pests and weeds, and record keeping for crops. Introduction to irrigation, crop water requirements, water resources, supply irrigation methods, surface sprinkler irrigation, water rights and legal aspects of irrigation combining irrigation scheduling with field scouting. (45/0/0/0)

AGRI 2035 Introduction to Agroecology 3 credits
An introduction to the relationship of natural ecosystems with agriculture on a local, state, nation, and world wide scale. How countries view and implement sustainable agriculture will be on the forefront of this class. Prerequisites: AGRI 1030 with min grade of C AND AGRI 1131 with min grade of C (45/0/0/0)

AGRI 2040 Livestock Production I 3 credits
The study of livestock management in the areas of selection, nutrition, reproduction, waste management and marketing as it pertains to cattle, swine, and sheep management. Job opportunities in livestock management and the role of professional organizations in livestock production will also be analyzed. (45/0/0/0)

AGRI 2080 Small Farm Engines 1 credit
Knowledge of tune-ups, maintenance, and overhaul procedures of small Briggs and Stratton engines. Corequisites: AGRI 2090 (15/0/0/0)

AGRI 2090 Small Farm Engines Lab 1 credit
Application of knowledge to perform tune-ups, maintenance and overhaul of small engines Corequisites: AGRI 2080 (0/45/0/0)

AGRI 2100 Farm Electricity and Wiring 1 credit
Utilization of electric energy in agricultural production and processing with an emphasis on safety. Wiring installations; selection of safe and adequate circuit devices; service equipment and conductors; and electric motors and their control; and energy management. (15/0/0/0)

AGRI 2105 Farm Electricity and Wiring Lab 2 credits
Supplement to AGRI 2100. Includes exercises for wiring skills needed in agricultural production operations. Wiring installations; selection of safe and adequate circuit devices; service equipment and conductors; and electric motors and their control; and energy management. Corequisites: AGRI 2100 (0/90/0/0)

AGRI 2115 Global Opportunities in Agriculture Leadership Studies 3 credits
The purpose of this leadership course is to develop prominent agriculture spokespersons. This travel study program will examine agricultural production, business, and trade in a designated country from a comparative point of view with the United States. The course will also discuss the history, culture, the arts, and leisure activities of citizens from the designated country. Prerequisites: AGRI 1115 (45/0/0/0)

AGRI 2140 Farm Welding Repair and Projects 1 credit
Study of gas metal arc welding-GMAW, steps of repairing metal objects & designing a small project. Prerequisites: AGRI 1050 (15/0/0/0)

AGRI 2150 Farm Welding Repair Class and Projects Lab 2 credits
Application of knowledge to create mechanically sound welds with gas metal arc welding-GMAW in the flat, horizontal, vertical and overhead positions. Making minor repairs to farm equipment. Layout and build a small project. Prerequisites: AGRI 1060 Corequisites: AGRI 2140 (0/90/0/0)

AGRI 2165 Value-Added Diversified Marketing 3 credits
A course in the basic planning and marketing of small-scale value-added products. This includes the inclusion of farmers markets, roadside-stands, and other small retail and wholesale operations. Focus will be on products that are considered niche. (45/0/0/0)

AGRI 2180 Livestock Selection and Carcass Judging III 1 credit
Continuation of the study of selecting beef, swine, sheep, and horses, including conformation and performance data. Instruction in livestock judging based on sound written and oral reasons. Prerequisites: AGRI 1180 (15/0/0/0)

AGRI 2190 Livestock Selection and Carcass Judging III Lab 1 credit
Continuation of the study of selecting beef, swine, sheep, and horses, including conformation and performance data. Instruction in livestock judging based on sound written and oral reasons in a lab situation. Prerequisites: AGRI 1190 (0/45/0/0)

AGRI 2200 Advanced Fertilizers 2 credits
Study of advanced formulations of fertilizers based on soil tests. Review of soils testing and evaluation, nutrient requirements. Includes use of programmable calculators where applicable. Prerequisites: AGRI 1030 (30/0/0/0)

AGRI 2210 Animal Health 3 credits
Fundamentals of animal and herd health, including beef and dairy cattle, swine sanitation, and animal drugs. (45/0/0/0)

AGRI 2250 Grain Harvesting and Handling Systems 3 credits
Harvesting techniques, new and different methods of crop production, new grain varieties, and methods of storing and drying of crops. Prerequisites: AGRI 1131 (45/0/0/0)

AGRI 2260 Beef Feedlot Production Management 2 credits
A study of the beef cattle industry including the consumer, retailer, packer, and feeder. (30/0/0/0)

AGRI 2275 Crop Genetics 2 credits
Study of Mendelian crop genetics and plant breeding, and how genetics relate to crop improvement and production.

The basics of crop genetic engineering will also be covered. (30/0/0/0)

AGRI 2285 Swine Production Management 2 credits
A study of the role of swine in the world and their functions. Methods of establishing a swine enterprise through selection and performance testing are also studied. Management as a factor in the cost and efficiency of production is given special attention. The importance of feed costs, nutrient requirements of swine, and processing of feeds are also demonstrated. (30/0/0/0)

AGRI 2290 Agricultural Commodities Marketing 3 credits
Introduction to the concepts of agricultural marketing including, but not limited to the study of marketing alternatives (cash, contracts, futures, and options). Development of marketing plans and analysis of current industry trends will be utilized to enhance the concepts. (45/0/0/0)

AGRI 2300 Cooperative Internship II 1 - 4 credits
Continuation of Cooperative Internship I (0/0/0/240)

AGRI 2400 Forage, Pasture and Grassland Production 3 credits
Economical management and cultural practices used in hay, haylage, silage, pasture and range production. Theories and practices relating to variety selection, seeding rates, fertilization, establishment, weed control and harvesting of forages. (45/0/0/0)

AGRI 2410 Forage, Pasture and Grassland Production Lab 1 credit
Lab for AGRI 2400, including a hands-on approach to grass and legume morphology. Identification of forage seeds and plants. Adaption, use and special management practices for various forage species. (0/45/0/0)

AGRI 2420 Hydraulic Components and Irrigation Pump Applications 3 credits
Study the design to analyze pump classes and types, selection, and application. Includes pump curves, system curves, suction characteristics, piping systems, and pumping system economics. (45/0/0/0)

AGRI 2430 Irrigation Blueprints 3 credits
Provides familiarization and utilization of blueprints and schematics used in the irrigation industry. (45/0/0/0)

AGRI 2450 Modern Technologies in Agriculture 3 credits
A study of the principles and concepts involved with site specific management and the evaluation of geographic information systems for crop product practices. The course will focus on hands-on experience with the hardware and software necessary for successful application of the information affecting crop management. (45/0/0/0)

AGRI 2460 Resource Efficient Crop Management 3 credits
Integration of principles of crop and soil science, plant breeding, climatology, integrated pest management, and natural resource management in the development and evaluation of crop management practices. Efficient use of solar radiation, water, nutrients, heat, carbon dioxide and other resources in field crop management will be emphasized. Prerequisites: AGRI 1030 AND AGRI 1040 AND AGRI 1131 (45/0/0/0)

AGRI 2500 Data Collection Methodologies 3 credits
A study of advanced methods of collecting data and the technology required for collection. Methods will include the use of sensors, soil moisture probes, Unmanned Aerial Vehicles. (UAVs) as well as new and emerging technologies. (45/0/0/0)

AGRI 2510 Ag GIS Fundamentals 3 credits
A study of Ag GIS software and its applications in agriculture. Includes data management, working with map layers, and underlying attribute data. (45/0/0/0)

AGRI 2520 Ag GPS Applications 3 credits
A study of principles and components that make GPS work in relation to agriculture. Includes correction levels, hardware, guidance, and mapping. Prerequisites: AGRI 1005 Corequisites: AGRI 2525 (45/0/0/0)

AGRI 2525 Ag GPS Applications Lab 1 credit
An application of principles and components that make GPS work in relation to agriculture. Includes installation of hardware and guidance components, guidance calibrations, and mapping. Prerequisites: AGRI 1005 Corequisites: AGRI 2520 (0/45/0/0)

AGRI 2530 Precision Hardware 3 credits
A study of principles and components that make variable rate application in agriculture possible. Includes equipment for applying fertilizer, chemicals, and seed. Prerequisites: AGRI 1520 Corequisites: AGRI 2535 (45/0/0/0)

AGRI 2535 Precision Hardware Lab 1 credit
A study of principles and components that make variable rate application in agriculture possible. Includes equipment for applying fertilizer, chemicals, and seed. Prerequisites: AGRI 1520 Corequisites: AGRI 2530 (0/45/0/0)

AGRI 2810 Horsemanship and Horse Care 2 credits
Basic knowledge of horse skills including: nutrition, daily care, horsemanship and management. (30/0/0/0)

AGRI 2820 Equine Production Management 2 credits
Review and application of horse nutrition, horsemanship, and management. (30/0/0/0)

AGRI 2830 Advanced Animal Nutrition 2 credits
The study of nutrition of farm animals including selection of feedstuffs, feed preparation and processing, and ration formulation. Nutritional management of beef and dairy cattle, sheep, swine, horses, and poultry will also be covered. (30/0/0/0)

AGRI 2840 Cow Calf Production Management 2 credits
A study of beef cattle identification, management procedures for Beef AI, and forage management systems. Resource requirements for a cow herd are studied along with beef cow herd management calendars. Grazing management strategies are also dealt with. Basic consideration for cow nutrition are considered. (30/0/0/0)

AGRI 2850 Sheep Production Management 1 credit
A study of sheep identification, management procedures for lambing, shearing considerations, and financial and marketing considerations. Resource requirements for a sheep herd are studied along with sheep herd management calendars. Grazing management strategies are also dealt with. Sheep herd health including infectious diseases, parasites, and plant poisoning are also reviewed. Basic considerations for sheep nutrition are considered. (15/0/0/0)

AGRI 2860 Dairy Production Management 2 credits
This course is designed to provide applicable hands on instruction in fundamental dairy management tools to help the dairy technician attain the following: the ability to perform basic dairy-specific management procedures, the ability to identify the basic signs of a sick cow, and the skills to take the crucial first steps in correcting day-to-day operational problems. (30/0/0/0)

AGRI 2870 Agricultural Law 3 credits
The study of law that governs agriculture. To include estate planning, contracts, leasing, personal and liability for the producer and agribusiness. (45/0/0/0)

AGRI 2880 Principles of Agricultural Selling 2 credits
A study of fundamental concepts and methods involving a combination of technical solutions to complex problems using sales and marketing tools to achieve mutual benefit of both the customer and the agribusiness. (30/0/0/0)

AGRI 2885 Agriculture Finance 3 credits
An analysis of capital investments, interpretation of financial statements, capital structure considerations of agricultural firms, and farm real estate pricing. Prerequisites: AGRI 1410 AND AGRI 2015 (45/0/0/0)

AGRI 2890 Agriculture Capstone Experience 1 credit
The course will provide students with an opportunity to reflect on previous coursework, synthesize the content and merit of their program of study while strengthening their competency level to enter the workforce upon graduation. Students will improve critical thinking and communication sills through the development of professional presentations. Through a variety of examination and demonstration exercises, students will show competency in their subject areas. (15/0/0/0)

Drafting (ARCH)

ARCH 1100 Architectural Drafting I 2 credits
Basic techniques and fundamentals of architectural drafting with emphasis on line work, lettering, and basic technical drawing. Basic drafting skills are developed through projects devoted to acquiring knowledge of basic residential construction methods and their graphical representation. Emphasis is placed on industry standards. Corequisites: ARCH 1110 (30/0/0/0)

ARCH 1110 Architectural Drafting I Lab 2 credits
Lab experience for ARCH 1100. Corequisites: ARCH 1100 (0/90/0/0)

ARCH 1120 Materials of Construction 3 credits
As related to the architectural industry, the study of standards, codes, materials, and methods of construction. Raw materials and manufactured products are studied. (45/0/0/0)

ARCH 1130 Introduction to Construction Documents 3 credits
Basic plan reading skills are developed through use of both residential and commercial drawings and specifications. The student will become familiar with codes, bidding and negotiation concepts. (45/0/0/0)

ARCH 1150 Introduction to Construction Lab 2 credits
Lab for ARCH 1140. Through group projects, students learn basic construction practices and will build a small structure. Corequisites: ARCH 1140 (0/90/0/0)

ARCH 1160 Fundamentals of Drafting 3 credits
A course that will provide a study into the basic concepts of drafting. The student will use traditional as well as computer aided drafting to create various drawings. Industry graphic standards will be emphasized through the creation of sketches, boards and CAD drawings. (15/90/0/0)

ARCH 1170 Introduction to Construction 3 credits
Basic building construction theory, methods, and techniques, including site work, concrete, masonry, rough and finish carpentry, structural calculation. Wood and steel building components are discussed. Through group projects, students learn basic construction practices and will build a small structure. (15/90/0/0)

ARCH 1200 Architectural Drafting II 4 credits
A sequence course to Architectural Drafting I that will provide a study into the basic design theories applied in the creation of residential structures both single and multi-unit and light commercial structures. Application of theory will be through projects designed to acquaint the student with the accepted structural methods used and the transformation of this knowledge into working drawings using dimension lumber, steel joists with decking and other material. Prerequisites: ARCH 1100 Corequisites: ARCH 1210 (60/0/0/0)

ARCH 1210 Architectural Drafting II Lab 6 credits
Lab experience for ARCH 1200. Corequisites: ARCH 1200 (0/270/0/0)

ARCH 1220 Estimating for Construction 3 credits
Sequence course to ARCH 1120 that provides further study into materials, quantity determination, and costs. (45/0/0/0)

ARCH 1230 Introduction to Revit 4 credits
Basic skills in 3-D Computer-Assisted Drafting (CAD) using REVIT ARCHITECTURE. Projects consist of various residential drawings. Students will plot and print drawings using CAD equipment. Emphasis is placed on following industry and office standards. (30/90/0/0)

ARCH 1250 Computer Assisted Drafting I Lab 2 credits
The development of basic skills in CAD using the microcomputer and AutoCAD. Students will plot and

print drawings using CAD equipment and develop written documents with the word processor. Emphasis is placed on following industry and office standards. Corequisites: ARCH 1240 (0/90/0/0)

ARCH 1260 Architectural Concepts 5 credits
A study into the application of CAD in the creation of architectural drawings for residential and light commercial structures. Students will be introduced to the accepted structural methods used and the transformation of this knowledge into working drawings. Prerequisites: ARCH 1240 AND ARCH 1250 (30/135/0/0)

ARCH 1270 Computer Assisted Drafting I 4 credits
Basic skills in Computer-Assisted Drafting (CAD) by assigned problems and projects using keyboard and mouse entry, drawing and lettering with CAD, and printing finished work. Students work in model and paper space. Projects consist of various mechanical drawings. Students will plot and print drawings using CAD equipment. Emphasis is placed on following industry and office standards. (30/90/0/0)

ARCH 1280 Introduction to SolidWorks 4 credits
This course offers an introduction to 3D, parametric, solid modeling concepts and practices through the use of SolidWorks. Students will develop an understanding and apply industry standards for the use of SolidWorks as a tool to design, model, and create documentation for parts and assemblies. Students will also utilize tools in Sheet Metal Fabrication, Weldments, and Simulation. At the end of the course, students will take the Certified SolidWorks Associate exam and upon successful completion of the exam, earn the CSWA certification. Prerequisites: ARCH 1270 (30/90/0/0)

ARCH 1285 Geometric Dimensioning and Tolerancing 2 credits
This course offers an introduction to Geometric Dimensioning and Tolerancing. Students will develop an understanding of GD&T per the ASME Y14.5, standard. The course will cover the basics of why and how to apply Geometric Tolerances for manufacturing quality parts. Prerequisites: ARCH 1160 (30/0/0/0)

ARCH 1295 Engineering Materials and Processes 2 credits
This course applies the design process to solve hypothetical design problems using concurrent engineering models and product life-cycle management combined with the study of manufacturing processes and industrial materials. Students will develop critical thinking abilities to solve design and process problems typical in industry. Prerequisites: ENGR 1010 AND ARCH 1160 (30/0/0/0)

ARCH 1300 Cooperative Internship I 3 credits
Work study program for in-depth experience on the job. Cooperative internships are planned and supervised by the college and employers so that each contributes to the student's education and employability. Completion of the first year of coursework in the AAS Drafting degree program, a 2.0 minimum GPA, and Instructor/Program Advisor approval is required. (0/0/0/0)

ARCH 1400 Industrial Plant Layout and Manufacturing Process Flow 4 credits
A study of commercial and industrial layout and design, including the development of efficient flow of product and people through the facility, facility orientation, traffic patterns, employee parking, emergency access and other site related issues. This course will also review how building codes, environmental regulations, ADA, and other government regulations can affect the facility site plan layout. (30/90/0/0)

ARCH 2010 Structural CAD Drafting I 6 credits
This theory and lab course covers the introduction of detailing structural systems utilizing steel, concrete, and timber. The main emphasis is on how and why of engineering bidding documents and shop drawings for steel, concrete, and timber structural systems. The student technician will sketch and develop construction (shop) drawings from the text book. The student will produce all shop drawings using recent AutoCAD software. Drafting emphasis is placed on presentation, industry standards, labeling and plotting. Prerequisites: ARCH 1230 (45/135/0/0)

ARCH 2020 Computer Assisted Drafting III 4 credits
A continuation of CAD Drafting II with theory and lab designed to develop a proper understanding of how the program functions and knowing the program limitations. The class will help in developing skills and procedures to draw 3-D solid models. Prerequisites: ARCH 1230 (30/90/0/0)

ARCH 2100 Surveying and Site Planning 3 credits
A theory and lab course devoted to the study of plane surveying and the application to civil drafting and architectural site planning. The use of field surveying equipment and office aspects of plane surveying help to develop the skills needed to gather, record and use information from the site. Prerequisites: MATH 1020 (30/45/0/0)

ARCH 2110 Architectural CAD I 4 credits
A course that will provide a study into the basic design theories applied in the creation of residential structures both single and multi-unit and light commercial structures. Application of theory will be through projects designed to acquaint the student with the accepted structural methods used and the transformation of this knowledge into working drawings using dimension lumber, steel joists with decking and other material. Emphasis will be in 2-D working drawings using AutoCAD. Prerequisites: ARCH 1130 AND ARCH 1230 (30/90/0/0)

ARCH 2130 Mechanical Drafting I 4 credits
In this course, students will use parametric 3D modeling software to design and plan drawings for a variety of parts including: machined parts, plastic injection molded parts, castings, and turned parts. A focus will be applied on using appropriate geometry based on the manufacturing process, calculating appropriate hole sizes, applying GD&T, and applying industry standards to drawings. Students will virtually test part geometry using simulation and build

prototype parts to validate their designs. Prerequisites: ARCH 1280 AND ARCH 1285 AND ARCH 1295 (30/90/0/0)

ARCH 2150 Civil Drafting 2 credits
A lecture and lab course devoted to the study of map drafting designed to present fundamental graphical concepts and related material as they apply to the field of civil technology. Course includes a lab segment devoted to the application of civil drafting and designed to practice fundamental graphical concepts and related material as they apply to site planning. The activity problems will be completed on the computer using a recent AutoCAD Version for Windows and Word for Windows. Prerequisites: MATH 1020 (15/45/0/0)

ARCH 2180 Process Piping CAD-P and ID 4 credits
This course is a detailed study of process piping and the various utility piping systems used in commercial and industrial facilities. Topics include piping types, piping materials and connections used on different types of piping systems. The class reviews applicable codes related to the design and fabrication of piping systems. Also covered are the drafting standards that apply to the creation of schematic and detailed piping drawings needed for fabrication and installation. Prerequisites: ARCH 2300 (30/90/0/0)

ARCH 2200 Structural CAD Drafting II 6 credits
This course is a lecture and lab class that covers the detailing of structural systems utilizing steel and concrete. The main emphasis is on the how and why of engineering bidding documents and shop drawings for steel and concrete structural systems. The student technician will sketch and develop construction, shop, drawings from construction documents. The student will produce all shop drawings using recent AutoCAD software. Drafting emphasis is placed on presentation, industry standards, labeling and plotting. Prerequisites: ARCH 2010 (45/135/0/0)

ARCH 2210 Architectural CAD II 6 credits
This is a continuation course which uses the knowledge gained in previous classes. The student will work individually and in teams to create both 2-D and 3-D drawings using AutoCAD and Revit. Students will create both working and presentation drawings. Prerequisites: ARCH 2110 AND ARCH 1160 AND ARCH 1230 (45/135/0/0)

ARCH 2220 Computer Assisted Drafting IV 4 credits
This course incorporates theory and lab designed to develop a proper understanding of how the program functions and knowing the program limitations. The class will help in developing skills and procedures to draw 3-D Structural Steel models using Structural Steel CAD Software. Prerequisites: ARCH 1230 (30/90/0/0)

ARCH 2230 Mechanical Drafting II 6 credits
In this course, students will utilize all the concepts from Mechanical Drafting I and create 3D models and drawings for assemblies including: weldments, jig and fixture, consumer products, machinery, and medical devices. Students will be responsible for managing data, validating their work, and applying industry standards to their designs and drawings. Students will plan the manufacturing processes used, estimate the costs associated, and build prototypes of their projects. Prerequisites: ARCH 2130 (45/135/0/0)

ARCH 2240 Power Distribution and Electrical CAD Drafting 3 credits
This course is a detailed study of electrical power distribution, motor control centers, lighting, electrical panel room layout, and electrical safety regulations. Students will study and apply current drafting standards to produce electrical layouts, design schematics, ladder-logic schematics, and single line electrical diagrams. Electrical service drawings needed for commercial and industrial facilities will also be studied. Prerequisites: ARCH 2300 (15/90/0/0)

ARCH 2250 Construction Documents 2 credits
This course is a theory and lab study of construction contract documents regarding the content, preparation, application, and interpretation of the AIA forms. These documents are part of the administration of the construction process. The student will study interrelationships of the front ends, technical specifications, and drawings. Prerequisites: ARCH 1200 (30/0/0/0)

ARCH 2260 Introduction to Inventor 3 credits
This course offers an introduction to basic drafting concepts and practices through the use of AutoDesk Inventor. The students will develop an understanding of how industry uses this software to quickly create 3-D objects. The student will learn the process of creating basic shapes to build solid models, create assemblies of multiple objects, create animations, and do final working drawings. Permission of instructor required. (15/90/0/0)

ARCH 2300 Computer Assisted Drafting II 4 credits
A continuation of CAD Drafting I with theory and lab designed to develop a proper understanding of how the program functions and knowing the program limitations. The class will help in developing skills and procedures to draw a three dimensional model of a commercial building using AutoDesk Architecture. Prerequisites: ARCH 1240 AND ARCH 1250 (30/90/0/0)

ARCH 2310 Plumbing, Water Treatment, and Wastewater 4 credits
This course is a detailed study of plumbing, water treatment and water supply systems, wastewater piping and wastewater treatment systems common in commercial and industrial facilities. Students will be introduced to water supply systems ranging from private water treatment systems to municipal systems. Regulations regarding water supply and wastewater plumbing systems as detailed in the applicable codes will be reviewed. Drafting standards to produce water and wastewater piping drawings will be examined. Prerequisites: ARCH 2300 (30/90/0/0)

Art (ARTS)

ARTS 1050 Introduction to Art History and Criticism I **3 credits**
A survey of major works of art in all media from prehistory through the end of the 14th century. Artistic styles will be discussed in relation to contemporary history, society, and culture. Individual works of art will be explored as well as the role of art and architecture in a cultural context. (45/0/0/0)

ARTS 1060 Introduction to Art History and Criticism II **3 credits**
A survey of major works of art in all media from the 14th century to the present. Artistic styles will be discussed in relation to contemporary history, society, and culture. Individual works of art will be explored as well as the role of art and architecture in a cultural context. (45/0/0/0)

ARTS 1250 Drawing Logic I **3 credits**
Fundamental principles of drawings and perspective based on observation and imagination. (30/30/0/0)

ARTS 1300 Design I **3 credits**
Two-dimensional study of structural use of line, form and color, including color theory. (30/30/0/0)

ARTS 1350 Watercolor **3 credits**
Introduction to the technical processes of the watercolor medium. Students will explore a variety of issues including form and expression. (30/30/0/0)

ARTS 1400 Ceramics **3 credits**
Introduction to the varied processes and development of the skills needed to work in clay. The course covers different construction methods, hand building, and wheel throwing. Glazes and glazing, and steps in kiln firing and finishing will also be discussed. (30/30/0/0)

ARTS 1450 Graphic Arts I **3 credits**
A concentrated study of the design process using commercial computer applications to create graphic design images. The student will develop design principles and applications that provide a foundation for advanced graphic design course work. (30/30/0/0)

ARTS 1500 Drawing Logic II **3 credits**
Basic elements of drawing using a variety of media, including ink, watercolors, and charcoal. Prerequisites: ARTS 1250 OR GCAD 1250 (30/30/0/0)

ARTS 1600 Design II **3 credits**
A continued investigation of spatial organization based on the principles of design. Exploration of art history will accent assignments. Individual interpretations of style and intent will develop. Prerequisites: ARTS 1300 OR GCAD 1300 (30/30/0/0)

ARTS 1700 Digital Photography **3 credits**
This course is designed to introduce the student to digital photography as it relates to the graphic design industry. The student will use imaging hardware (cameras, scanners, and computers), and photo manipulation software; alter, combine, create and recreate custom images to graphic design industry specifications. Class projects require specific knowledge and skill-set techniques. Group class critiques will be held to develop the student's professional level photography skills, visual aesthetic, and industry vocabulary. (30/30/0/0)

ARTS 1750 Painting I **3 credits**
Introduction to oil painting with an emphasis on the study of forms existing in space. Issues of representational painting will be addressed. (30/30/0/0)

ARTS 2250 Elementary School Art **3 credits**
Study of art activities related to the teaching of elementary school children. Provides a basis for evaluation of art in elementary grades. Five hours of volunteer service learning required. Prerequisites: EDUC 1110 with min grade of C (45/0/0/0)

ARTS 2450 Graphics Arts II **3 credits**
Advanced application of graphic design principles and processes, as expressed through the development of advanced projects in advertising and product design which incorporate the use of industry-standard software. Prerequisites: ARTS 1450 OR GCAD 1450 (30/30/0/0)

ARTS 2750 Painting II **3 credits**
Formal and technical concerns will be investigated. Subject matter will vary, yet figure study will be emphasized. Prerequisites: ARTS 1750 (30/30/0/0)

Audio Recording Technology (AUDR)

AUDR 1600 Audio Principles and Technology I **2 credits**
Introduction to audio engineering topics and principles including psychoacoustics, hearing safety, microphones, signal processing, and digital audio technology. (30/0/0/0)

AUDR 1615 Audio and Recording Techniques I Lab **1 credit**
Introduction to hands-on techniques utilized in recording studios. Students will be involved in mock recording sessions while learning how to operate the various components found in recording studios such as microphones, mixing consoles, multi-track recorders and two-track recorders. (0/45/0/0)

AUDR 1635 Audio and Recording Techniques II Lab **3 credits**
Continuation of instruction for hands-on techniques utilized in recording studios. Students will be involved in mock recording sessions while learning how to operate the various components found in recording studios such as microphones, mixing consoles, digital audio workstations (DAW), multi-track recorders and two-track recorders. Prerequisites: AUDR 1615 (15/90/0/0)

AUDR 1800 Electronic Soldering **1 credit**
This course will instruct students to make electronic connections using a pencil-style soldering iron. These connections will mostly consist of audio connections such as XLR, TRS, TS and RCA. Students will also be building a direct input (D.I.) box. (0/45/0/0)

AUDR 2000 Advanced Audio Principles I 3 credits
Continuation of audio engineering topics and principles including electronics, signal processing, metering, and equipment wiring. Prerequisites: AUDR 1600 AND AUDR 1615 (45/0/0/0)

AUDR 2010 Audio Systems and Live Sound Lab 2 credits
This course is designed to give students the background and skills necessary to enter the field of live sound production. In this course, students will apply the skills and knowledge acquired from previous audio recording classes to the practice of live sound setup, live mixing and troubleshooting. Prerequisites: AUDR 1600 (may be taken concurrently) AND AUDR 1615 (may be taken concurrently) (22.5/22.5/0/0)

AUDR 2020 Advanced Audio Principles II 3 credits
Continuation of audio engineering topics and principles including recording studio procedures, copyright, physics of sound, and acoustics. Prerequisites: AUDR 2000 AND AUDR 1635 (45/0/0/0)

AUDR 2610 Audio and Recording Techniques III Lab 3 credits
Lab for AUDR 2020. Prerequisites: AUDR 2000 AND AUDR 1635 (0/135/0/0)

AUDR 2800 Audio and Recording Projects I 2 credits
Includes all aspects of a recording project. Depending on the nature of project preparation, it may include song and talent selection, recording and overdub sessions, mixdown sessions, and editing the master tape for mastering and pressing. Student must have sophomore standing in the audio and recording program. Prerequisites: CINE 1020 OR CINE 1030 AND AUDR 1600 AND AUDR 1615 (15/45/0/0)

AUDR 2820 Audio and Recording Projects II 2 credits
Continuation of AUDR 2800. Prerequisites: AUDR 2800 (15/45/0/0)

Auto Body Repair Technology (AUTB)

AUTB 1015 Glass, Trim, and Welding Theory 2.5 credits
Course includes study of glass installation, servicing, automotive trim, and a study of MIG welding procedures. Course also emphasizes the theory of expansion, contraction, and distortion of sheet metal along with problems and control. (37.5/0/0/0)

AUTB 1025 Glass, Trim, and Welding Lab 3.5 credits
This course is a study of automotive glass and trim. Emphasis is placed on removal and replacement of structural glass, non-structural glass, and auto trim. Upon completion, the student should be able to remove and replace automotive trim and glass. Students further experience in the effects of heat when welding and working with sheet metal including problems commonly encountered and methods of control. Corequisites: AUTB 1015 (0/157.5/0/0)

AUTB 1045 Beginning Paintless Dent Repair 2 credits
Beginning look at the art of paintless dent repair (PDR). The course covers specialized tools, techniques, and strategies, including metal characteristics and corrosion protection, commonly used by industry in dent repair without the need for refinishing or repainting. (30/0/0/0)

AUTB 1050 Panel Adjustment and Metalworking Theory 2.5 credits
Course includes study of basic metalworking procedures, terminology, and metallurgy. Also includes the effect of impact on automobile sheet metal, its classification, analysis, repair procedures, and proper adjustments of all body bolts on panels. (37.5/0/0/0)

AUTB 1055 Panel Adjustment and Metalworking Lab 3.5 credits
Provides a laboratory experience for panel replacement and adjustment techniques include replacement and alignment of bolt-on body panels, fasteners and trim. Metalworking practice opportunities are provided for minor collision damage repair including shaping, straightening, and proper adjustment techniques. Corequisites: AUTB 1050 (0/157.5/0/0)

AUTB 1210 Major Body Damage Repair Theory 5 credits
Includes instruction in car body design, the use of plastic body filler, body lead, and various auto body materials. Also includes fiberglass repair, plastic welding, MIG welding, portapowers and alignment equipment, power tools and equipment, and basic electricity and chassis electrical systems. Prerequisites: AUTB 1050 AND AUTB 1055 (75/0/0/0)

AUTB 1225 Major Damage and Metalworking Lab 7 credits
Provides a hands-on experience in major panel replacement and repair including working with weld-on panels and sections. Experience is further gained through the repair of basic automotive electrical systems. Corequisites: AUTB 1210 (0/315/0/0)

AUTB 1300 Cooperative Internship I 1 - 6 credits
Work-study program for in-depth instruction on the job. The college gives both related and vocational instruction before and-or during this period, including seminars directly related to the work experience. These experiences are planned and supervised by the college and the employers so that each contributes to the student's education and employability. First year completion of the Auto Body Repair Technology program or permission of instructor. (0/0/0/360)

AUTB 2015 Paint Care and Refinishing Theory 5 credits
Extensive study of detailing procedures, automotive refinishing, surface preparation, undercoats and automotive colors. Course also includes proper use of refinishing tools and equipment required in minor spot repair to major auto refinishing projects. Prerequisites: AUTB 1210 AND AUTB 1225 (75/0/0/0)

AUTB 2035 Paint Care and Refinishing Lab 7 credits
Practice in automotive refinishing of various automotive paint finishes with emphasis on proper use of materials, paint preparation, equipment selection and care, and refinishing techniques. Corequisites: AUTB 2015 (0/315/0/0)

AUTB 2045 Advanced Collision Repair Lab 3 credits
This course introduces advanced hands-on experiences involving high production practices used by industry collision repair technicians in real world shop situations. (0/135/0/0)

AUTB 2055 Auto Body Restoration Theory 0.5 credits
A look at autobody restoration as it applies to older and newer vehicles alike. Classroom theory include rust repair, panel straightening and replacement, glass and refinishing. (7.5/0/0/0)

AUTB 2065 Auto Body Restoration Lab .5 credits
A hands on look at auto body restoration. Practice of classroom theory including welding and straightening of panels as it relates to the students restoration project. (0/22.5/0/0)

AUTB 2215 Frame and Heavy Collision Theory 5 credits
A study of frame and unitized body terminology and measuring including the effects of impact, its classification, analysis and repair procedures. All phases of collision repair including methods and procedures of estimating collision damage, calculating estimates according to local standards, on live projects. As well as business practices involved in estimating and acquainting students with the shop manager's role in organizing the shop and its equipment along with customer relations, and employer-employee relations. Prerequisites: AUTB 2035 (75/0/0/0)

AUTB 2235 Frame and Heavy Collision Lab 3.5 credits
Provides experiential learning in the identification and calculation of vehicle damage including the use of mechanical and computer assisted measuring system to analyze and develop repair procedures on frame and unibody vehicles to enable the vehicle to be restored to industry standards. Corequisites: AUTB 2215 (0/157.5/0/0)

AUTB 2245 Applied Body Repair Lab 3.5 credits
Provides hands-on experience in complex and advanced repair and refinishing processes used in auto body repair. Allow students hands-on practice skills required to return a vehicle to service under typical auto body shop conditions. Corequisites: AUTB 2215 (0/157.5/0/0)

Automotive Technology (AUTT)

AUTT 1010 Suspension, Steering, and Brake Systems Theory 2.5 credits
Study of various suspension and steering systems along with the functions and purpose of related members of the system. Covers front-end and rear-end alignment angles and their effects on the system. Emphasizes hydraulics and components of modern automotive brake systems. (37.5/0/0/0)

AUTT 1015 Suspension Steering and Brakes Systems Lab 3.5 credits
Involves practical shop experiences, analyzing and correcting various suspension and steering problems, front-end and rear-end alignment and steering systems repair. Includes diagnosis of brake system problems, repair, and service of brake systems using the proper procedures, methods, tools, and equipment. Corequisites: AUTT 1010 (0/157.5/0/0)

AUTT 1110 Electrical Systems Theory 2.5 credits
Study of basic electricity, automotive circuitry, and wiring diagrams. Complete coverage of batteries, starting, charging, and accessory systems including application, testing, diagnosis, and repair. (37.5/0/0/0)

AUTT 1125 Electrical Systems Lab 3.5 credits
Practical application, analysis and repair of areas and systems covered in the electrical systems theory class, AUTT 1110. Involves use of proper methods, tools, specifications, and equipment. Corequisites: AUTT 1110 (0/157.5/0/0)

AUTT 1150 Automotive Welding and Repair Lab1 credit
This course will cover safe and proper use of oxyacetylene cutting and heating equipment, MIG welding, and aluminum spool gun use. (0/45/0/0)

AUTT 1210 Electrical Tune-Up and Fuel Systems Theory 2.5 credits
This course overs standard and transistorized ignition systems, including tanks, pumps, filters and fuel system designs; as well as the purpose, application, testing, diagnosis, service and repair of the ignition and fuel systems. Prerequisites: AUTT 1110 (37.5/0/0/0)

AUTT 1225 Electrical Tune Up and Fuel Systems Lab 3.5 credits
Lab experience corresponds to the material covered in AUTT 1210. The proper use of test equipment, procedures, and specification to diagnose, repair, adjust and overhaul components of the engine's ignition and fuel systems. Corequisites: AUTT 1210 (157.5/0/0/0)

AUTT 1300 Cooperative Internship I 1 - 6 credits
Work-study program for in-depth instruction on the job. The college gives both related and vocational instruction before and-or during this period, including seminars directly related to the work experience. These experiences are planned and supervised by the college and the employers so that each contributes to the student's education and employability. First year completion of the Automotive Technology program or permission of instructor. (0/0/0/360)

AUTT 1310 Automotive Electronics Theory 2.5 credits
The study of the complete electronics systems including microprocessors, sensors, and controllers of the computerized ignition and fuel injection systems. Covers the computers, sensors, and controllers, their circuits, application, operation and the testing and diagnosing of these systems. Prerequisites: AUTT 1210 (*may be taken concurrently*) (37.5/0/0/0)

AUTT 1325 Automotive Electronics Lab 3.5 credits
Lab experiences correspond to the material covered in AUTT 1310. Includes the proper use of tools, scanners, and other test equipment to diagnose the computers, sensors and controllers, along with the repair and adjustment of the ignition and fuel injection systems. Corequisites: AUTT 1310 (0/157.5/0/0)

AUTT 2010 Clutch, Manual Transmission and Transaxle, Drive Shaft and Differential Theory 2.5 credits
Explanation of automotive clutch purposes, design and function along with the working of various modern three, four, and five-speed standard transmissions. Includes discussion of drive shaft assemblies along with differential and front wheel drive types. (37.5/0/0/0)

AUTT 2015 Clutch, Manual Transmission and Transaxle, Drive Shaft and Differential Lab 3.5 credits
Lab work relative to all these systems. Includes use of correct diagnostic, reconditioning and overhaul procedures. Corequisites: AUTT 2010 (0/157.5/0/0)

AUTT 2110 Automatic Transmission and Transaxle Theory 2.5 credits
Fundamentals of hydraulics, planetary gears, holding devices, and their application to automatic transmissions. Includes introduction to the various components and their functions along with rebuilding the power flows of various present-day automatic transmissions. Including four-speed overdrives and front wheel drive systems. (37.5/0/0/0)

AUTT 2125 Automatic Transmission and Transaxle Lab 3.5 credits
Includes complete servicing and adjustment procedures, troubleshooting, diagnosis, repair and overhaul of various present-day automatic transmissions in a live shop. Provides maximum supervision and guidance for completion of this very complex and exacting work. Corequisites: AUTT 2010, AUTT 2110 (0/157.5/0/0)

AUTT 2210 Major Engine Theory 2.5 credits
Includes the complete theory and techniques of rebuilding, servicing, and diagnosing of the internal combustion engine and its related parts and systems. Prerequisites: AUTT 1310 (37.5/0/0/0)

AUTT 2215 Major Engine Lab 3.5 credits
Practical application of the techniques of rebuilding and servicing the automotive engine and its related systems using the proper procedures, tools and testing equipment. Corequisites: AUTT 2210 (0/157.5/0/0)

AUTT 2310 Automotive Environmental Systems Theory 2.5 credits
Covers principles of evaporation, heat transfer, temperature, and pressure. Study of various systems in regard to circuits, components and their operation in each application. Includes explanation of heating and air conditioning systems as presently used in today's automobiles, including integrated and isolated installation, and their corresponding control systems. Prerequisites: AUTT 1110 (37.5/0/0/0)

AUTT 2325 Automotive Environment Systems Lab 3.5 credits
Includes diagnosis, service, repair, installation, and overhaul of live environmental systems. Covers custom, factory, and automatic systems of the popular makes and models used in present-day automobiles. Corequisites: AUTT 2310 (0/157.5/0/0)

AUTT 2410 Automotive High Performance 2 credits
A study of the fundamentals of applying high performance techniques to the various systems of the automobile, including suspension, steering, brakes, engine, and drive train. (30/0/0/0)

AUTT 2415 Automotive Performance Drive Train 1 credit
A study of the fundamentals of applying high performance techniques to the various systems of the automobile, including suspension, steering, brakes, engine, and drive train. (15/0/0/0)

Biology (BIOS)

BIOS 1005 Science Laboratory Techniques 1 credit
This course will familiarize students with the scientific method through the conducting of experiments related to everyday living. Students will apply critical thinking skills in the implementation and analysis of basic laboratory experiments, and effectively record their results in lab reports. (0/30/0/0)

BIOS 1010 General Biology 4 credits
This course covers fundamental processes of cells and organisms, cell structure, genetics, evolution, classification, diversity, and interaction of organisms at the molecular, cellular, organismic, ecosystems, and biosphere level. It is designed as both a course for non-majors and as a foundation course for those planning additional work in biology. Includes a lab. (45/30/0/0)

BIOS 1050 General Botany 4 credits
Introduction to the biology of the entire plant kingdom with emphasis on seed producing plants. Course content includes plant anatomy, physiology, genetics, reproduction, evolution, and classification. Prerequisites: BIOS 1010 with min grade of a C OR AGRI 1131 with min grade of a C AND AGRI 1132 with min grade of C OR ENGL 1010 with the min grade of C (*may be taken concurrently*) OR HORT 1010 with min grade of a C OR Appropriate Placement Score(s) (45/30/0/0)

BIOS 1090 General Zoology 4 credits
Introductory survey of the morphology, anatomy, physiology, evolution, and distribution of the major animal groups. Prerequisites: BIOS 1010 with a min grade of C OR ENGL 1010 with min grade of C (*may be taken concurrently*) OR Appropriate Placement Score(s) (45/30/0/0)

BIOS 2020 Introduction to Environmental Issues 4 credits
This course examines the interrelationships between humans and the environment and how humans apply different ethics toward their relationship with the natural world. Explores the functionality of the different ecosystems of the world and how human interactions have changed those ecosystems along with its biodiversity. Introduces the basics of soil quality, water quality, and air quality and how agriculture and industry has affected the functionality of those natural resources. Using

experiences in the course, students will summarize how human activity has caused global climate change and how that impacts the biosphere. (45/30/0/0)

BIOS 2170 Principles of Heredity and Genetics 4 credits
Introduction to the fundamental principles of genetics including Mendelian and non-Mendelian genetics, molecular genetics, gene frequency and distribution, probabilities and statistics and applied human genetics. Prerequisites: BIOS 1010 (45/30/0/0)

BIOS 2250 Introduction to Human Anatomy and Physiology I 4 credits
A course focusing on the form and function of the human body, including homeostatic mechanisms, organization, biochemistry, cells, tissues, integumentary system, skeletal system, muscular system, nervous system, and an introduction to the special senses. Includes Lab. Prerequisites: BIOS 1010 with min grade of C OR ENGL 1010 with the min grade of C (*may be taken concurrently*) OR Appropriate Placement Score(s) (45/30/0/0)

BIOS 2260 Introduction to Human Anatomy and Physiology II 4 credits
This course focuses on form, function and homeostasis of the following human body systems: overview of the nervous system and special senses, endocrine system, blood and cardiovascular system, lymphatic system and immunity, respiratory system, digestive system, metabolic system, urinary system, and reproductive system, as well as balance of fluids, electrolytes and pH. Includes Lab. Prerequisites: BIOS 2250 OR BIOS 2110 (45/30/0/0)

BIOS 2460 Microbiology 4 credits
Study of microbiology with emphasis on structure of microbial cells, their nutrition and growth, control of growth including the immune system, genetics and genetic engineering, metabolic and biosynthetic activity, and host-parasite interactions. Accompanying laboratory study emphasizes microbiological techniques including microbial control and manipulation. Prerequisites: Appropriate Placement Score(s) OR BIOS 1050 with min grade of C OR BIOS 1090 with a min grade of C OR BIOS 2250 with min grade of C OR BIOS 1010 with min grade of C OR ENGL 1010 with min grade of C (*may be taken concurrently*) (45/30/0/0)

Broadcasting (BRDC)

BRDC 1010 Introduction to Mass Media 3 credits
An introduction to the history and technology of mass media. The history of print, radio, television, recorded music and the internet will be introduced along with a study of advertising, ethics, social impact, new technologies, government regulation and the future of media. Students are also introduced to audio and video editing tools in an effort to create projects such as podcasts and music videos. (45/0/0/0)

BRDC 1110 Radio Production and Performance 3 credits
Theory and application of radio production and announcing techniques beginning with control board operation, audio players and recorders, routing signals, audio signal flow, radio automation, editing software and microphones. Students finish the semester by learning and developing announcing skills, including reading, interpreting copy, pronunciation, voice development, announcing music, reading commercials, and interviewing. Jobs in radio are also discussed. (30/45/0/0)

BRDC 1120 Broadcast News 3 credits
Principles of news writing for radio and TV, plus techniques of news gathering are studied and practiced. Some assignments will be based on actual wire service copy and news stories from local stations. During the semester, students will be scheduled to write news stories for the college's cable channel. (45/0/0/0)

BRDC 1210 Television Production and Performance 3 credits
Knowledge and skill development in studio camera operation, television audio, lighting for video, set design, video editing techniques, electronic field production and principles of television production are featured. Also included are remote productions, television studio, and control room use. Jobs in TV are discussed. Prerequisites: CINE 1700 (*may be taken concurrently*) (30/15/0/0)

BRDC 1235 Broadcast Scripts 1 credit
Writing principles for radio and television are introduced. Additional topics covered are: formats of scripts, writing public service announcements and promotional announcements, working with advertisers to write commercials. (15/0/0/0)

BRDC 1240 Voice and Diction 3 credits
Learn how the voice works and how articulators are used in speech. Explore the voice-over industry and how to act with just your voice. Create character voices and tell stories so your audience understands them better and can imagine the scene and characters clearly. (45/0/0/0)

BRDC 1250 Applied Radio Production I 0.5 - 3 credits
Practical experience as a staff member of KHWK, the college cable access channel. Duties will include disc jockey shifts, writing and announcing news and producing public service announcements. Night work will be included. Prerequisites: BRDC 1110 (0/135/0/0)

BRDC 1600 Drone Operations 1 credit
This course is designed to introduce students to the rules of small UAS (drone) operations as required by the Federal Aviation Administration. It is also intended to help students learn and understand the interworking of drones and proper flight planning and protocol for various drone missions. Another goal of this course is to prepare the student for the successful completion of the FAA Part 107 UAS Remote Pilot certification. This course is designed for those who want to become commercially licensed drone pilots, but also includes useful rules and information for the drone hobbyist. Corequisites: BRDC 1610 (15/0/0/0)

BRDC 1610 Drone Operations Lab 1 credit
Students will learn how to safely operate and pilot small UAS (drones) owned and insured by Northeast Community College in controlled environments. This course will also

cover proper mission planning. In addition, students will learn how to take aerial photos and videos and use them to relay data. They will also learn to think critically and responsibly about drone use. This course should be taken together with the Drone Operations classroom function or in a subsequent semester. It's vital that rules are understood before flying a drone. This course will be instructed by an FAA certified commercial drone pilot. Corequisites: BRDC 1600 (0/45/0/0)

BRDC 2160 Broadcast Operations 3 credits
Radio and TV station functions other than production and performance are studied, including programming, log preparation, music cataloging, station promotion, directing the news department, maintaining station equipment, and assigning production work. Students are assigned to fill operations functions for KHWK, the college cable channel. Prerequisites: BRDC 1110 AND BRDC 1120 AND BRDC 1210 (45/0/0/0)

BRDC 2170 Applied TV Production I 0.5 - 3 credits
Practical experience in producing and performing television programs on Hawk TV, including regular programs about the college, remote coverage of college sports events, special college events, and special projects. Prerequisites: BRDC 1210 (0/135/0/0)

BRDC 2180 Digital Storytelling I 1 credit
After getting an overview and understanding of storytelling, students will use a mix of writing, video and audio production skills and techniques to produce and present feature-length television stories. Unlike regular news stories, which are typically under two minutes and give a broad overview, stories created in this course will be 5 minutes long and be more specific. Prerequisites: CINE 1700 (0/45/0/0)

BRDC 2260 Broadcast Sales 3 credits
Marketing principles, basic sales skills, advertising, fundamentals, attitude and motivation, and opportunities in broadcast and cable sales are included. The course introduces broadcast and cable sales information and skills, then checks them with a final project where students make a sales presentation. Students will also continue management roles begun in BRDC 2160. Prerequisites: BRDC 2160 (45/0/0/0)

BRDC 2265 Media Sales and Copywriting 3 credits
Marketing principles, basic sales skills, advertising fundamentals, consumer attitudes and motivation, and opportunities in broadcast and online media are all included. This course will introduce media sales strategies and approaches, then check the student with a final project where they will make a sales presentation to a local business. In addition, students will be instructed how to write commercial copy for use across all media platforms based on client needs. Commercials will be written to accompany the final project presentation. (45/0/0/0)

BRDC 2270 Applied TV Production II 0.5 - 3 credits
Additional practical experience in production of television programs for Hawk TV. If preparatory courses are complete, students may take role of producer or director for some productions. Prerequisites: BRDC 1210 (0/135/0/0)

Business (BSAD)

BSAD 1000 Human Relations and Ethics 3 credits
Study of modern methods and procedures used in effective human relations and ethics including information on the following: definition and history of human relations, ethics, diversity, self-esteem, motivation, communication and personality styles, conflict management and resolution, and team building and rapport as well as self expression and effective listening skills. (45/0/0/0)

BSAD 1005 Investing in Strengths 1 credit
This course promotes greater self-awareness and understanding of others through strengths discovery and development. Students will develop a growth mindset and learn how to leverage strengths to achieve college, career, and life aspirations. (15/0/0/0)

BSAD 1040 Personal Finance 3 credits
This course will cover the basic principles needed for effective personal financial management, including the practical applications of money management, budgeting, taxes, credit, insurance, housing, investments, and retirement planning. (45/0/0/0)

BSAD 1050 Introduction to Business 3 credits
An introductory study and overview of the role of business in society as well as a discussion of the various disciplines of business including an overview of business organization, management, marketing, human resource management, and finance. Also a study and discussion of various strategies for success of public and private firms as well as a small business. Business vocabulary is introduced and used to understand, analyze, and interpret business news and information. (45/0/0/0)

BSAD 1070 Business Math 3 credits
This course will develop and apply mathematical skills to solve problems related to business occupations. Topics include application, basic mathematics related to cash and trade discounts, markup and markdowns, interest, payroll, annuities, stocks and bonds, installment buying, mortgages, taxes, insurance, banking, payroll, and business statistics. (45/0/0/0)

BSAD 1300 Cooperative Internship 3 credits
Work-study program for in-depth experience on the job. Cooperative internships are planned and supervised by the college and employers so that each contributes to the student's education and employability. Prerequisite: completion of the first year coursework in the applicable AAS degree with a 2.0 minimum GPA and/or permission of instructor. (0/0/0/180)

BSAD 1310 Cooperative Internship 3 credits
Work-study program for in-depth experience on the job. Cooperative internships are planned and supervised by the college and employers so that each contributes to the student's education and employability. Prerequisite: Completion of the first year coursework in the applicable

AAS degree with a 2.0 minimum GPA and/or permission of the instructor. (0/0/0/180)

BSAD 1320 Cooperative Internship 3 credits
Work-study program for in-depth experience on the job. Cooperative internships are planned and supervised by the college and employers so that each contributes to the student's education and employability. Prerequisite: completion of the first year coursework in the applicable AAS degree with a 2.0 minimum GPA and/or permission of instructor. (0/0/0/180)

BSAD 1600 Real Estate Principles and Practices 3 credits
Introduction to real estate with reference to estates in land, acquisition of title, legal instruments used in real estate transactions, real estate markets, ownership, interests, contracts, closing transfers, financing brokerage, management, appraising, developing, and government influences in real estate. (45/0/0/0)

BSAD 1620 Real Estate Finance 3 credits
Study of the methods of financing various types of real estate, lending institutions involved in making mortgage loans, and the institutions that are the permanent investors in real estate loans. Examines sources of funds and the factors affecting the supply of money available for mortgage loans. (45/0/0/0)

BSAD 2010 Personal Insurance 3 credits
Students in the personal insurance course will explore property and casualty insurance in three segments: automobile insurance, homeowner's and residential insurance, and personal-human loss prevention. Students will collaborate on group projects for a deeper understanding of personal insurance principles. Resources will be provided for additional independent study at the interest of the student. Prerequisites: BSAD 2240 (*may be taken concurrently*) (45/0/0/0)

BSAD 2020 Commercial Insurance 3 credits
This course will explore the fundamentals of commercial insurance and its application. Students will gain knowledge of commercial coverage forms and endorsements. Topics covered are commercial property, business income, commercial crime, equipment breakdown, commercial general liability, commercial auto, business owners, farm, workers' compensation and employers' liability. Prerequisites: BSAD 2240 (*may be taken concurrently*) (45/0/0/0)

BSAD 2050 Business Communications 3 credits
Development of both oral and written communication skills. Students will be able to organize and present effective presentations gaining audience rapport and sending appropriate nonverbal messages as well as formulate effective letters, memos, and reports for business and industry. Prerequisites: ENGL 0900 with min grade of C OR ENGL 1000 with min grade of C OR ESLX 0885 with min grade of C OR ENGL 0905 with min grade of C OR Appropriate Placement Score(s) (45/0/0/0)

BSAD 2130 Salesmanship 3 credits
Deals with sales as a career and the application of professional selling techniques. Topics include the duties and responsibilities of a professional salesperson, the development, planning and implementation of a sales presentation, role-playing activities, and the various techniques and methods involved in making a sale. Prerequisites: BSAD 2050 (45/0/0/0)

BSAD 2140 Principles of Banking 3 credits
This course is designed to provide entry-level bankers with information they need to effectively serve their customers, thereby having an impact on banking profitability. This information includes how banks affect the economy, why they are in business, what services they provide, and how they provide them. Students also get a basic understanding of the interrelationships of various departments within a bank. (45/0/0/0)

BSAD 2160 Customer Service and Business Etiquette 3 credits
Emphasis on the importance of customer service in an overall business setting. Topics include recognizing the importance of customer service, identification of customer needs, handling of routine and difficult situations, and emphasis of long lasting customer relationships. Students will also develop knowledge and practical experience to exercise good manners, project a professional image, and confidently respond to most business situations. (45/0/0/0)

BSAD 2170 Applied Statistics 3 credits
The course is an introduction to basic probability and statistical methods that are used in a wide variety of disciplines. Topics include descriptive statistics, probability distributions, sampling distributions, methods of statistical inference and bivariate relationships. Prerequisites: Appropriate Placement Score(s) OR MATH 1140 with min grade of C OR MATH 1150 with min grade of C OR MATH 1075 with min grade of C OR MATH 1100 with min grade of C (45/0/0/0)

BSAD 2190 Principles of Lending 4 credits
Principles of lending will cover three categories of lending: consumer, real estate and agricultural. This course is designed for the student to gain an understanding of these regulations governing mortgage lending, their requirements and penalties, the technical requirements of lending, and industry history. Students will also explore how lending decisions will impact the consumer, bank, industry, and nation's economy. (60/0/0/0)

BSAD 2240 Principles of Insurance 3 credits
This course will examine the field of insurance, risk and risk management, and the basic provisions of various types of insurance-accident, casualty, health and life. (45/0/0/0)

BSAD 2250 International Business 3 credits
Designed to assist students in development of appreciation, knowledge, skills, and abilities needed to live and work in a global marketplace. (45/0/0/0)

BSAD 2320 Agency Operations 3 credits
The course focuses on the producer's office environment and the ability to use sales management techniques as a

means to identify and sell to selected markets. Students learn to apply management principles to the business of running an agency. (45/0/0/0)

BSAD 2340 Introduction to Underwriting 3 credits
This course is designed to provide students with a broadened overview of underwriting. Students will explore underwriting as a decision making tool and analyze personal lines underwriting for auto and homeowners, commercial lines underwriting for property and general liability, and the measurement of underwriting results. Prerequisites: BSAD 2260 (*may be taken concurrently*) (45/0/0/0)

BSAD 2350 Security and Loss Prevention 3 credits
Provides insight into the complex problems of loss prevention in today's society, including security staffing needs, fire protection and control, duties and responsibilities of security personnel, internal controls, emergency and disaster planning, and internal theft. (45/0/0/0)

BSAD 2520 Principles of Marketing 3 credits
A study of the development of an effective marketing program including consumer behavior, product, pricing, distribution, and promotional strategies. (45/0/0/0)

BSAD 2530 Advanced Marketing 3 credits
Application of marketing principles and knowledge using case study and project based learning to simulate decisions made by marketing managers utilizing marketing research and analytic based statistics. Course will thoroughly explore strategies to deal with opportunities and challenges of evolving technology in marketing, including social media and mobile marketing. An Integrated Marketing Campaign will be created and evaluated. Prerequisites: BSAD 2520 (45/0/0/0)

BSAD 2540 Principles of Management 3 credits
Introduction to management theory and practice for supervisors of employees or managers of organizations. Topics include the functions of planning, organizing, directing, controlling, and supervising along with new and rapidly developing areas of management. (45/0/0/0)

BSAD 2550 Advanced Management 3 credits
This course provides an application-based study of management theory and fundamentals related to first-line, supervisory positions and helps students to develop a framework for decision making, motivation, leadership, human resources management, and conflict resolution. Prerequisites: BSAD 2540 (45/0/0/0)

BSAD 2600 Real Estate Law 3 credits
Study of the principles of law governing the interests in real estate including acquisition, encumbrance, transfer, rights of obligations of parties, and state and federal regulation thereof. (45/0/0/0)

BSAD 2620 Fundamentals of Real Estate Appraisal 3 credits
Provides instruction in real estate appraisal. Examines the nature of different values, the function and purpose of an appraisal, the methods of establishing value with emphasis on residential market value. (45/0/0/0)

BSAD 2700 Business Law I 3 credits
Practical course regardless of the subsequent occupation of the student, covering contracts, negotiable instruments, sales and mortgages of personal property. (45/0/0/0)

BSAD 2710 Business Law II 3 credits
Study of negotiable instruments, business organizations including partnerships and corporations, and agencies. Prerequisites: BSAD 2700 (*may be taken concurrently*) (45/0/0/0)

BSAD 2760 Applied Business Projects 3 credits
Designed as a capstone experience, this project based course requires students to apply knowledge from the marketing, accounting, management, business communications and sales disciplines. Students will create projects designed to implement their knowledge into real world applications using problem solving and creative thinking skills. Prerequisites: BSAD 2520 AND BSAD 2540 AND BSAD 2050 AND BSAD 2160 AND (ACCT 1100 OR ACCT 1200) AND (OFFT 1500 OR INFO 1100) (45/0/0/0)

Career Planning (CAPL)

CAPL 1150 Career Planning 1 credit
Provides assistance in making career decisions through interest and aptitude testing. Examines occupations via research and explorations. Includes identification of goals and steps necessary to achieve goals. (15/0/0/0)

CAPL 1290 Introduction to Job Search and Employment 1 credit
Basic course in analysis of qualifications and operation of cooperative internship programs, locating and researching a prospective business or company, developing a resume and cover letter, and preparing for an employment interview. (15/0/0/0)

Chemistry (CHEM)

CHEM 1020 Survey of Chemistry 3 credits
Fundamental principles of chemistry including atomic structure, basic inorganic and organic nomenclature and selected chemical reactions as well as techniques in handling laboratory equipment. (45/0/0/0)

CHEM 1090 General Chemistry I 4 credits
This is the first course of comprehensive chemistry sequence. Topics include nomenclature, atomic structure, chemical reactions, essentials of bonding, periodic properties, Valence Shell Electron Pair Repulsion Theory (VSEPR) theory, modern bonding theories, stoichmetry, thermochemistry, and the chemistry of solids, liquids, and gases. (45/30/0/0)

CHEM 1100 General Chemistry II 4 credits
This is the second course of a comprehensive chemistry sequence. Topics include solutions, kinetics, equilibrium, acid-base reactions, solubility, thermodynamics, and electrochemistry. (45/30/0/0)

CHEM 1140 General Chemistry I for Majors 5 credits
Study of general principles including atomic structure, nomenclature, reactions, and compounds. (60/30/0/0)

CHEM 1160 General Chemistry II for Majors 5 credits
The study of interactions of substances and the effects of temperature, pressure and concentrations as it applies to solubility, reaction rate, pH, kinematics, thermodynamics, and electrochemistry. It is also an introduction to nuclear chemistry and organic chemistry. Prerequisites: CHEM 1140 (60/30/0/0)

CHEM 2030 Introductory Organic Chemistry 4 credits
Introduction to properties, syntheses, uses, and nomenclatures of the aliphatic and aromatic compounds. Prerequisites: CHEM 1160 (45/30/0/0)

CHEM 2510 Organic Chemistry 4 credits
Topics in this course include the structure and properties of carbon compounds; including acid-based chemistry as it relates to organic chemistry, the classification of organic molecules by functional groups, structure, nomenclature, properties, stereochemistry, radicals, substitution and elimination reactions. Topics may also include: spectroscopy. Students registering for this course must also register for the laboratory component of the course. Prerequisites: CHEM 1090 with min grade of C (45/30/0/0)

CHEM 2520 Organic Chemistry II 4 credits
A continuation of CHEM 2510. Topics in this course include the structure and properties of carbon compounds; including nomenclature, stereochemistry and spectroscopy of alcohols, phenols, ethers, epoxides, aromatic compounds, aldehydes, ketones, carboxylic acids and their derivatives, and amines. Students registering for this course must also register for the laboratory component of the course. Prerequisites: CHEM 2510 with min grade of C (45/30/0/0)

Cinema (CINE)

CINE 1000 Camera and Lighting I 2 credits
An introductory course in the basics of camera functions, lighting and film style production principals for film and cinema production. Corequisites: CINE 1010 (30/0/0/0)

CINE 1010 Camera and Lighting I Lab 1 credit
An application of the introductory practice of basic camera functions, lighting and film style production techniques for film and cinema production. Corequisites: CINE 1000 (0/45/0/0)

CINE 1020 Camera and Lighting II 2 credits
An intermediate course in camera and lens selection configuration and lighting for dramatic impact and corporate/commercial production. Analysis and study of select existing films and shot sequences will be used to further define production styles and approaches in film and video. Sound techniques relevant to these styles and music videos will be introduced. Prerequisites: CINE 1000 AND CINE 1010 Corequisites: CINE 1030 (30/0/0/0)

CINE 1030 Camera and Lighting II Lab 1 credit
An application of film and videography concepts that focus on camera and lens selection, configuration and lighting for dramatic impact and corporate/commercial production. Sound capture techniques relevant to these styles and music videos will be practiced. Prerequisites: CINE 1000 AND CINE 1010 Corequisites: CINE 1020 (0/45/0/0)

CINE 1100 Script Writing and Analysis 3 credits
Script writing and analysis is designed to present students with a practical approach to scriptwriting techniques and formats. Writers will explore the various elements, structure and styles used in crafting all types of television script genres and motion picture screenplays. They will experience this process while writing news, commercials, corporate video scripts, long form features, documentaries, short films and the first act of a feature-length script. Students will work in small groups to discuss script assignments and proposals. Writers' work will be shared and discussed regularly in class, and short film scripts will be implemented by the Digital Cinema Film & Video Lab. (45/0/0/0)

CINE 1200 Media Graphics 3 credits
This course is designed to help students develop proficiency in and knowledge of digital graphics used in broadcasting, film and web-based media production. Students will learn raster and vector based graphic design programs including Photoshop, Illustrator, and InDesign, and gain hands-on experience in the integration of graphic design into video and motion graphics projects. Students will design graphics packages for broadcast, movie titles, full screen graphics, lower-third templates and understand image compression and manipulation for television, film and the web. (45/0/0/0)

CINE 1700 Post Production I 3 credits
Introduction to concepts and techniques of video and audio editing and post-production using a non-linear, computer-based production system. (45/0/0/0)

CINE 1720 Post Production II 3 credits
Continuation of concepts and techniques of video and audio editing and production using a non-linear, computer-based production system. The student will demonstrate comprehension of basic editing techniques to enhance visual storytelling. The student will learn to critically analyze shot construction, motion and composition in storytelling. The student will be introduced to motion graphics, effects and color correction techniques that will support their creativity and enhance their digital skill-set. (45/0/0/0)

CINE 2000 Camera and Lighting III 2 credits
An advanced class that explores set design, continuity, set etiquette and set dressing for drama, corporate and feature-product style production. Use of specialized lenses and lighting for commercial and music video as well as 3-D moving camera techniques discussed. Analysis and study of select existing films and shot sequences will be used to further define production styles and approaches relevant

to student film and video techniques. Prerequisites: CINE 1020 AND CINE 1030 Corequisites: CINE 2010 (30/0/0/0)

CINE 2010 Camera and Lighting III Lab 1 credit
An applied lab class that practices techniques and applications of set design, continuity, set etiquette and set dressing for drama, corporate and feature-product style production. Use of specialized lenses and lighting for commercial and music video as well as 3-D moving camera techniques practiced. Prerequisites: CINE 1020 AND CINE 1030 Corequisites: CINE 2000 (0/45/0/0)

CINE 2700 Post Production III 3 credits
Advanced video and audio editing using industry standard television and film non-linear, computer-based production software. This class builds upon enhanced digital storytelling techniques and concepts. The student will video edit and audio sweeten short films, music videos, documentary projects, long form features and student directed movies created in the digital cinema program. Prerequisites: CINE 1720 (45/0/0/0)

CINE 2720 Post Production IV 3 credits
Professional level video and audio editing and 2D/3D motion graphics animation. The student will function as the online video editor, colorist and motion graphics specialist for Digital Cinema Film & Video lab short films, music videos, documentary projects, long form features and student directed movies. Prerequisites: CINE 2700 (45/0/0/0)

CINE 2982 Digital Cinema and Media Capstone 4 credits
Students will produce professional-level projects appropriate to their individual areas of interest. Projects can include, but are not limited to, short films, documentaries, long form features, corporate videos, PSAs and commercials. Students will end the semester with an industry ready resume and demo reel. Sophomore standing. Course is to be taken during the student's final semester, prior to the completion of their AAS degree. Prerequisites: CINE 2000 (15/135/0/0)

Building Construction (CNST)

CNST 1000 Building Construction Fundamentals 1.5 credits
This course provides an introductory overview of the various materials, components, methods, and sequences used in residential construction. Students further gain exposure to the properties of wood and wood-based products used in structural systems. Students are also introduced to the various tools used in construction and their proper usage and care. (22.5/0/0/0)

CNST 1005 Building Construction Fundamentals Lab 2.5 credits
This course is the practical application of basic building materials, components, methods, and sequences in residential construction. It is designed to provide students with basic, hands-on experience in entry level construction and related trades. Emphasis is placed on safety and the proper use of both hand and power tools. This course provides students the experience of participating in the building of a construction project. (0/112.5/0/0)

CNST 1030 Construction Drafting 2 credits
Theory of freehand sketching and lettering using proper drawing instruments and techniques. Includes identification of basic house design, proper room design and identification of different types of architecture. (30/0/0/0)

CNST 1035 Construction Safety 1 credit
This course covers OSHA policies, procedures, and standards for the construction industry, as well as safety and health principles. Sections of the OSHA construction standards are covered with special emphasis placed on more hazardous areas, while using OSHA standards as a guide. (15/0/0/0)

CNST 1040 Construction Drafting Lab 1 credit
Course includes sketching and dimensioning different types of houses and various other projects using the proper dimensioning and lettering techniques. Corequisites: CNST 1030 (0/45/0/0)

CNST 1050 Residential Blueprint Reading 3 credits
The study and practice of blueprint reading, identifying lines and symbols, using construction math and identifying proper dimensioning procedures. (45/0/0/0)

CNST 1060 Basic Woodworking Theory 0.5 credits
Theory of small wood project design and construction. Includes materials and cost estimating along with safe working practices using hand and power tools. (7.5/0/0/0)

CNST 1065 Principles of Light-Frame Structure Technology 1.5 credits
This course provides students with an understanding of the construction industry, processes, and building materials used in residential and light-frame construction. Students are introduced to the entire framing process: from regulation and design through site preparation, and ultimate delivery of a completed structure. Students gain exposure to laying out foundations, floors, walls, ceiling, and roofing systems. (22.5/0/0/0)

CNST 1070 Basic Woodworking Lab 0.5 credits
Practical application of construction techniques used in the construction of small wood projects. Emphasizes safety in use of hand and power tools. Corequisites: CNST 1060 (0/22.5/0/0)

CNST 1075 Principles Light-Frame Structure Technology Lab 2.5 credits
This course is practical application of residential and light-frame construction. It is designed to provide students with basic, hands-on experiences in framing techniques used in flooring, walls, and ceiling components. Students will apply these techniques as they lay out and begin building the structural components of a student design home. Corequisites: CNST 1065 (0/112.5/0/0)

CNST 1210 Building Construction II 3 credits
Study of the procedures used in closing in a house and in preparing the inside of a house for finish carpentry.

Develop skills in proper floor, wall, ceiling and roof framing procedures using appropriate hand and power tools in a safe manner. Prerequisites: CNST 1000 AND CNST 1065 (45/0/0/0)

CNST 1220 Building Construction II Lab 5 credits
Hands on experience in closing in a house in preparation for finish carpentry. Safely operating hand and power tools in framing floors, exterior and interior walls, ceilings and roof systems in a teamwork environment. Prerequisites: CNST 1005 AND CNST 1075 Corequisites: CNST 1210 (0/225/0/0)

CNST 1230 Construction and Architectural Drafting 2 credits
The theory of plot plans, footing details, foundation plans, floor plans, interior and exterior elevations, window and door schedules, section drawings, and construction details. Prerequisites: CNST 1030 (30/0/0/0)

CNST 1240 Construction and Architectural Drafting Lab 1 credit
Design, draw, dimension and letter a house floor plan incorporating proper room design and completing a set of house plans. Corequisites: CNST 1230 (0/45/0/0)

CNST 1250 Materials Estimating 2 credits
Study of types, amounts, and costs of building products used in modern construction. Corequisites: CNST 1210 (30/0/0/0)

CNST 1300 Cooperative Internship I 1 - 6 credits
Work-study program for in-depth instruction on the job. The college gives both related and vocational instruction before and-or during this period, including seminars directly related to the work experience. These experiences are planned and supervised by the college and the employers so that each contributes to the student's education and employability. First year completion of the Building Construction program or permission of instructor. (0/0/0/360)

CNST 2010 Concrete Construction 2 credits
Principles involved in concrete forms, concrete materials, and concrete finishing. Stresses concrete wall forms prefabricated and job site built, and flatwork such as driveways, sidewalks, and floor forming and placement. Prerequisites: CNST 1220 (30/0/0/0)

CNST 2020 Concrete Construction Lab 1 credit
Provides a working knowledge of concrete materials, wall forms, flatwork, and finishing. Emphasis on placement of forms, concrete, and finishing through assigned lab projects. Corequisites: CNST 2010 (0/45/0/0)

CNST 2030 Cabinet and Finish Construction I 3 credits
Theory and practical application of cabinet construction and millwork covering the design, construction, and placement of cabinets with proper methods of joinery, construction, and finishes. Prerequisites: CNST 1220 (45/0/0/0)

CNST 2040 Cabinet and Finish Construction I Lab 4 credits
Designed to introduce the construction practices of cabinetry and all related millwork by the construction and placement of cabinets, millwork, and finish materials in related projects. Corequisites: CNST 2030 (0/180/0/0)

CNST 2050 Blueprint Reading and Estimating I 2 credits
Designed for theory of blueprint reading, estimating, and drawing for residential and some light commercial building. Emphasis on specifications, schedules, elevations, floor plans and site plans. (30/0/0/0)

CNST 2060 Blueprint Reading and Estimating I Lab 1 credit
Course provides an opportunity to properly use drafting equipment and read existing construction drawings and specifications to accurately implement construction. Corequisites: CNST 2050 (0/45/0/0)

CNST 2230 Millwork and Finish Construction II 4 credits
Advanced theory of finish materials used in construction. Covers the selection and application of paints and other finishes and other finishing materials for decoration and redecoration of homes. Prerequisites: CNST 2030 (60/0/0/0)

CNST 2240 Millwork and Finish Construction II Lab 5 credits
Lab experience for CNST 2230 with application of interior doors, trim work, and related finishing practices. Corequisites: CNST 2230 (0/225/0/0)

CNST 2250 Blueprint Reading and Estimating II 2 credits
Continuation of theory of print reading, estimating and drawing for residential and some light commercial building. Emphasis on specifications, schedules, floor plans, elevations, site plans, and construction management. Prerequisites: CNST 2050 (30/0/0/0)

CNST 2260 Blueprint Reading and Estimating II Lab 1 credit
Course provides practice in the proper use of drafting equipment, how to accurately read construction drawings and specifications to develop working drawings used in construction projects. Corequisites: CNST 2250 (0/45/0/0)

CNST 2270 Construction Management 1 credit
Basic knowledge of contract preparation, construction financing, liens, construction insurance, and other construction legalities. (15/0/0/0)

Communication (COMM)

COMM 1010 Fundamentals of Communication 3 credits
This course stresses the correlation of effective communication common to interpersonal, small group, and public speaking contexts. Communication theory and application are incorporated into a variety of classroom activities. (45/0/0/0)

COMM 1050 Career Communication 1 - 3 credits
The course introduces the student to a wide range of communication occurrences relevant to situations in their

career. The student will gain knowledge and experience in the five types of communication: intrapersonal communication, interpersonal communication, small group communication, public speaking and mass communication. (45/0/0/0)

COMM 1100 Small Group Communication 3 credits
Study of the processes and techniques of purposeful, problem-solving communication in small, face-to-face groups. (45/0/0/0)

COMM 1110 Public Speaking 3 credits
This course will enable students to master the skills required of speaking in today's workplace and society. This course will focus on the organization, preparation, research, and evidence needed for a presentation that is tailored to fit the audience. This course will also enhance the students' active and critical listening skills. (45/0/0/0)

COMM 2010 Interpersonal Communication 3 credits
This course addresses the theories and models of interpersonal communication. Understanding these areas will allow students to develop and improve their own interpersonal communication skills. The course addresses listening skills, relationship and conflict management, gender communication, intercultural differences and the connection between intrapersonal and interpersonal communication. Students will participate in projects and activities that enhance verbal and nonverbal interpersonal communication skills. (45/0/0/0)

COMM 2200 Public Relations 3 credits
Students will study the application of public relations in corporations, politics, national and international government, non-profit organizations, entertainment, sports, and travel. Topics include the role of ethics, gender and cultural differences, internal and external communications, and conflict management. (45/0/0/0)

COMM 2300 Intercultural Communications 3 credits
This course will demonstrate the need for intercultural communication in today's world and present strategies and methods needed to be an effective intercultural communicator. (45/0/0/0)

Criminal Justice (CRIM)

CRIM 1010 Introduction to Criminal Justice 3 credits
Provides an overview of the history, development, and philosophies of the criminal justice system within the United States. Areas covered include crime and the criminal justice system, the police, the courts, corrections, and the juvenile justice system. (45/0/0/0)

CRIM 1020 Introduction to Corrections 3 credits
Outlines corrections in a systematic process showing the evolving changes within institutional and community-based corrections. Topics include, but are not limited to the history of corrections, the influence of social thought and philosophy on the development of corrections, the rights of the incarcerated inmate, and the duties of the correctional officer. (45/0/0/0)

CRIM 1030 Courts and Judicial Process 3 credits
Surveys the United States judicial system. Topics include, but are not limited to, legal and constitutional concepts, institutions, and processes. Coverage includes adult and civil courts. (45/0/0/0)

CRIM 1270 Introduction to Forensic Crime Scene Investigation 3 credits
This course provides an overview of the basic concepts of forensic crime scene investigations. The course reviews the basic principles used by crime scene investigators. Topics include protecting the crime scene as a first responder, processing and establishing evidence, and understanding personnel disciplines that aid in the investigation to include special physical evidence handling. (45/0/0/0)

CRIM 1800 Criminal Justice Practicum 3 credits
Under faculty and agency supervision, students will work at a criminal justice agency in all appropriate facets of that agency and apply acquired skills and principles studied in the classroom. (0/0/135/0)

CRIM 2000 Criminal Law 3 credits
Outlines the purpose and function of criminal law. Topics include, but are not limited to, the rights and duties of citizens and police in relation to local, state, and federal law such as arrest, search and seizure, and confessions; the development, application, and enforcement of laws; constitutional issues; and sentencing. (45/0/0/0)

CRIM 2030 Police and Society 3 credits
Examines the role of the police in relationship to law enforcement and the society of the United States. Topics include, but are not limited to, the role and function of police, the nature of police organizations and police work, and the patterns of police-community relations. (45/0/0/0)

CRIM 2080 Criminal Procedures 3 credits
This course is a study of the legal limitations on criminal investigative practices contained in the Fourth, Fifth, and Sixth Amendments to the Constitution. Topics include probable cause, reasonable suspicion, warrants (arrest and search), search and seizure of persons and things, motor vehicle stops, arrest and detention, the exclusionary rule, stop and frisk, electronic surveillance and evidence, lineups and show ups, interrogations, confessions, the right to counsel and legal liabilities of public officers. (45/0/0/0)

CRIM 2100 Juvenile Justice 3 credits
Examines the origins, philosophy, and objectives of the juvenile justice system. Topics include, but are not limited to, causation of crime, such as race and gender, socioeconomic relevance, and victimization; the juvenile court system, the law enforcement approach, corrections, and prevention. (45/0/0/0)

CRIM 2200 Criminology 3 credits
Examines crime and criminology from a broad social perspective. Emphasizes the nature and causes of, investigation and prosecution of, and treatment and prevention of crimes. (45/0/0/0)

CRIM 2250 Community-Based Corrections 3 credits
Emphasizes the correctional process as applied in a community setting. Focuses on probation, parole, and other current community-based strategies for dealing with the offender. Prerequisites: CRIM 1020 (45/0/0/0)

CRIM 2260 Criminal Investigation 3 credits
Introduces criminal investigation procedures. Reviews the historical development and investigative processes related to law enforcement functions. Topics include, but are not limited to: the proper collection, organization and preservation of evidence; basic investigative tools; examining the primary sources of information; analysis of the importance of writing skills; and reviewing of the constitutional, specifically legal limitations of the investigation. (45/0/0/0)

CRIM 2300 Sociology of Deviant Behavior 3 credits
Theoretical analysis of the relation of deviant behavior including crime, vice, innovation, individual pathology, and deviant subgroups to community standards of conventional behavior as expressed in law and norms. (45/0/0/0)

CRIM 2330 Management of Behavioral Issues in Criminal Justice 3 credits
This course examines the various and complex ways mental health and the criminal justice system are intertwined. Students will explore the criminalization of mental health and interactions with law enforcement, mental health care in the correctional system, and community mental health care as it connects with the criminal justice system. Civil and criminal law addressing competency and mental illness will also be addressed. (45/0/0/0)

CRIM 2350 Security and Loss Prevention 3 credits
Provides insight into the complex problems of loss prevention in today's society, including security staffing needs, fire protection and control, duties and responsibilities of security personnel, internal controls, emergency and disaster planning, and internal theft. (45/0/0/0)

CRIM 2400 Jail Management Certification Training 5.5 credits
Provides applicants with skills and instruction in accordance with Nebraska Jail Standards regulations. Upon successful completion of the course, the student will be certified to work in Nebraska county and local jails. (82.5/0/0/0)

CRIM 2580 Communication Skills in Criminal Justice 3 credits
This course will address communication skills that are essential in today's criminal justice environment. Concentration will be on enhancing speaking skills, understanding body language, interview and interrogation techniques, and developing listening skills. Additionally, a portion of the class will concentrate on report writing for both law enforcement and corrections. (45/0/0/0)

CRIM 2700 Issues in Criminal Justice 3 credits
This capstone course serves to synthesize the knowledge gained from each course taken within either concentration of the criminal justice curriculum. In addition to exploring issues in criminal justice, the student will develop job-seeking skills. Eighteen credit hours of criminal justice coursework required. Prerequisites: CRIM 1010 (45/0/0/0)

Diesel Technology (DESL)

DESL 1000 Basic CDL Driver Training 1 credit
The Basic CDL Training program at Northeast Community College is designed to prepare each student for completing the minimum requirements necessary to acquire their Commercial Drivers License. Corequisites: DESL 1005 (15/0/0/0)

DESL 1005 Basic CDL Driver Training Lab 1 credit
The Basic CDL Training program at Northeast Community College is designed to prepare each student for completing the minimum requirements necessary to acquire their Commercial Drivers License. Students enrolling in this CDL course must have their CDL learners permit prior to the start of the course. Corequisites: DESL 1000 (0/45/0/0)

DESL 1010 Electrical Systems Theory 2.5 credits
The study of basic electricity, circuitry and wiring diagrams. Complete coverage of batteries, starting circuits, charging circuits, ignition circuits, multi-meters and accessory circuits including operation, testing, and diagnostic procedures. (37.5/0/0/0)

DESL 1015 Electrical Systems Lab 3.5 credits
A practical application of the analysis, repair, and testing of the material covered in DESL 1010. This lab involves the use of proper methods, tools and service materials to complete work requirements. Corequisites: DESL 1010 (0/157.5/0/0)

DESL 1055 Ag Power Trains and Farm Machines Theory 5 credits
Study of the practical operations of bearings, bushings, gears, and the systems of power trains incorporated in farm tractors. Includes the fundamentals of mechanical steering, gear repair and adjustment, and the basic study of farm machinery used in modern farming. This includes a study of a variety of farm machinery operations, tests and troubleshooting of farm machinery. Prerequisites: DESL 1010 AND DESL 1095 Corequisites: DESL 1082 (75/0/0/0)

DESL 1065 Air Conditioning Theory 2.5 credits
An introduction to the fundamentals of air conditioning and basic refrigeration principles including the study of different types of compressors, evaporators, controls and condensers used today. Gauge reading as a diagnostic tool, environmental issues and preparation for certification to handle refrigerants is also covered. (37.5/0/0/0)

DESL 1072 Air Conditioning Lab 3.5 credits
A practical application of the diagnosis, service, repair installation, and overhaul of the systems covered in DESL 1065. Lab projects emphasize the proper use of gauges and other tools to diagnose and repair the system. Corequisites: DESL 1065 (0/157.5/0/0)

DESL 1082 Ag Power Trains and Farm Machines Lab **7 credits**
Practical experience in repair, troubleshooting and testing of various power trains and farm machinery used in today's farm equipment. Students are required to disassemble, analyze, troubleshoot, repair and assemble farm machinery. Prerequisites: DESL 1015 Corequisites: DESL 1055 (0/315/0/0)

DESL 1095 Shop Processes and Safety **2 credits**
This course covers basic shop processes, tools, fasteners, and equipment including the identification, use, inspection, and care of those tools and equipment. The course also addresses OSHA regulations as it pertains to shop safety. Students have the opportunity to earn both a shop safety certificate and forklift operator certification upon successful completion of the curriculum. (30/0/0/0)

DESL 1145 Truck Hydraulic Systems **2 credits**
This course will start with the basics of hydraulics and the various components necessary for hydraulic operation. Students will then learn how these components come together to build hydraulic systems including the basics of maintain and diagnosing these systems. (30/0/0/0)

DESL 1172 Truck Brakes, Suspension, and Steering Systems Theory **5 credits**
The study of heavy-duty truck brake systems, suspension and steering systems, their components, their function, diagnosis, repair, and preventative maintenance. The course covers tires and wheels systems, steering components, suspension types and hydraulic and air brake systems. ABS, stability control, collision mitigation systems, and DOT annual inspection requirements will also be covered. Corequisites: DESL 1182 (75/0/0/0)

DESL 1182 Truck Brakes, Suspension, and Steering Systems Lab **7 credits**
The hands-on application of heady-duty truck brake systems, suspension and steering system inspections, measurements, diagnostics, and repairs. Students will remove, disassemble, repair, assemble, and reinstall steering and suspension components and perform wheel alignments using modern computerized equipment. The course also provides a hands-on introduction to air and hydraulic braking systems types, functions, and their diagnostics and repair procedures. Experience will also be gained in ABS, ATC, and ESC systems. Corequisites: DESL 1172 (0/315/0/0)

DESL 1300 Cooperative Internship I **1 - 6 credits**
Work-study program for in-depth instruction on the job. The college gives both related and vocational instruction before and-or during this period, including seminars directly related to the work experience. These experiences are planned and supervised by the college and the employers so that each contributes to the student's education and employability. First year completion of the Diesel Technology program or permission of instructor. (0/0/0/360)

DESL 2015 Ag Electronics Theory **2.5 credits**
The study of electronic systems used on today's farm equipment including microprocessors, sensors, monitors, controllers, emergency shutdown systems and GPS systems. Also includes operation, set-up, testing and diagnosing of these systems. Prerequisites: DESL 1010 AND DESL 1015 Corequisites: DESL 2035 (37.5/0/0/0)

DESL 2030 Ag Engine and Fuel Systems Theory **5 credits**
A study of the various types of diesel engines including both two and four-stroke cycle and direct and indirect injection styles. Includes diagnosis, service, and repair procedures for the basic engine as well as air induction, fuel, lubrication and cooling systems. Must have completed first year of the DESL program or permission of instructor. (75/0/0/0)

DESL 2035 Ag Electronics Lab **3.5 credits**
Includes proper use of tools, scanners, and other test equipment required to service electronic circuits on farm equipment. Also covers proper installation, calibration, set-up, testing, and diagnosing various types of electronic devices. Prerequisites: DESL 1010 AND DESL 1015 Corequisites: DESL 2015 (0/157.5/0/0)

DESL 2045 Ag Engines and Fuel Systems Lab **7 credits**
The course includes disassembly, repair, measurement, and assembly procedures for diesel engines and diesel fuel systems. Emphasis on diagnosis, testing and repairing of diesel engines and related systems including fuel systems. Corequisites: DESL 2030 (0/315/0/0)

DESL 2070 Hydraulic Theory **2.5 credits**
Practical application of basic laws of hydraulics and schematics of farm tractors and industrial hydraulics. Includes the theory and operations of hydraulic components, testing and troubleshooting used in today's equipment. Prerequisites: DESL 1010 AND DESL 1015 Corequisites: DESL 2085 (37.5/0/0/0)

DESL 2085 Hydraulics Lab **3.5 credits**
Practical experience in repair, troubleshooting, and testing various hydraulic components used in today's farm tractors and industrial equipment. Students are required to disassemble, analyze, troubleshoot, repair, and assemble hydraulic components. Prerequisites: DESL 1010 AND DESL 1015 Corequisites: DESL 2070 (0/157.5/0/0)

DESL 2115 Truck Power Trains System Theory **2.5 credits**
The study of heavy truck power train components and their function. The course covers inspections, diagnosis, repair and preventative maintenance of power train systems including clutches, manual and automated transmissions, drive shafts, and differentials. Prerequisites: DESL 1065 AND DESL 1072 (37.5/0/0/0)

DESL 2125 Truck Power Trains System Lab **3.5 credits**
Learn to troubleshoot, diagnose, maintain, and repair power train systems including clutches, manual and automated transmissions, drive shafts, and differentials through hands-on training in lab setting working on trainers, simulators and/or a variety of vehicles and equipment Corequisites: DESL 2115 (0/157.5/0/0)

DESL 2132 Truck Engines and Fuel Systems Theory **5 credits**
A study of various types of internal combustion engines specific to the trucking industry. Includes the study of internal components, cooling, lubrication, intake, exhaust systems, emission controls, engine brakes, electronic controls, and fuel systems. The course will also address preventative maintenance, troubleshooting techniques, failure analysis, parts inspection, overhaul, and tune up techniques. Student must have completed the first year of the DESL program to enroll or permission of the instructor. (75/0/0/0)

DESL 2135 Truck Engines and Fuel Systems Lab 7 credits
A practical application of disassembly, measurement, and repair of diesel engines used in the trucking industry. Includes the inspection, troubleshooting, and repair of internal components, cooling, lubrication, intake, exhaust systems, emission controls, engine brakes, electronic engine and fuel system controls, cooling systems, lubrication systems, air intake systems, exhaust systems, and emission control devices. Hands-on experience will further be gained in preventative maintenance and troubleshooting techniques, failure analysis, parts inspection, overhaul, and tune up techniques. Student must have completed the first year of the DESL program to enroll or permission of the instructor. Corequisites: DESL 2132 (0/315/0/0)

DESL 2170 Transportation Refrigeration Theory **2.5 credits**
The study of the fundamentals of refrigeration trailer operation and maintenance. Prerequisites: DESL 1065 AND DESL 1072 (37.5/0/0/0)

DESL 2185 Transportation Refrigeration Lab 3.5 credits
The practical application of the theories learned in DESL 2170 with hands on experience in the function, diagnosis, and repair of refrigeration trailers. Corequisites: DESL 2170 (0/157.5/0/0)

Early Childhood (ECED)

ECED 1050 Expressive Arts **3 credits**
This course focuses on the development and application of materials, activities, and experiences that encourage the young child's (birth-8 years olds) creativity and aesthetic appreciation through visual arts, music, body movement, creative/open-ended thinking, dramatic arts, and play. (45/0/0/0)

ECED 1060 Observation, Assessment, and Guidance **3 credits**
This course introduces a variety of observation, assessment, and guidance strategies used in early childhood education settings birth through age eight. (45/0/0/0)

ECED 1110 Infant/Toddler Development **3 credits**
This course focuses on typical-atypical development of children in the prenatal period of development through 36 months. Planning curriculum in the domains of physical growth and motor skills, cognition and language, and social-emotional development are examined across diverse settings. (45/0/0/0)

ECED 1120 Preschool Child Development **2 credits**
This course focuses on typical-atypical development of the child ages 3 through 5 years, in the domains of physical growth and motor skills, cognition and language, and social-emotional development across diverse settings. (30/0/0/0)

ECED 1150 Introduction to Early Childhood Education **3 credits**
This course provides an overview of the history, trends and philosophies of early childhood education. Diversity, inclusion, licensing standards, current legislation, professionalism, and advocacy are examined. (45/0/0/0)

ECED 1160 Early Language and Literacy **3 credits**
This course focuses on the development of literacy and language skills from birth to age eight including typical/atypical and multiple language learners. (45/0/0/0)

ECED 1220 Pre-Practicum **1 credit**
This course is designed to prepare students for practicum experiences in the early childhood settings. A review of the various practicum settings, forms, policies, procedures, and best practices will be covered. Students will complete the appropriate background checks as required by childcare licensing. An understanding of childcare licensing standards, roles, responsibilities, expectations of the practicum student, professionalism, supervision, and the evaluation process will be covered. (15/0/0/0)

ECED 1230 School Age Child Development and Programming **2 credits**
This course focuses on typical-atypical development of the children ages 5 through 8 years. The course will examine program design in out of school care that addresses the domains of physical growth and motor skills, cognition, and language, and social/emotional development. (30/0/0/0)

ECED 1260 Early Childhood Health, Safety, and Nutrition **3 credits**
This course addresses the interrelatedness of health, safety, and nutrition in the life of a young child, birth through age eight. Practices that assess and promotes good health are introduced. Effective control of communicable diseases and acute illnesses found in the early childhood years and early education settings is addressed. Safety management and the handling of child abuse and neglect are examined. Students learn appropriate nutritional guidelines and practices for planning meals and snacks in the classroom. (45/0/0/0)

ECED 1610 Infant Practicum **1 credit**
This course is designed to provide an understanding of the developmental stages of children from birth through 18 months-of-age by participating in hands-on learning experiences in diverse early childhood care and

education settings. Students will develop an awareness of appropriate adult/child interaction while developing positive employee skills. Basic skills in planning and implementing a daily routine and curriculum activities for infants are presented. Students are required to complete a minimum of 45 clock hours of practical work experience. A passing grade of C or better is required for ECED majors. Prerequisites: ECED 1220 with min grade of C AND ECED 1110 with min grade of C (0/0/45/0)

ECED 1620 Toddler Practicum **1 credit**
This course is designed to provide an understanding of the developmental stages of children 18 months through 36 months-of-age by participating in hands-on learning experiences in diverse early childhood care and educational settings. Students will develop an awareness of appropriate adult/child interaction while developing positive employee skills. Basic skills in planning and implementing a daily routine and curriculum activities for toddlers are also presented. Students are required to complete a minimum of 45 clock hours of practical work experience. A passing grade of C or better is required for ECED majors. Prerequisites: ECED 1220 with min grade of C AND ECED 1110 with min grade of C (0/0/45/0)

ECED 1630 Preschool Practicum **1 credit**
This course is designed to provide an understanding of the developmental stages of children from three to five years of age by participating in hands-on learning experiences in diverse early childhood care and education settings. Students will develop an awareness of appropriate adult/child interaction while developing positive employee skills. Basic skills in planning and implementing a daily routine and curriculum activities for children from 3-5 years are also presented. Students are required to complete a minimum of 45 clock hours of practical work experience. A passing grade of C or better is required for ECED majors. Prerequisites: ECED 1120 with min grade of C AND ECED 1220 with min grade of C (0/0/45/0)

ECED 1640 School-Age Practicum **1 credit**
This course is designed to provide an understanding of the developmental stages of children from five to eight years of age by participating in hands-on learning experiences in diverse early childhood care and education settings. Students will develop an awareness of appropriate adult/child interaction while developing positive employee skills. Basic skills in planning and implementing a daily routine and curriculum activities for school age children are also presented. Students are required to complete a minimum of 45 clock hours of practical work experience. A passing grade of "C" or better is required for ECED majors. Prerequisites: ECED 1220 with min grade of C AND ECED 1230 with min grade of C (0/0/45/0)

ECED 2050 Children with Exceptionalities **3 credits**
This course focuses on the theory, development and philosophy of early childhood education programs serving children (from birth to age 8) with exceptionalities. Topics include working with families, legislation, role of the interventionist, interdisciplinary teams and inclusion of children with special needs in natural environments. Observation of inclusionary practices and exceptional children are required. Strongly suggest prior knowledge of child growth and development. (45/0/0/0)

ECED 2060 Early Childhood Education Curriculum Planning **3 credits**
This course prepares students to plan a developmentally appropriate curriculum and environments for children ages 3-8 years of age. Topics include writing goals and objectives, lesson plans, daily schedules, working with families, and inclusionary practices. (45/0/0/0)

ECED 2070 Family and Community Relationships **3 credits**
This course focuses on the development of skills, techniques and attitudes needed to form successful collaboration with diverse family systems and communities. Ten hours of volunteer service learning required. (45/0/0/0)

ECED 2450 Early Childhood Administration **3 credits**
This course is designed to provide students with a comprehensive understanding of the administrative aspects of early childhood programs. This course will prepare students to plan a facility, identify program goals, work with community resources, collaborate with schools, families, and other early childhood programs, implement an early childhood program, and evaluate the program quality. (45/0/0/0)

Economics (ECON)

ECON 1010 Personal and Business Finance **2 credits**
Covers the basic principles needed for effective personal and business finance management, including the practical applications of budgeting, credit, insurance, taxes, along with business overhead, break-even analysis, and return on investment. (30/0/0/0)

ECON 1040 Personal Finance **3 credits**
This course covers the basic principles needed for effective personal financial management including the practical applications of money management, budgeting, taxes, credit, insurance, housing, investments, and retirement planning. (45/0/0/0)

ECON 2110 Principles of Macroeconomics **3 credits**
This course is a study of the "big ideas" of macroeconomics such as GDP, inflation, unemployment, labor, and international trade. A look at public-policy decision making using macro theories such as: monetary policy, fiscal policy and other economic-stabilization theories, is also presented. This course will also examine the economic challenges facing our economy. (45/0/0/0)

ECON 2120 Principles of Microeconomics **3 credits**
Analysis of competitive and non-competitive markets, including the behavior of producers and consumers. Topics include price and income elasticity, income distribution, production costs, resource allocation, comparative advantage and current economic problems. Prerequisites: ECON 2110 with min grade of C (45/0/0/0)

Education (EDUC)

EDUC 1100 Human Relations in a Pluralistic Society **1 credit**
This course is designed to help students gain an understanding of the values and lifestyles of various cultures within a pluralistic society; recognize and deal with dehumanizing bias; apply human relations techniques to facilitate a favorable student experience and an inclusive learning environment; and develop an understanding of and respect for human dignity and individual rights. (15/0/0/0)

EDUC 1110 Introduction to Professional Education **3 credits**
An overview of education in the United States viewed in terms of history, philosophy, finance and governance. Encourages critical thought regarding the role of education in our ever-changing diverse society, the role of the teacher, and educational practices in schools. The course is designed to help students explore education as a prospective career. (45/0/0/0)

EDUC 2000 Educational Psychology **3 credits**
This course is a study of the three focal areas in education: the learner, the learning process, and the learning environment. It is a survey of the principles of psychology as applied to classroom teaching; development, learning, motivation, evaluation, adjustment, and educational techniques and innovations. Prerequisites: EDUC 1110 AND PSYC 1810 (45/0/0/0)

EDUC 2070 Family and Community Relationships **3 credits**
This course focuses on the development of skills, techniques and attitudes needed to form successful collaboration with diverse family systems and communities. Ten hours of volunteer service learning required. (45/0/0/0)

EDUC 2250 Children's Literature **3 credits**
Provides the potential elementary teacher an introduction to literature suited to children. Addresses genres, authors and illustrators, historical development, trends, and techniques of presentation. (45/0/0/0)

EDUC 2800 Professional Practicum **1 credit**
Designed to acquaint the student with the classroom situation and atmosphere by participation in the teaching-learning process. Includes observation and assistance in classroom-related activities under supervision of an experienced teacher. Prerequisites: EDUC 1110 (0/0/45/0)

EDUC 2920 Introduction to Online Instruction **1 credit**
Provides instructor training on how to construct and facilitate an online course using the campus-supported learning management system, or LMS. Introduces common LMS tools used to build course content, interact with students, and assess student learning. Demonstrates how to perform basic course management tasks and implement best practices of online instruction. (15/0/0/0)

Electromechanical Technology (ELMC)

ELMC 1010 Fundamentals of Electricity **3 credits**
This course covers the fundamentals of electrical theory, including electrical components and their effects on AC and DC circuits. The students will study electrical measurements with emphasis on circuit analysis using Ohm's law, circuit testing equipment, and the use of other instruments. (45/0/0/0)

ELMC 1020 Fundamentals of Electricity Lab **2 credits**
Practical application of safely testing components and circuitry, proper use of electrical test equipment, and diagnosing circuitry using circuit diagrams. Corequisites: ELMC1010 (0/90/0/0)

ELMC 1030 Orientation and Safety **2 credits**
This course covers the basic lockout-tagout, electrical hazards such as arc flash and arc blast and an individual's role in safety programs. (30/0/0/0)

ELMC 1035 OSHA 30-Hour Safety **2 credits**
The OSHA 30-Hour General Industry course provides compliance safety training to prepare all employees for the hazards found in manufacturing, service, and distribution companies. Students will gain in-depth knowledge of the following course topics: OSHA regulations, OSH Act and general duty clause, walking and working surfaces, means of egress and fire protection, flammable and combustible liquids, personal protective equipment, permit-required confined spaces, machine guarding, hazard communication, safety and health programs, hearing conservation, industrial hygiene, hand and portable power tools, toxic and hazardous substances, lockout/tagout, and electrical safety. To meet Department of Labor standards, students must attend all class periods to receive a 30-hour certification card. (30/0/0/0)

ELMC 1045 PLC Basics **2 credits**
The development of basic PLC skills utilizing common PLCs and application software. Prerequisites: ELMC 1120 (30/0/0/0)

ELMC 1070 Automation Fundamentals **3 credits**
The coverage of fundamental personal computer system, terminology, operation, and the introduction of computer software applications. Software applications cover the basics of word processing, spreadsheet, and computer-aided drawing. (45/0/0/0)

ELMC 1090 Mechanical Matter and Energy **3 credits**
This course will provide the student with a comprehensive presentation of the basic concepts and principles of general algebra based physics. The student will achieve a generalized understanding of the concepts and principles that form the basis of manufacturing. The student will also develop skills in formulating and applying physical principles based on data and use scientific reasoning to solve real-world problems. (45/0/0/0)

ELMC 1110 Motor Control **2 credits**
The study of various circuits and controls commonly used to control electrical motors and the techniques used to troubleshoot these circuits and controls. Prerequisites: ELMC 1010 (30/0/0/0)

ELMC 1120 Motor Control Lab **2 credits**
Construct and troubleshoot various motor control circuits utilizing different switch and relay components. Prerequisites: ELMC 1010 AND ELMC 1020 Corequisites: ELMC 1110 (0/90/0/0)

ELMC 1150 Introduction to Mechanics **3 credits**
This course is an introduction to the form and function of mechanical systems. The emphasis for this course will be on power transmission, lubrication, safety procedures, maintenance, and repair of mechanical equipment and systems. Prerequisites: INDT 1090 OR INDT 1150 (45/0/0/0)

ELMC 1160 Introduction to Mechanics Lab **3 credits**
Practical application of power transmission devices, lubrication practices, safety, maintenance, and repair of mechanical equipment. Prerequisites: INDT 1095 OR INDT 1160 Corequisites: ELMC 1150 (0/135/0/0)

ELMC 1170 Total Quality Management **2 credits**
This course examines concepts, tools, and techniques used in the management and measurement of quality, productivity, and competitiveness in an industrial environment. Topics include total quality control and management, employee involvement in quality, team building for quality, quality circles, relation between quality, productivity and competitiveness, and statistical process control. The course also emphasizes the development of decision-making skills through consultation with local organizations and industry personnel. (30/0/0/0)

ELMC 1300 Cooperative Internship I **1 - 6 credits**
Work-study program for in-depth instruction on the job. The college gives both related and vocational instruction before and-or during this period, including seminars directly related to the work experience. These experiences are planned and supervised by the college and the employers so that each contributes to the student's education and employability. First year completion of the Electromechanical Technology program or permission of instructor. (0/0/0/360)

ELMC 2010 Introduction to Automated Controls **2 credits**
The student shall study various machine control systems that utilize a programmable logic controller as the system controller. The student will write numerous ladder programs to be used with these PLCs. Prerequisites: ELMC 1110 AND ELMC 1120 (30/0/0/0)

ELMC 2020 Introduction to Automated Controls Lab **2 credits**
The student shall construct and program various industrial control systems utilizing various programmable logic controllers. Prerequisites: ELMC 1110 AND ELMC 1120 Corequisites: ELMC 2010 (0/90/0/0)

ELMC 2030 Motor Repair **2 credits**
A practical course on the theory, operation, and construction of electric motors and generators including repair of AC and DC motors. (30/0/0/0)

ELMC 2040 Motor Repair Lab **1 credit**
Practical application of safety practices used in motor repair. Experience in motor repair and trouble-shooting procedures on AC and DC motors using proper tools and testing equipment. Corequisites: ELMC 2030 (0/45/0/0)

ELMC 2052 Fluid Fundamentals **3 credits**
The study of fluid characteristics, the operation of valves, pumps, and cylinders, and the basic steps in hydraulic troubleshooting. Prerequisites: ELMC 1090 (45/0/0/0)

ELMC 2062 Fluid Fundamentals Lab **1 credit**
Practical application in the safe use of high pressure hydraulic fluids. Students will also work as a team to draw and construct a simple hydraulic circuit, analyze a hydraulic system and demonstrate the use of flow control components. Corequisites: ELMC 2052 (0/45/0/0)

ELMC 2070 Machine Repair **2 credits**
This course will focus on machines used as part of industrial manufacturing processes and in materials handling. It will provide the student an overview of machine operation and maintenance. The student will study continuous, intermittent, and custom systems. Prerequisites: ELMC 1110 AND ELMC 1150 (30/0/0/0)

ELMC 2080 Machine Repair Lab **2.5 credits**
This course will focus on building and automating simple machines. The students will automate machines using control relays and then replace control relays with PLCs and sensors to increase machine efficiency. Students will demonstrate trouble-shooting techniques for fault isolation. Prerequisites: ELMC 1120 AND ELMC 1160 Corequisites: ELMC 2070 (0/112.5/0/0)

ELMC 2110 Control Systems **3 credits**
The student will study various industrial control systems that utilize advanced electrical components and devices such as sensors, relays, switches and controllers. Prerequisites: ELMC 2010 AND ELMC 2020 (45/0/0/0)

ELMC 2120 Control Systems Lab **2.5 credits**
Demonstrate safe working habits when installing system controllers and remote sensing devices in control systems, as well as program and trouble-shooting PLC systems design. Prerequisites: ELMC 2010 AND ELMC 2020 Corequisites: ELMC 2110 (0/112.5/0/0)

ELMC 2150 Solid State Fundamentals **4 credits**
The basic study of the use of solid state devices in the control and measurement of electricity. Prerequisites: ELMC 1010 (60/0/0/0)

ELMC 2170 Electromechanical Systems **1 credit**
The study of manufacturing systems and how each system interacts with various connecting systems. Prerequisites: ELMC 2010 (15/0/0/0)

ELMC 2180 Industrial Ethernet Basics 2.5 credits
This course is an introduction to Ethernet communications, including documentation and system layout. (37.5/0/0/0)

ELMC 2185 PLC Intermediate 2 credits
The development of intermediate programmable logic controller (PLC) skills utilizing common PLCs and application software. Prerequisites: ELMC 1045 (30/0/0/0)

ELMC 2190 Electromechanical Systems Lab 2 credits
Student will identify which computer protocol to use in setting up network communications, follow trouble-shooting procedures using a computer, and demonstrate set-up of a variable frequency drive for network communications and motor controls in a safe work environment. Prerequisites: ELMC 2020 AND ELMC 2080 Corequisites: ELMC 2170 (0/90/0/0)

Electrical Construction and Control (ELTR)

ELTR 1010 Basic Electricity 3 credits
Fundamental electrical theory including electrical components and their effects on AC and DC circuits. Covers electrical measurement with emphasis on circuit analysis using Ohm's law, circuit testing equipment, and the use of each instrument. (45/0/0/0)

ELTR 1015 Basic Electricity and Components for Reinke Irrigation 3 credits
A study of the basic electrical principles used in Reinke Irrigation systems. (45/0/0/0)

ELTR 1018 Basic Electricity and Components for Zimmatic Irrigation 3 credits
A study of the basic electrical principles and components used to mechanically assist the movement of Lindsay Zimmatic Center pivot irrigation systems. (45/0/0/0)

ELTR 1020 Basic Electricity Lab 2 credits
Includes practical application of safe work practices in building series and parallel circuits as used in the building industry. Includes utilizing digital meters and related test equipment in a live work setting. Corequisites: ELTR 1010 (0/90/0/0)

ELTR 1030 Electrical Wiring I 3 credits
Application of electrical fundamentals to actual residential and agricultural wiring. Involves installation of common electrical devices, sizing, and routing of circuits of single-phase services. Includes use of tools and techniques for various types of installations. (45/0/0/0)

ELTR 1040 Electrical Wiring I Lab 3 credits
Practical application of pulling wire, wiring switches, electrical boxes, circuit breakers in residential electrical construction according to electrical code. Corequisites: ELTR 1030 (0/135/0/0)

ELTR 1050 National Electrical Code I 3 credits
Basic study of the National Electrical Code and its interpretation. (45/0/0/0)

ELTR 1070 Industrial Maintenance Code 2 credits
Basic study of proper use of the National Electrical Code for installation emphasizing industrial branch circuits, control circuits, and motor operated loads. (30/0/0/0)

ELTR 1200 National Electrical Code II 3 credits
A study of the national Electric Code and the application of these codes to electrical installations. Prerequisites: ELTR 1050 AND MATH 1020 (45/0/0/0)

ELTR 1210 Electrical Wiring II 3 credits
Application of commercial wiring as to installation of branch circuits and services for lighting, heating, and power installations. (45/0/0/0)

ELTR 1220 Electrical Wiring II Lab 2 credits
Hands on application of commercial electrical wiring methods and components. Corequisites: ELTR 1210 (0/90/0/0)

ELTR 1230 Motor Control 2 credits
Practical source on various circuits commonly used to control electrical motors, including practice in troubleshooting and wiring control circuits in a laboratory situation. Prerequisites: ELTR 1010 (30/0/0/0)

ELTR 1240 Motor Control Lab 2 credits
Practical application in constructing circuits used to control motors. Includes troubleshooting and repair of motor control systems in a lab setting. Prerequisites: ELTR 1020 Corequisites: ELTR 1230 (0/90/0/0)

ELTR 1250 Blueprint Reading and Cost Estimating 3 credits
Study of the use of electrical and structural blueprints and material list takeoff and cost estimating of electrical projects. Prerequisites: ELTR 1030 AND ELTR 1040 AND ELTR 1050 Corequisites: ELTR 1230, ELTR 1240 (45/0/0/0)

ELTR 1300 Cooperative Internship I 1 - 6 credits
Work-study program for in-depth instruction on the job. The college gives both related and vocational instruction before and-or during this period, including seminars directly related to the work experience. These experiences are planned and supervised by the college and the employers so that each contributes to the student's education and employability. First year completion of the Electrical Construction and Control program or permission of instructor. (0/0/0/360)

ELTR 2000 Motor Theory and Application 2 credits
A practical course on the theory, operation, and construction of electric motors and generators including field repair of AC and DC motors. Prerequisites: ELTR 1230 AND ELTR 1240 (30/0/0/0)

ELTR 2010 Motor Theory and Application Lab 1 credit
Diagnosis and repair of electrical motors and generators including field repair of AC and DC motors. Corequisites: ELTR 2000 (0/45/0/0)

ELTR 2015 Electrical Licensing I 1 credit
Course designed for licensed electricians' to obtain contact hours for license renewal. The course includes review of current code topics and electrical code changes

relevant to industry standards as dictated by the State electrical code. (15/0/0/0)

ELTR 2020 Automation Fundamentals 2 credits
Installation and maintenance of commercial and industrial electric systems. Completion of first-year of ELTR course work required. (30/0/0/0)

ELTR 2025 Electrical Licensing Prep 2 credits
Study of National Electric Code and electrical basics in preparation of the State Licensing exam. The course is designed to help the student pass electrical licensing exams in a state electrical licensing program. (30/0/0/0)

ELTR 2030 Automation Fundamentals Lab 2 credits
Installation and maintenance of commercial and industrial components in a simulated workplace setting. Corequisites: ELTR 2020 (0/90/0/0)

ELTR 2045 Electrical Energy Conservation I 3 credits
Study of the cost of installation, maintenance, and operation of electric lighting and heating systems. Completion of first-year of ELTR course work required. (45/0/0/0)

ELTR 2055 Electrical Troubleshooting 2 credits
Problem solving of electrical circuits including motor control circuits. Completion of first-year of ELTR course work required. (30/0/0/0)

ELTR 2065 Electrical Troubleshooting Lab 2 credits
Application of safe electrical troubleshooting techniques used in motor control circuits. Corequisites: ELTR 2055 (0/90/0/0)

ELTR 2210 Control Wiring 3 credits
Study of control and measurement circuits used in industry including logic controlled motor circuits. Prerequisites: ELTR 2020 (45/0/0/0)

ELTR 2215 Control Wiring and Solid State Lab 2.5 credits
Practical experience in operation, troubleshooting and maintenance of industrial control systems. Corequisites: ELTR 2210 (0/112.5/0/0)

ELTR 2235 Electrical Energy Systems 3 credits
This course introduces an advanced knowledge of electrical systems. Emphasis on electrical system design, troubleshooting and repair using various diagnostic tools and procedures, power factors and power quality, alternative energy sources and systems such as solar energy systems, and energy management and conservation concepts are presented. (45/0/0/0)

ELTR 2245 Electrical Energy Systems Lab 2 credits
Application of the concepts and principles of advanced electrical energy systems. Student will experimentally test and evaluate electrical system design, troubleshoot and repair techniques using various diagnostic tools and procedures, determine power factors and power quality, become familiar with alternative energy sources and systems such as solar energy systems, and employ energy management and conservation concepts. Corequisites: ELTR 2235 (0/90/0/0)

ELTR 2260 Solid State Fundamentals 2 credits
Basic study of the use of solid state electronic devices in the control and measurement of electricity. (30/0/0/0)

Paramedicine (EMTL)

EMTL 1410 Emergency Medical Technician Refresher 1.5 credits
This course successfully meets the Nebraska Department of Health and Human Services requirements for competency renewal of Nebraska Licensed EMTs and for those seeking reinstatement of their Nebraska EMT license. (15/15/0/0)

EMTL 1515 Emergency Medical Responder 3.5 credits
This course is dedicated to the study and application of the knowledge and skills necessary to become and Emergency Medical Responder. The curriculum is based on the National Standards set forth by the National Registry of Emergency Medical Technicians. The course will include applications/skills needed to qualify for the Emergency Medical Responder certification in the State of Nebraska. Passing the Cognitive examination and Practical Skills examination of the National Registry of Emergency Technicians is required for certification. Student must have current CPR certification, American Heart Association-Healthcare Provider Level or equivalent. (45/15/0/0)

EMTL 1525 Emergency Medical Responder to Emergency Medical Technician 5.5 credits
This course is dedicated to the study and application of the knowledge and skills necessary for an individual to become an Emergency Medical Technician and provide emergency medical care at a basic life support level with an ambulance service or other specialized service. The course will include all applications/skills needed to apply for a Nebraska EMT license. After successful completion of this course, the individual must pass both the written and practical skills examinations of the National Registry of Emergency Technicians (NREMT) before he/she can apply to obtain a Nebraska certificate of competency to practice in Nebraska. Must hold a current EMR license. (67.5/30/0/0)

EMTL 1810 EMS Instructor Course 3 credits
The EMS Instructor Course is designed to provide students who are clinically competent in a specific content area with the instructional skills to deliver training effectively. It focuses on instructional preparation, presentation, and evaluation. Upon completion of the course, the student should be able to teach any of the curriculum packages in which they are clinically competent. Prerequisites: The student must hold an active National Registry Certification at the level or above for which they intend to teach. (45/0/0/0)

EMTL 1825 Pre-hospital Emergency Care for Nurses 3 credits
Designed for an existing Registered Nurse or Licensed Practical Nurse who wishes to act as an EMT provider on a volunteer or paid rescue or transport service according to rules and regulations from Nebraska Health and Human

Services Regulation and Licensure-EMS Division. Must be a current RN or LPN. (37.5/15/0/0)

EMTL 1840 Emergency Medical Technician – Part 1 **4.5 credits**
This course is dedicated to the study and application of the knowledge and skills necessary for an individual to become an Emergency Medical Technician and provide emergency medical care at a basic life support level with an ambulance service or other specialized service. The course will include the first half of the applications/skills needed to apply for licensure as an EMT in the State of Nebraska. After successful completion of this course and EMTL-1845 the student will be eligible to apply to test for the National Registry of Emergency Medical Technician (NREMT) cognitive examination. Once the student has passed both the cognitive and practical skills examinations of the NREMT he/she can apply to obtain an EMT license in the State of Nebraska. This class contains the current information found in the National EMS Education Standards as outlined by the National Highway Traffic Safety Administration. Student must have current CPR certification, American Heart Association-Healthcare Provider Level or equivalent. (60/15/0/0)

EMTL 1845 Emergency Medical Technician – Part 2 **5 credits**
This course is dedicated to the study and application of the knowledge and skills necessary for an individual to become an Emergency Medical Technician and provide emergency medical care at a basic life support level with an ambulance service or other specialized service. Emergency Medical Technician Part 2 includes the assessment and treatment of a medical patient and the associated skills and medications an EMT can use. After successful completion of this course and EMTL 1840, the student will be eligible to apply to test for the National Registry of Emergency Medical Technician cognitive and practical skills examinations of the National Registry of Emergency Medical Technicians (NREMT). Once the student is successful, the student can apply to obtain an EMT license in the State of Nebraska. This class contains the current information found in the National EMS Education Standards as outlined by the National Highway Traffic Safety Administration. Students must have current CPR certification, American Heart Association - Healthcare Provider Level or equivalent. Prerequisites: EMTL 1840 with min grade of C (67.5/15/0/0)

EMTL 1870 Pre-hospital Trauma Life Support **1 credit**
This course includes certification in Pre-hospital Trauma Life Support and covers techniques of rapid patient assessment, airway management, shock recognition and management, spinal immobilization, stabilization of fractures, kinematics, rapid extrication, geriatric trauma, pediatric trauma, thoracic and abdominal trauma, soft tissue trauma, trauma with pregnancy patients, burns, crime scenes and air medical transport. PHTLS is a continuing education course that is recognized by the National Registry of Emergency Medical Technicians (NREMT) and by the Continuing Education Certification Board for Emergency Medical Services (CECBEMS). A NAEMT certification card is provided upon successful completion. Prerequisite: License or certification in one of the following fields: EMT, paramedic, nurse, physician assistant, nurse practitioner or physician. (15/0/0/0)

EMTL 1880 Advanced Medical Life Support **1 credit**
Advanced Medical Life Support (AMLS) is the gold standard of education for emergency medical assessment and treatment. Endorsed by the National Association of EMS Physicians, AMLS emphasizes the use of the AMLS Assessment Pathway, a systematic tool for assessing and managing common medical conditions with urgent accuracy. The course offers an initial assessment-based approach that progresses to a diagnostic-based approach to quickly develop the best treatment plan. Students learn to recognize and manage common medical crises through realistic case-based scenarios that challenge students to apply their knowledge to highly critical patients. The course emphasizes the use of scene size-up, history, interactive group discussion on potential treatment strategies, and physical examination to systematically rule out and consider possibilities and probabilities in treating patients' medical crises. AMLS is a continuing education course that is recognized by the National Registry of Emergency Medical Technicians (NREMT) and by the Continuing Education Certification Board for Emergency Medical Services (CECBEMS). A NAEMT certification card is provided upon successful completion. Prerequisite: License or certification in one of the following fields: paramedic, nurse, physician assistant, nurse practitioner or physician. (15/0/0/0)

EMTL 2641 Paramedic I **5 credits**
Upon completion of this course the student will be able to integrate a comprehensive knowledge of the EMS System, safety/well-being of the paramedic, and medical/legal and ethical issues which are intended to improve the health of EMS personnel, patients and the community. The student will be able to integrate knowledge of human anatomy, physiology, pathophysiology and lifespan development in a variety of human systems. The student will learn to take a proper history, perform advanced physical assessments and communicate those findings The student will then begin to formulate a field impression and develop a treatment plan. The student will also begin to learn advance airway management techniques while focusing on respiratory emergencies. Student must have current national registry EMT certification or EMT state license and admission into the paramedicine program. Corequisites: EMTL 2651, EMTL 2661 (45/60/0/0)

EMTL 2642 Paramedic II **5 credits**
Upon completion of this course the student will be able to identify cardiac rhythms and arrhythmias, and obtain and interpret 12- lead EKGs. The student will integrate comprehensive knowledge of causes and pathophysiology into the management of adult and pediatric cardiac arrest and pre- arrest states. PALS and ACLS certification are a part of this course. The student will also formulate a field impression and implement treatment for both obstetric and neonatal patients including neonatal resuscitation.

Prerequisites: EMTL 2641 AND EMTL 2651 AND EMTL 2661 Corequisites: EMTL 2652, EMTL 2662 (45/60/0/0)

EMTL 2643 Paramedic III 5 credits
Upon completion of this course the student will be able to formulate a field impression and implement a treatment plan including pharmacology interventions, EKG interpretation and airway interventions as appropriate for medical diseases involving neurology, cardiac, respiratory, endocrine, abdominal, gynecology, immunology, hematology, behavioral, toxicology, renal and infectious organisms. This course will also begin to discuss the principles of kinematics to enhance the patient assessment and predict the likelihood of injuries based on the patient's mechanism of injury. This course will also discuss traumatic injuries related to soft tissue, burns and injuries of the face, neck, head and spine. Students rotate through a variety of scenarios designed to help them better prepare for the patient at the paramedic skill level. Prerequisites: EMTL 2642 AND EMTL 2652 AND EMTL 2662 Corequisites: EMTL 2653, EMTL 2663 (45/60/0/0)

EMTL 2644 Paramedic IV 5 credits
Upon completion of this course, the student will be able to integrate pathophysiological principles and assessment findings to formulate a field impression and implement a treatment plan for the patient with traumatic or environmental injuries. Principles in ambulance operations, extrication, hazardous material management, crime scene, terrorism and mass casualty response will also be discussed. The student will also understand how to adjust their assessment and care for special needs patients with medical or traumatic emergencies. The student will utilize critical thinking skills and their knowledge of pathophysiology to assess, formulate an impression, prioritize and implement treatment plans for patients with multiple problems. Students rotate through a variety of increasingly complicated patient scenarios designed to help them better prepare for the patient at the paramedic skill level. Prerequisites: EMTL 2643 AND EMTL 2653 AND EMTL 2663 Corequisites: EMTL 2654, EMTL 2664 (45/60/0/0)

EMTL 2651 Paramedic Clinical Practicum I 1.5 credits
This course supports the didactic components of Paramedic I. Students rotate through a variety of clinical settings including but not limited to emergency departments, operating rooms, respiratory therapy and critical care units. There is an emphasis on gaining an understanding of the hospital and how paramedics from pre-hospital services or transfer services interact with this environment. There is also an emphasis on developing skills including patient assessment, advanced airway management, intravenous cannulation and medication administration via multiple routes and more. The student must have a current American Heart Association Basic Life Support CPR card or equivalent. Corequisites: EMTL 2641, EMTL 2661 (0/0/67.5/0)

EMTL 2652 Paramedic Clinical Practicum II 1.5 credits
Rotations through clinical settings continues with exposure to more advanced care situations assisting the student with broad exposure to understanding of the total operation of the clinical setting and their assistive role as an emergency provider. An emphasis on skills including patient assessment, airway management, endotracheal intubation, medication administration, and intravenous cannulation is practiced at a level of advanced competence above the initial Clinical Practicum I experience. The student may also begin to utilize cardiac monitoring, 12 lead acquisition, ACLS, PALS skills. The student must have a current American Heart Association Basic Life Support CPR card or equivalent. Prerequisites: EMTL 2641 AND EMTL 2651 AND EMTL 2661 Corequisites: EMTL 2642, EMTL 2662 (0/0/67.5/0)

EMTL 2653 Paramedic Clinical Practicum III 2 credits
Rotations through clinical settings continues with exposure to advanced care situations assisting the student with broad exposure to understanding of the total operation of the clinical setting and their role as an emergency provider. An emphasis on skills including patient assessment, airway management, endotracheal intubation, medication administration, intravenous cannulation, cardiac monitoring, 12 lead acquisition, ACLS, and PALS is practiced at a level of advanced competence above the initial Clinical Practicum I and II experience. The student must have a current American Heart Association Basic Life Support CPR card or equivalent. Prerequisites: EMTL 2642 AND EMTL 2652 AND EMTL 2662 Corequisites: EMTL 2643, EMTL 2663 (0/0/90/0)

EMTL 2654 Paramedic Clinical Practicum IV 2 credits
Students rotate through a variety of clinical settings including, emergency departments, Rotations through clinical settings continues with exposure to more advanced care situations assisting the student with complete understanding of the total operation of the clinical setting and their assistive role as an emergency provider. An advanced skill level emphasis on demonstration of skills including patient assessment, airway management, endotracheal intubation, medication administration, and intravenous cannulation is practiced at a level of advanced competence above the initial Clinical Practicum III experience. The student must have a current American Heart Association Basic Life Support CPR card or equivalent. Prerequisites: EMTL 2643 AND EMTL 2653 AND EMTL 2663 Corequisites: EMTL 2644, EMTL 2664 (0/0/90/0)

EMTL 2661 Paramedic Field Practicum I 1 credit
This practicum is the first in a series of five progressive practicum experiences. Each practicum session builds on the knowledge gained in previous classroom and lab sessions. Field practicum experiences will consist of ride a long for medical assistance with an ambulance service, as an observer. As the student progresses through the semester the student will start to move from observer to paramedic trainee role. During classroom and lab sessions the student will be introduced to various Advanced Life Support (ALS) skills. As the student shows satisfactory understanding of an ALS skill they will be allowed to start to perform the skill in the field. The student will be expected to build and develop knowledge of people/

patient care skills such as interacting with patients and family members, working as a team member on an ambulance, and working with other various medical personnel in the treatment of patients. The student must have a current American Heart Association Basic Life Support CPR card or equivalent. Corequisites: EMTL 2641, EMTL 2651 (0/0/45/0)

EMTL 2662 Paramedic Field Practicum II 1 credit
This practicum is the second in a series of five progressive practicum experiences. Each practicum session builds on the knowledge gained in previous classroom sessions. The eight weeks of instruction in the classroom will tie all previous teaching of skills together for advanced knowledge and mastery of the information learned to this point. The student will be able to complete the skills performed initially in Practicum I and the student will move from observer to trainee level for all Practicum I skills. The student should be able to perform these skills with very little prompting by preceptors. During classroom sessions the student will be introduced to additional Advanced Life Support (ALS) skills including Cardiac Monitoring, ACLS, PALS and12-Lead EKG Interpretation. As the student shows satisfactory understanding of an ALS skill they will be allowed to start to perform these skills in the field. The student will be expected continue to build and develop knowledge of people/patient care skills such as interacting with patients and family members, working as a team member on an ambulance, and working with other various medical personnel in the treatment of patients. The student must have a current American Heart Association Basic Life Support CPR card or equivalent. Prerequisites: EMTL 2641 AND EMTL 2651 AND EMTL 2661 Corequisites: EMTL 2642, EMTL 2652 (0/0/45/0)

EMTL 2663 Paramedic Field Practicum III 1 credit
Practicum III builds on the knowledge and experience that the student gained in Field Practicum II. This eight week session of instruction in the classroom will tie all previous teaching of skills together for advanced knowledge and mastery of the information learned to this point. The student will be able to complete the skills performed initially in Practicum I at the team member level. The student will be able to perform these skills with very little to no prompting by preceptors. Skills the student initially performed in Practicum II have moved the student completely out of the observer role and into the trainee role. In the trainee role the student will be completing ALS skills and will continue to receive advice and direction on a regular basis from a preceptor. During this cumulative practicum the student refines developed patient and people skills to demonstrate professionalism as a paramedic. The student must have a current American Heart Association Basic Life Support CPR card or equivalent. Prerequisites: EMTL 2642 AND EMTL 2652 AND EMTL 2662 Corequisites: EMTL 2643, EMTL 2653 (0/0/45/0)

EMTL 2664 Paramedic Field Practicum IV 1 credit
Practicum IV builds on the knowledge and experience the student gained in Field Practicum III. This final semester of instruction in the classroom will tie all previous teaching of skills together for advanced knowledge and mastery of the information learned to this point in the field. The student will be able to complete the skills performed initially in Practicum I at the team member level. The student will be able to perform these skills with very little to no prompting by preceptors. Skills the student initially performed in Practicum II & III have moved the student completely out of the observer role and into the trainee role. At the conclusion of this practicum the student should be able to perform all skills at a team member role. During this cumulative practicum the student refines developed patient and people skills to demonstrate professionalism as a paramedic. The student must have a current American Heart Association Basic Life Support CPR card or equivalent. Prerequisites: EMTL 2643 AND EMTL 2653 AND EMTL 2663 Corequisites: EMTL 2644, EMTL 2654 (0/0/45/0)

EMTL 2760 Paramedic Lab I 1 credit
Students rotate through a variety of scenarios designed to help them better prepare for the patient at the paramedic skill level. The stations will include, but not be limited to, advanced airway, controlling bleeding wounds and shock, IV cannulation, securing patients to a long board, splinting, and cardiac rhythm recognition at a beginning knowledge level. Corequisites: EMTL 2641, EMTL 2651, EMTL 2661 (0/30/0/0)

EMTL 2761 Paramedic Lab II 1 credit
Students rotate through a variety of scenarios designed to help them better prepare for care of the patient at the paramedic skill level. Stations will include, but not be limited to, advanced airway, controlling bleeding wounds and shock, IV cannulation, securing patients demonstrating competence of lab I knowledge level. Prerequisites: EMTL 2760 Corequisites: EMTL 2642, EMTL 2652, EMTL 2662 (0/30/0/0)

EMTL 2852 Paramedic Field Internship 4.25 credits
The capstone field internship is designed to give the student an opportunity to apply the skills and knowledge from previous didactic and classroom trainings in the field. Student mastery and competency will be demonstrated and evaluated through a series of thorough patient assessments, formulation of proper treatment plans for each situation encountered, and administration of patient care under the preceptor's guidance at the Advanced Life Support skill level. The student must have a current American Heart Association Basic Life Support CPR card or equivalent. Prerequisites: EMTL 2644 AND EMTL 2654 AND EMTL 2664 (0/0/192/0)

EMTL 2860 Paramedic Lab III 1 credit
Students rotate through a variety of scenarios designed to help them better prepare for the patient at the paramedic skill level. The stations will include, but not be limited to, advanced airway, controlling bleeding wounds and shock, IV cannulation, securing patients to a long board, splinting, and cardiac rhythm recognition demonstrating competence of lab II knowledge level mastery.

Prerequisites: EMTL 2761 Corequisites: EMTL 2643, EMTL 2653, EMTL 2663 (0/30/0/0)

EMTL 2861 Paramedic Lab IV **1 credit**
Students rotate through a variety of scenarios designed to help them better prepare for the patient at the paramedic skill level. The stations will include, but not be limited to, advanced airway, controlling bleeding wounds and shock, IV cannulation, securing patients to a long board, splinting, and cardiac rhythm recognition demonstrating competence of lab III knowledge level mastery. Prerequisites: EMTL 2860 Corequisites: EMTL 2644, EMTL 2654, EMTL 2664 (0/30/0/0)

English (ENGL)

ENGL 0900 Reading and Writing Skills **3 credits**
This course prepares students for success in college by providing opportunities to review and practice a variety of reading, writing, and critical thinking skills. Students will work with an instructor to develop an individualized education plan. The self-paced instruction of this course will also accommodate a variety of learning styles. Prerequisites: Appropriate Placement Score(s) (45/0/0/0)

ENGL 0905 Reading and Writing Skills for Workplace Communication **2 credits**
This course prepares students for success in college by providing opportunities to review and practice a variety of reading, writing, and critical thinking skills. Students will work with an instructor to develop an individualized plan of study which will also accommodate a variety of learning styles. Instruction will include texts and materials that are relevant to the students' areas of studies. Prerequisites: Appropriate Placement Score(s) (30/0/0/0)

ENGL 0955 Individualized English for Workplace Communication **1 credit**
This course provides academic support to a student who is enrolled in a Workplace Communication course. (15/0/0/0)

ENGL 0980 Individualized English **1 - 2 credits**
This course provides academic support to a student who is enrolled in any writing intensive course. (30/0/0/0)

ENGL 0990 Introduction to College Writing **3 credits**
Introduces academic writing with an emphasis on integrated reading and writing skills. The course examines common grammar topics found in composition and encompasses the parts paragraph and essay composition, including using critical thinking skills, previewing and annotating texts, crafting main ideas with support, identifying and using text patterns, using organization, drafting, and summarizing skills, and writing with specific tone for different types of audiences. This course is designed for students who may not be ready for ENGL 1010. Prerequisites: Appropriate Placement Score(s) OR (ENGL 0900 with min grade of C OR ENGL 0905 with min grade of C) (45/0/0/0)

ENGL 1010 English Composition I **3 credits**
English Composition I offers instructional practice in the techniques of effective writing. The process of planning, writing, revising, and editing essays for particular audiences and purposes and research-related skills are also emphasized. Prerequisites: (ENGL 0990 with min grade of C OR ENGL 1020 with min grade of C OR ENGL 1023 with min grade of C OR ENGL 2040 with min grade of C OR ENGL 2060 with min grade of C OR ENGL 1050 with min grade of C OR ENGL 1000 with min grade of C OR BSAD 2050 with min grade of C) (45/0/0/0)

ENGL 1020 English Composition II **3 credits**
Students will read and analyze various texts and respond with research-based argumentative essays that demonstrate information literacy, critical-reading, and source integration. A significant argument-based research project is required. Prerequisites: ENGL 1010 with min grade of C OR ENGL 2070 with min grade of C (45/0/0/0)

ENGL 1050 Workplace Communication **3 credits**
Develop and implement oral and written workplace communication skills. Students will organize and present effective presentations and interviews, send appropriate nonverbal messages, formulate effective business reports, letters, memos, electronic correspondence, plan and execute effective business meetings, and create employment documents. Prerequisites: ENGL 0900 with min grade of C OR ENGL 1000 with min grade of C OR ENGL 0905 with min grade of C OR ESLX 0885 with min grade of C OR Appropriate Placement Score(s) OR (45/0/0/0)

ENGL 2030 Creating Poetry I **3 credits**
Study of the fundamentals involved in the process of creating and developing poetry, both formal and free verse. Includes feedback in a workshop environment. Reading, writing and performance assignments. (45/0/0/0)

ENGL 2040 Creating Poetry II **3 credits**
Continuing study of the process of creating and developing poetry, both formal and free verse. Feedback in a workshop environment. Reading, writing and performance assignments. Prerequisites: ENGL 2030 (45/0/0/0)

ENGL 2050 Creating Stories I **3 credits**
Study of the fundamentals involved in the process of creating and developing stories as either fiction or creative non-fiction. Feedback in a workshop environment. Reading, writing and performance assignments. (45/0/0/0)

ENGL 2060 Creating Stories II **3 credits**
Continuing study of the process of creating and developing stories as either fiction or creative non-fiction. Feedback in a workshop environment. Reading, writing and performance assignments. (45/0/0/0)

ENGL 2070 Technical Communications I **3 credits**
Introduces both written and oral technical communications as applied in science and technology including technical library research Prerequisites: (ENGL 0990 with min grade of C OR ENGL 1020 with min grade of C OR ENGL 2023 with min grade of C OR ENGL 2040 with min grade of C OR ENGL 2060 with min grade of C OR ENGL 1050 with min grade of C OR ENGL 1000 with min grade of C OR ESLX

0885 with min grade of C OR BSAD 2050 with min grade of C) (45/0/0/0)

ENGL 2080 Technical Communications II 3 credits
Comprehensive approach to written, oral, visual, and electronic technical communications applicable to scientific and technological fields. Prerequisites: ENGL 1010 with min grade of C OR ENGL 2070 with min grade of C (45/0/0/0)

ENGL 2090 Editing and Publishing 2 credits
Students will focus on the selection, design an execution of a literary publication. Publishing ethics are also addressed. Prerequisites: ENGL 1010 with min grade of C (0/60/0/0)

ENGL 2100 Introduction to Literature 3 credits
This course offers a critical analysis of culturally diverse works of poetry, drama, and fiction. Students employ various techniques for discussing, evaluating, and writing about literature. Prerequisites: ENGL 1010 with min grade of C OR ENGL 2070 with min grade of C (45/0/0/0)

ENGL 2140 Introduction to Shakespeare 3 credits
This course offers a critical analysis of the works of poetry and drama by William Shakespeare. Students employ various techniques for discussing, evaluating, and writing about literature in order to examine the impact Shakespeare has had on the arts, language, and culture of the English-speaking world. Prerequisites: ENGL 1010 with min grade of C OR ENGL 2070 with min grade of C (45/0/0/0)

ENGL 2150 American Literature to 1865 3 credits
Critical reading and evaluation of writers of prose and poetry from the colonial period to 1865. Emphasizes such writers as Edwards, Hawthorne, Melville, Longfellow, Emerson, Thoreau, and Native American writing. Prerequisites: ENGL 1010 with min grade of C OR ENGL 2070 with min grade of C (45/0/0/0)

ENGL 2160 American Literature since 1865 3 credits
This survey of American literature will introduce students to some of the important voices as well as literary, artistic, and cultural movements in the United States. Students will develop skills to critically read, understand, and assess a variety of literary works from different historical periods, ethnic communities and genres. Prerequisites: ENGL 1010 with min grade of C OR ENGL 2070 with min grade of C (45/0/0/0)

ENGL 2170 Comic and Graphic Novels 3 credits
This course offers a critical analysis of culturally diverse works of poetry, drama, and fiction. Students imply various techniques for discussing, evaluating, and writing about literature. Prerequisites: ENGL 1010 with min grade of C (45/0/0/0)

ENGL 2190 Comparative Mythology 3 credits
Introduces students to mythological and folkloric materials from a variety of cultural traditions, including, but not limited to, Greek, Roman, Norse, Native American, Aboriginal, Chinese, Japanese, East Indian, and Arthurian and Celtic. Themes within the course structure will encompass Creation myths, gods and goddesses, the Fall of Humankind, the Heroic ideal, the Afterlife, and rites of passage. Prerequisites: ENGL 1010 with min grade of C OR ENGL 2070 with min grade of C (45/0/0/0)

ENGL 2200 British Literature to 1800 3 credits
Study and comprehensive reading in English literature from 700-1800 following its development from Beowulf to the Romantic period with emphasis on poetry and essay forms. Prerequisites: ENGL 1010 with min grade of C OR ENGL 2070 with min grade of C (45/0/0/0)

ENGL 2210 British Literature after 1800 3 credits
Study and comprehensive reading in English literature from the Romantic movement to the present day, including poetry and the essay with works by representative novelists. Prerequisites: ENGL 1010 with min grade of C OR ENGL 2070 with min grade of C (45/0/0/0)

ENGL 2730 Fiction and Cinema 3 credits
Explores the intersection of narrative literary works and cinema. Students will learn to respond to literary and cinematic works in discussion and writing, including a research essay. Prerequisites: ENGL 1010 with min grade of C OR ENGL 2070 with min grade of C (45/0/0/0)

Pre-Engineering (ENGR)

ENGR 1010 Introduction to Engineering Design 3 credits
Introduction to the engineering profession, engineering problem solving and engineering design with an emphasis on current topics. Course material will be presented using projects and group learning activities. (45/0/0/0)

ENGR 1015 Engineering Design Fabrication to Pre-Engineers 1 credit
Practical application of the engineering design process including construction and evaluation of prototypes, performance of field-related activities, and the safe and proper use of various tools and equipment. Students must receive a grade of C or better to transfer the course. (0/45/0/0)

ENGR 1020 Programming and Problem Solving 3 credits
This is a computer programming course that teaches structured programming and problem solving using computers. Consists of a sequence of programming assignments that require students to write programs to solve engineering problems. Proficiency with Windows Operating System and word processing software required. Student must receive a grade of C or better to transfer. Prerequisites: Appropriate Placement Score(s) OR (MATH 1150 with min grade of C AND MATH 1220 with min grade of C) (45/0/0/0)

ENGR 2010 Introduction to Circuits and Electronics 4 credits
Basic circuit analysis for engineers including direct and alternating currents and operational amplifiers, digital signals and circuits. Prerequisites: PHYS 2120 (45/30/0/0)

ENGR 2020 Engineering Statics 3 credits
Action of forces on engineering structures and machines. Force systems, static equilibrium of frames and machines.

Friction, center of gravity, moment of inertia, vector algebra. Prerequisites: PHYS 2110 with min grade of C AND MATH 2010 with min grade of C (45/0/0/0)

Entrepreneurship (ENTR)

ENTR 1050 Introduction to Entrepreneurship 3 credits
The student will evaluate the business skills and commitment necessary to successfully operate an entrepreneurial venture and review the challenges and rewards of entrepreneurship. The student will understand the role of entrepreneurial businesses in the United States and the impact on our national and global economy. (45/0/0/0)

ENTR 2040 Entrepreneurship Feasibility Study 3 credits
Students will assess the viability of a new venture business idea to determine if the concept is feasible for business start up and long term growth based on strengths and skills, personal, professional and financial goals. The student will identify and analyze through basic research the present climate for their business idea by completing an industry, target market and competitive analysis. The student will assess the financial needs for startup as well as their own skills, strengths and talents to launch a successful business idea. (45/0/0/0)

ENTR 2090 Entrepreneurship Business Plan 3 credits
The student will evaluate a business concept and write a sound business plan. Students will assess the strengths and weaknesses of a business concept; collect, analyze and organize market research data into a marketing plan; and prepare the financial projections for their business concept. Students will be able to identify and evaluate various resources available for funding small businesses. (45/0/0/0)

English as a Second Language (ESLX)

ESLX 0850 ESL Conversation I 3 credits
Focuses on developing intermediate communication skills through listening, vocabulary development, role playing, oral presentations, and class discussions. Prerequisites: Appropriate Placement Score(s) (45/0/0/0)

ESLX 0870 ESL Conversation II 3 credits
Focuses on developing advanced communication skills through vocabulary development, class discussions, and public speaking. Prerequisites: ESLX 0850 with min grade of C (45/0/0/0)

ESLX 0875 ESL Writing I 3 credits
Course emphasizes the fundamentals of English language writing, including composing sentences and paragraphs; identifying parts of speech; recognizing active and passive voice; building vocabulary and spelling skills; using general punctuation. Students will develop effective personal writing processes appropriate for paragraph writing to include prewriting, writing, proofing, and revising strategies. (45/0/0/0)

ESLX 0885 ESL Writing II 3 credits
Course builds English language writing skills, including paragraph and short essay development; building vocabulary and spelling skills; making a claim and supporting it with evidence; evaluating source material; and using general punctuation correctly. Students will develop effective personal writing processes appropriate for essay writing to include prewriting, writing, proofing, and revising strategies. Placement based on writing sample. Prerequisites: ESLX 0875 with min grade of C (45/0/0/0)

French (FREN)

FREN 1200 Elementary French I 4 credits
Introduction to the grammatical and conversational study of French. (60/0/0/0)

FREN 1210 Elementary French II 4 credits
Continuation of FREN 1200 with more intense concentration on verbs and conversation. Prerequisites: FREN 1200 (60/0/0/0)

Graphic Design (GCAD)

GCAD 1100 Typography 3 credits
This course is an introduction and study of the history, vocabulary, and principles of typography. Basic type identification, styles, and measurement will be discussed and practiced. The primary purpose of type as a means of communication combining readability and legibility will be reinforced. Design elements and principles will be presented in relation to designing with type. (45/0/0/0)

GCAD 1250 Drawing Logic I 3 credits
Fundamental principles of drawings and perspective based on observation and imagination. (30/30/0/0)

GCAD 1300 Design I 3 credits
Two-dimensional study of structural use of line, form, and color, including color theory. (30/30/0/0)

GCAD 1310 Cooperative Internship I 1 - 3 credits
A work study experience for students planned and supervised by the College in cooperation with employers. This cooperative experience will expand students' occupational knowledge and enhance students' employability. 2.0 GPA and permission of instructor required. (15/0/0/120)

GCAD 1450 Graphic Arts I 3 credits
A concentrated study of the design process using commercial computer applications to create graphic design images. The student will develop design principles and applications that provide a foundation for advanced graphic design course work. (30/30/0/0)

GCAD 1500 Layout and Design I 3 credits
An introductory level course using industry standard page layout software, with an emphasis toward developing expressive designs that communicate. Prerequisites: (ARTS 1300 (*may be taken concurrently*) OR GCAD 1300 (*may be taken concurrently*)) AND ((ARTS 1700 (*may be taken concurrently*) OR GCAD 1700 (*may be taken concurrently*)) (37.5/22.5/0/0)

GCAD 1600 Design II **3 credits**
A continued investigation of spatial organization based on the principles of design. Exploration of art history will accent assignments. Individual interpretations of style and intent will develop. Prerequisites: ARTS 1300 OR GCAD 1300 (30/30/0/0)

GCAD 1700 Digital Photography **3 credits**
This course is designed to introduce the student to digital photography as it relates to the graphic design industry. The student will use imaging hardware (cameras, scanners, computers, etc.), and photo manipulation software; alter, combine, create and recreate custom images to graphic design industry specifications. Class projects require specific knowledge and skill-set techniques. Group class critiques will be held to develop the student's professional level photography skills, visual aesthetic, and industry vocabulary. (30/30/0/0)

GCAD 2100 Digital Prepress **3 credits**
This course is designed to familiarize students will multi-color reproduction theory and technique. Students completing the class will have a broad overview of multi-color printing processes so that they may effectively supervise or estimate printing operations, communicate technically with vendors or buyers, and design graphic products giving full consideration to the limitations inherent in multi-color printing processes. (37.5/22.5/0/0)

GCAD 2200 Typography II **3 credits**
The course is a combination of hand-skill and digital/ synthetic media projects taking students from where the basics (Typography 1/GCAD 1100) left off; to more advanced studies in typographic solutions. Typographic lettering techniques from pen calligraphy and brush (hand/ sign) lettering through digital typesetting will be explored. Students will create solutions for both traditional page, and digital media output/layout. Prerequisites: GCAD 1100 (45/0/0/0)

GCAD 2300 Package Design **3 credits**
This course focuses on the development of three-dimensional designs, including the application of two-dimensional graphics as utilized in the corporate environment. The course stresses the use of visual and design concepts into corporate identity packaging. Prerequisites: GCAD 1500 AND GCAD 2500 (37.5/22.5/0/0)

GCAD 2450 Graphic Arts II **3 credits**
Advanced application of graphic design principles and processes, as expressed through the development of advanced projects in advertising and product design, which incorporate the use of industry-standard software. Prerequisites: ARTS 1450 OR GCAD 1450 (30/30/0/0)

GCAD 2500 Layout and Design II **3 credits**
Designed to develop proficiency in page layout and design by utilizing the latest desktop publishing software, including related work processing and graphic tools. The course emphasizes the successful completion of a publication by the student. Layout and Design II is intended to be a continuation of the work begun in Layout and Design I and concerns primarily the interaction of text forms and images into cohesive, clean designs. Prerequisites: GCAD 1500 (37.5/22.5/0/0)

GCAD 2610 Graphic Design Capstone **1 credit**
This course is the culmination of The student's design career here at Northeast Community College. There are two goals to be met in this class. The first is the gathering, choosing, refining and preparation of the students best design work compiled into a professional level portfolio presentation format. The second goal of the class is to prepare the students for presenting that portfolio in search of employment. Prerequisites: GCAD 1500 AND GCAD 2500 (7.5/22.5/0/0)

Geography (GEOG)

GEOG 1020 World Regional Geography **3 credits**
This course expands students' knowledge of the world through a study of the major global regions. It focuses on understanding regional patterns around the world, geographic processes contributing to the character and diversity of regions, and contemporary regional and global issues. (45/0/0/0)

Global Studies (GLBS)

GLBS 2900 Global Studies Capstone **3 credits**
Cumulative course that is intended to draw on previous coursework taken in the completion of a Global Studies program of study. Primary focus of the course will be on research and completion of a final project of significance that will be presented in a public format. Prerequisites: (POLS 1600 AND BSAD 2250) OR AGRI 1290 (45/0/0/0)

Health Information Management Systems (HIMS)

HIMS 1000 Introduction to Health Information Management **2 credits**
This is an introductory course into the health information management profession. An overview of healthcare delivery systems and how the HIM profession relates to healthcare delivery will be explored. This course will also cover health information technology functions and various HIM personnel specializations. (30/0/0/0)

HIMS 1010 Applied Health Informatics **2 credits**
The purpose of this course is to provide students with an overview of current health data sources, standards, and informatics systems. This course builds, through practical experience, an understanding with computerized health records that can be applied directly in the clinical setting. Design of a health informatics solution for decision support and how to answer a health informatics problem through data retrieval and analysis will be reviewed. (30/0/0/0)

HIMS 1015 Introduction to Billing **1 credit**
This course introduces fundamentals of medical insurance and billing. Emphasis is placed on the medical billing cycle to include third party payers, coding concepts, and form preparation. Upon completion, students should be able to explain the life cycle of and accurately complete a medical

insurance claim. (15/0/0/0)

HIMS 1025 Medical Office Procedures 2 credits
This course is an overview of the healthcare system and the functions of a medical office professional in the healthcare setting. It includes the study of evolution and current state of healthcare services and healthcare professionals in the workplace. The student will learn about legal and ethical issues, professionalism, communications, and common medical office procedures. (30/0/0/0)

HIMS 1110 Coding I and Lab 4 credits
This course is an introduction to ICD-10-CM/PCS Coding. International Classification of Diseases is a statistical Classification system to categorize diseases and injuries for insurance claims. Every medical record coder must understand the basic principles behind a disease classification system in order to code effectively and appropriately. This class will focus on appropriate use of the codebook and the principles of appropriate diagnosis and procedure code selection. Prerequisites: HLTH 1060 with min grade of C AND HIMS 1220 with min grade of C (45/30/0/0)

HIMS 1120 Legal and Compliance Aspects in HIM 3 credits
This course provides an in-depth review of the legal requirements regarding health records and an introduction to the health care regulatory environment. The student will learn the essential elements of legal aspects in healthcare facilities and the tools necessary to maintain HIPAA compliance. Prerequisites: HIMS 1000 with min grade of C (45/0/0/0)

HIMS 1140 Pathopharmacology 3 credits
This course combines the study of human disease processes and treatments. The etiology of diseases is described in the course with the application of diagnostic procedures and patient care. The pathology and the underlying principles of the human systems are presented in this course. Prerequisites: HLTH 1060 with min grade of C AND HIMS 1220 with min grade of C (45/0/0/0)

HIMS 1150 Professional Practice Experience I 2 credits
This course provides practical experience in a healthcare setting as well as AHIMA's virtual lab. Students report to an approved location and participate in activities related to Health Information Management. Prerequisites: HIMS 1025 with min grade of C AND HIMS 2000 with min grade of C (15/0/0/0)

HIMS 1220 Structure and Function of the Human Body 3 credits
Provides fundamental knowledge of the normal structure and functions of the cell, tissues, organs, organ systems and interrelationship among those systems. (45/0/0/0)

HIMS 2000 Medical Billing and Reimbursement 3 credits
This course will introduce policies, procedures, and laws that govern medical billing and reimbursement. A history of health insurance is presented as well as medical coding and claims processing guidelines. The reimbursement methods for clinics, hospitals, long-term care facilities, and home health agencies are also discussed. Prerequisites: HIMS 1220 with min grade of C (may be taken concurrently) AND HLTH 1060 with min grade of C (45/0/0/0)

HIMS 2015 Principles of Healthcare Insurance 3 credits
This course includes detailed reviews of Medicare, Medicaid, Third Party Insurance, Worker's Compensation, Blue Cross and Managed Care. Emphasis includes providing payers with "clean claims" and techniques to employ to minimize claims denials. Prerequisites: HIMS 1000 with min grade of C AND HIMS 1025 with min grade of C Corequisites: HIMS 2000 (45/0/0/0)

HIMS 2020 Coding II and Lab 4 credits
This course introduces the use of the Current Procedural Terminology (CPT) classification and coding guidelines for appropriate procedure code and modifier selection. The class includes a coding lab where the student will learn to code through over 100 redacted patient records. Prerequisites: HIMS 1110 with min grade of C (*may be taken concurrently*) (45/30/0/0)

HIMS 2025 Medical Coding and Compliance for Billers 3 credits
This course will demonstrate the best methods to ensure the accuracy of coding and billing for medical encounters. This course will have an emphasis on the compliance in the coding and billing completion. Prerequisites: HIMS 1015 with min grade of C (may be taken concurrently) (45/0/0/0)

HIMS 2030 Health Information Management Applications 3 credits
This course discusses the content and structure, as well as the various functions of health records. This course also addresses topics such as storage and retrieval of information, indices/registries, documentation requirements, and accreditations and licensures, as well as utilizing various medical software for topics such as the master patient index and deficiency analysis. Prerequisites: HLTH 1060 with min grade of C AND HIMS 1220 with min grade of C (45/0/0/0)

HIMS 2040 Advanced Health Informatics 3 credits
This course provides a hands-on approach to data management, systems development, and integration of informational technology. In addition, the students will examine high-level information related to the management of computer systems in a healthcare setting. Prerequisites: HIMS 1010 with min grade of C (45/0/0/0)

HIMS 2100 Quality Management and Process Improvement 3 credits
Leading and sustaining effective change efforts is a primary responsibility of leaders. This course will provide students with the tools and techniques of leading continuous quality improvement (CQI) of clinical and organizational efforts within a facility. An emphasis on how to develop the processes of in-depth investigation of various areas of internal operations will be presented. Specific focus will be on skill development associated with selecting and implementing various CQI tools. Prerequisites: HIMS 1025 with min grade of C AND HIMS 1120 with min grade of C

AND HIMS 2000 with min grade of C (45/0/0/0)

HIMS 2110 Health Information Technology Assessment 1 credit
This assessment course is designed as a review for the RHIT certification exam. Through this course, students will register for and complete the RHIT certification exam through AHIMA's early testing option. Must have permission of program director to enroll in course. (15/0/0/0)

HIMS 2120 Professional Practice Experience II 3 credits
This course is used to provide students an opportunity to practice the skills learned within the program curriculum. The course will be split into two distinct sections. Students will utilize the course as a lab course for the first six weeks and as a clinical course for the last portion of the semester. Students will gain experience in all types of health care settings. Prerequisites: HIMS 2030 with min grade of C (*may be taken concurrently*) AND HIMS 2020 with min grade of C AND OFFT 1500 (30/0/45/0)

HIMS 2125 Billing Professional Practicum Experience 3 credits
Practicum experience is hands-on hours in a medical office setting receiving hands on experience in areas of medical administration which may include but not limited to medical records, scheduling, process of payments, follow-up, professional agencies and patient communication. Prerequisites: HIMS 1000 with min grade of C AND HIMS 1025 with min grade of C (30/0/0/0)

HIMS 2130 Reimbursement Methodologies 2 credits
This course provides a detailed examination of coding systems across a continuum of health care settings. The student's comprehensive knowledge of coding, terminology, structures and functions of the human body, pathopharmacology will come into play in identifying all services, supplies and conditions described in redacted patient records. Topics include reimbursement and case mix management, revenue cycles, coding compliance requirements, charge-master maintenance, auditing processes, payment systems, and DRGs. Prerequisites: HIMS 2020 with min grade of C AND HIMS 1110 with min grade of C (30/0/0/0)

HIMS 2150 Health Information Management Leadership 1 credit
This course is used to provide students an opportunity to practice the skills learned within the program curriculum. Students apply principles for the management of health information services. This course provides a study of change, team building and leadership development related to the practice of health care. Students explore strategies for problem-solving and decision-making, strategic leadership, management and planning. Prerequisites: HIMS 2030 with min grade of C AND HIMS 2020 with min grade of C (15/0/0/0)

History (HIST)

HIST 1030 Premodern Europe 3 credits
Study of history that interprets and evaluates the contribution of civilizations from ancient times to 1600. (45/0/0/0)

HIST 1040 The History of Modern Europe 3 credits
The development of European civilization since 1600, concluding with the peace settlements and national tensions that followed World War II. (45/0/0/0)

HIST 1050 World History to 1500 CE 3 credits
A chronological study of world civilizations giving an overall view of contributions made by these civilizations from the Neolithic period. (45/0/0/0)

HIST 1060 World History since 1500 CE 3 credits
A chronological study of world civilizations giving an overall view of contributions made by these civilizations from 1715 to the present day. (45/0/0/0)

HIST 2010 American History I 3 credits
A survey of American History from the Age of Discovery through the Civil War and Reconstruction. Emphasis is on the political, economic, cultural, social, and technological issues that arise in the development of the American nation. (45/0/0/0)

HIST 2020 American History II 3 credits
A survey of American history from the end of the Civil War era to the present. Emphasis is on the political, economic, cultural, social, and technological issues that arise in America's development as a global power. (45/0/0/0)

Health Education (HLTH)

HLTH 1060 Comprehensive Medical Terminology 3 credits
This course establishes a solid foundation of prefixes, suffixes, word roots, abbreviations, medical terms, and symbols. It emphasizes understanding the medical vocabulary as it applies to the anatomy, physiology, pathology, diagnostic, and therapeutic procedures of the human body systems. (45/0/0/0)

HLTH 1120 Medication Aide 3 credits
This course is designed to prepare the student to assume the role and responsibilities of a Medication Aide working in a nursing facility. This course includes information regarding medication administration, pharmacology rules and regulations, classification of drugs, orders, storage, abbreviations, and an overview of commonly used drugs and documentation. (45/0/0/0)

HLTH 1210 Community Health Worker 3 credits
This course is designed for members of the general public who want to be trained as Community Health Workers (CHW) to conduct safe and effective outreach to vulnerable populations for medical personnel or health care organizations. CHWs will implement programs in the community that promote, maintain, and improve individual and community health. The course is designed to meet the skills necessary for community health workers in a public health organization, health care facility or other health-related agency. CPR and First Aid Certification required. (45/0/0/0)

HLTH 1220 Introduction to Health Sciences 3 credits
Experience health careers at a personal level. Explore the

essential skills necessary for success in a health career. Includes a review of the science courses needed, the healthcare industry, diseases and disorders, healthcare technology, health rules and regulations, and employability. (45/0/0/0)

HLTH 1500 Phlebotomy Technician 6 credits
This course focuses on the act of practice of blood collection as a therapeutic or diagnostic measure known as Phlebotomy. The course includes principles of proper phlebotomy technique, specimen processing, patient care, maintenance, and use of equipment, record keeping, basic principles of anatomy and physiology, disease process, therapeutic communication, hazardous materials management, and patient assessment. (75/45/0/0)

HLTH 1710 First Aid 2 credits
Study and application of the principles and techniques involved in the administration of first aid. Deals with prevention of accidents and emergency care and treatment including CPR that can be given until the services of a doctor are available. (30/0/0/0)

HLTH 1720 CPR Instructors Course 1 credit
CPR instructor training for those currently qualified in basic life support. Includes background materials, teaching techniques and aids to enable individuals to instruct others in the knowledge of local emergency care systems, understanding of risk factors, signals and actions for survival and recognition of indications for life support and accurate performance of same. Must have current AHA BLS CPR card. (15/0/0/0)

HLTH 1730 Pediatric Basic Life Support and First Aid 0.5 credits
Designed to prepare students to perform Cardio Pulmonary Resuscitation on infants and children, relieve a foreign body airway obstruction from infants and children as well as basic first aid. The training meets the requirements of the American Heart Association for Cardio Pulmonary Resuscitation. (7.5/0/0/0)

HLTH 2600 Basic Coronary Care 2 credits
Course designed to help health care providers become more knowledgeable about basic arrhythmia detection and treatment. (30/0/0/0)

Home Economics (HOEC)

HOEC 1050 Nutrition 3 credits
Study of the basic principles of nutrition in health and disease throughout the human life cycle. (45/0/0/0)

Horticulture and Golf Course Management (HORT)

HORT 1010 Horticulture Science 4 credits
The study of horticultural plant science concepts related to plant growth and development. Includes topics on cultural growing practices, propagation, and other metabolic processes. (60/0/0/0)

HORT 1020 Introduction to Turf Management I 2 credits
Introductory course in the care and culture of turf that provides knowledge on the principles of turf management. (30/0/0/0)

HORT 1025 Residential Turf Management 3 credits
An introduction to care and culture of residential turf that provides knowledge on the principles of proper turf management. (45/0/0/0)

HORT 1040 Introduction to Soil Science Lab 1 credit
This course will focus on "artificial" soils including turf and landscape soils, greenhouse and nursery soilless media mixes, and other urban soils. The compare and contrast of the physical, biological, and chemical processes between urban and rural soils will be taught. Corequisites: AGRI 1030 (0/45/0/0)

HORT 1050 Commercial Turf Management 3 credits
A turf course with emphasis on scientific principles of turf species adaptation in commercial settings. Corequisites: HORT 1060 (45/0/0/0)

HORT 1060 Commercial Turf Management Lab 1 credit
Lab for HORT 1050, including hands-on emphasis on scientific principles of turf species adaptation in landscape and recreation. Corequisites: HORT 1050 (0/45/0/0)

HORT 1070 Plant Propagation 2 credits
Principles and practices of sexual and asexual processes involved with the propagation of herbaceous and woody plants. Corequisites: HORT 1080 (30/0/0/0)

HORT 1080 Plant Propagation Lab 1 credit
Lab for HORT 1070. Includes hands-on practice to gain experience in propagating herbaceous and woody plants using various methods. Corequisites: HORT 1070 (0/45/0/0)

HORT 1090 Integrated Pest Management 2 credits
Identification of insects, plant pathogens, weeds, and nutritional disorders of horticultural crops. Pesticide selection, handling, and application will be demonstrated. (30/0/0/0)

HORT 1140 Golf Playability I 1 credit
This course is designed for the student to learn and improve the different techniques used in the golf swing and to allow the student to gain a better understanding and enjoyment of the game of golf. (7.5/22.5/0/0)

HORT 1150 Golf Playability II 1 credit
This course is designed for the student to fine tune, improve and begin to analyze their golf swing for the improvement and advancement of their individual golf game. (7.5/22.5/0/0)

HORT 1300 Cooperative Internship I 1 - 6 credits
Work-student program for in-depth instruction on the job. The college gives both related and vocational instruction before and-or during this period, including seminars directly related to the work experience. These experiences are planned and supervised by the college and employers

so that each contributes to the student's education and employability. (0/0/0/360)

HORT 2000 Landscape History and Use 3 credits
An appreciation for the development and use of the landscape, from large to small, will be discussed. Large players in landscape perceptions world-wide will be explored as well as the ways in which people historically have interacted with the landscape. (45/0/0/0)

HORT 2020 Nursery and Greenhouse Management 4 credits
Principles and practices underlying nursery and greenhouse management and production. A portion of the course will deal with the economic aspect of running a retail or wholesale business. (60/0/0/0)

HORT 2045 Landscape Management 3 credits
The principles and practices of managing a residential or commercial landscape. Includes pruning, fertility, wildlife management, water relations, pest and disease management, and overall plant health. (45/0/0/0)

HORT 2055 Landscape Design 3 credits
Introduction to the process and elements of landscape design. Includes graphic and oral presentation techniques for landscape design. (45/0/0/0)

HORT 2060 Sports Turf Management 3 credits
An in-depth study of the specialized techniques in the maintenance practices of recreational turf sites such as sports complexes and parks. Corequisites: HORT 2070 (45/0/0/0)

HORT 2070 Sports Turf Management Lab 1 credit
This lab is designed to give the students hands-on experience in the specialized and complex maintenance practices of recreational turf sites such as golf courses, sports complexes and parks. Corequisites: HORT 2060 (0/45/0/0)

HORT 2080 Woody Plant Identification 3 credits
Identification using common and scientific names for woody plant species frequently found in Nebraska and the Upper Great Plains. Includes the management and environmental tolerances for these shrubs and trees. (45/0/0/0)

HORT 2090 Herbaceous Perennial Identification 3 credits
Identification using common and scientific names for herbaceous perennial plant species frequently found in Nebraska and the Upper Great Plains. Includes the management and environmental tolerances for these ornamental landscape plants. (45/0/0/0)

HORT 2100 Golf Course Management 3 credits
Students will learn basic construction, renovation, and restoration techniques for golf courses, sports fields, parks and landscaped areas. (45/0/0/0)

HORT 2140 Hydroponic Growing Systems 2 credits
A course in hydroponic plant production that provides the practical skills and scientific concepts of growing plants in soilless growing media. A focus on food production will allow students to design, build, and experiment with hydroponic systems. (30/0/0/0)

HORT 2150 Annual Flower Identification, Production and Care 2 credits
An introductory course in annual flower growing that provides the practical skills and scientific concepts involved in identification, production, and care of annual plants. (30/0/0/0)

HORT 2160 Vegetable Gardening and Farm Production 3 credits
A course in vegetable gardening that provides the practical skills and scientific concepts involved in vegetable production. Includes planning, preparation, seasonal care, and post-harvest handling and storage. Regenerative agricultural practices on soil health, water management, and plant fertility. (45/0/0/0)

HORT 2165 Value-Added Diversified Marketing 3 credits
A course in the basic planning and marketing of small-scale value-added products. This includes the inclusion of farmers markets, roadside-stands, and other small retail and wholesale operations. Focus will be on products that are considered niche. (45/0/0/0)

HORT 2170 Alternative Horticulture 2 credits
An introductory course on production methods in the field of horticulture that are not considered mainstream. This course will look at existing methods of creative production and the challenges each of these may encounter. A focus will also be made on understanding how production demand follows cultural needs. (30/0/0/0)

HORT 2180 Irrigation and Equipment 3 credits
Introduction to the management of horticultural irrigation systems. Includes water requirements, water resources, application methods, types and selection of irrigation equipment, application time and rates, irrigation well principles and operation, water rights and legal aspects, costs and returns. (45/0/0/0)

HORT 2890 Horticulture Capstone Experience 1 credit
The course will provide students with an opportunity to reflect on previous coursework, and synthesize the content and merit of their program of study while strengthening their competency level to enter the workforce upon graduation. Students will improve critical thinking and communication skills through the development of professional presentations. Through a variety of examination and demonstration exercises, students will show competency in their subject areas. (15/0/0/0)

Health, Physical Education and Recreation (HPER)

HPER 1060 Soccer I 1 credit
Intercollegiate competition. Designed to give the student knowledge, skills, and experience in the sport of soccer. Instructor permission is required for registration in this course. (7.5/15/0/0)

HPER 1062 Soccer II **1 credit**
Intercollegiate competition. Designed to give the student knowledge, skills, and experience in the sport of soccer. Instructor permission is required for registration in this course. (7.5/15/0/0)

HPER 1070 Softball I **1 credit**
Intercollegiate competition. Designed to give the student knowledge, skills, and experience in the sport of softball. Instructor permission is required for registration in this course. (7.5/15/0/0)

HPER 1072 Softball II **1 credit**
Intercollegiate competition. Designed to give the student knowledge, skills, and experience in the sport of softball. Instructor permission is required for registration in this course. (7.5/15/0/0)

HPER 1090 Baseball I **1 credit**
Intercollegiate competition. Designed to give the student knowledge, skills, and experience in the sport of baseball. Instructor permission is required for registration in this course. (7.5/15/0/0)

HPER 1092 Baseball II **1 credit**
Intercollegiate competition. Designed to give the student knowledge, skills, and experience in the sport of baseball. Instructor permission is required for registration in this course. (7.5/15/0/0)

HPER 1100 Basketball I **1 credit**
Intercollegiate competition. Designed to give the student advanced knowledge, skills, and experience in the sport of basketball. Instructor permission is required for this course. (7.5/15/0/0)

HPER 1102 Basketball II **1 credit**
Intercollegiate competition. Designed to give the student advanced knowledge, skills, and experience in the sport of basketball. Instructor permission is required for registration in this course. (7.5/15/0/0)

HPER 1130 Golf I **1 credit**
Intercollegiate competition. Designed to give the student knowledge, skills, and experience in the sport of golf. Instructor permission is required for registration in this course. (7.5/15/0/0)

HPER 1132 Golf II **1 credit**
Intercollegiate competition. Designed to give the student advanced knowledge, skills, and experience in the sport of golf. Instructor permission is required for registration in this course. (7.5/15/0/0)

HPER 1150 Sports Officiating **1 credit**
Rules, interpretation and officiating of team sports. (15/0/0/0)

HPER 1160 Volleyball I **1 credit**
Intercollegiate competition. Designed to give the student knowledge, skills, and experience in the sport of volleyball. Instructor permission is required for registration in this course. (7.5/15/0/0)

HPER 1162 Volleyball II **1 credit**
Intercollegiate competition. Designed to give the student advanced knowledge, skills, and experience in the sport of volleyball. Instructor permission is required for registration in this course. (7.5/15/0/0)

HPER 1191 Spinning **1 credit**
An activity class designed to give the student knowledge, skills, and experience in the exercise of spinning. (7.5/15/0/0)

HPER 1210 Badminton **1 credit**
An introduction to the knowledge and skills utilized to participate in badminton. (7.5/15/0/0)

HPER 1240 Circuit Training **1 credit**
A fitness class designed to give the student knowledge of physical training utilizing a prescribed exercise circuit and-or stations. (7.5/15/0/0)

HPER 1245 Weight Management **1 credit**
Designed to develop an understanding of the principles for weight management. The course will focus on ways to improve the student's ability to lose weight and inches and maintain those losses. The importance of exercise, daily calorie goals, food plan, and food portions are topics that will be covered. (15/0/0/0)

HPER 1260 Golf **1 credit**
A study and practice of the fundamental skills, techniques, and rules of golf. (7.5/15/0/0)

HPER 1270 Aerobic Fitness **1 credit**
This course provides an assortment of various aerobic activities designed primarily for cardiovascular health. Includes aerobic circuit training, interval cardiovascular workouts, introduction to cardiovascular machines, as well as total body exercises. (7.5/15/0/0)

HPER 1271 Fitness for the Aging Population **2 credits**
Course designed to apply the principals necessary for providing exercise for the aging population. Course will focus on the importance of fitness as one ages, as well as a variety of exercises designed for the aging population, including cardiovascular, flexibility, balance, and strength. (30/0/0/0)

HPER 1272 Total Body Resistance Exercise TRX BOSU Training **1 credit**
Course will provide resistance workout for the entry level exerciser through the advanced athlete. (7.5/15/0/0)

HPER 1290 Racquetball **1 credit**
An activity designed to give students knowledge, skills, and experience in the sport of racquetball. (7.5/15/0/0)

HPER 1320 Water Aerobic Fitness **1 credit**
A study and practice by which a person may achieve and/or maintain a high level of fitness through a water aerobics program. Increasing the student's knowledge of the components of fitness and having them gain an appreciation of water aerobics will be emphasized. (7.5/15/0/0)

HPER 1325 Introduction to Yoga **1 credit**
An introduction to all types of yoga including: Hatha, Jnana,

Karma, and Bakti with an emphasis on Raja. The student will gain physical flexibility, respiration control and control of the mind functions. Anatomy and physiology will be covered in respect to function of the nervous system as it affects all of the bodily functions. Students may register twice for this class. (7.5/15/0/0)

HPER 1326 Introduction to Pilates 1 credit
A study of the eight principles of Pilates including body awareness, posture, and muscle imbalances. Students may register twice for this class. (7.5/15/0/0)

HPER 1350 Recreational Games 2 credits
An activity class designed to enhance the knowledge, skills, and active participation in lifelong recreational activities. Numerous outdoor and indoor activities are offered such as tennis, frisbee golf, bocce, sand volleyball, power walking, badminton, table tennis, etc. (30/0/0/0)

HPER 1360 Body Conditioning 1 credit
Introduction to fitness and body conditioning as related to optimal healthy living. (7.5/15/0/0)

HPER 1510 Introduction to Health, Physical Education, and Recreation 3 credits
Designed for the Health, Physical Education, and Recreation student. Orientation to Health, Physical Education, and Recreation history, principles, objectives, careers, and a survey of the scope of activities in the Health, Physical Education, and Recreation curriculum. (45/0/0/0)

HPER 1520 Nutrition for Fitness and Sport 3 credits
The purpose of this course is to investigate and clarify the relationship between nutrition and human performance. The focus will include a study of the following areas: nutrition, energy value of food, metabolic rates, calorimetry, body composition, aerobic and anaerobic power, physiological conditioning and nutritional requirements. (45/0/0/0)

HPER 1521 Nutrition for the Aging Population 1 credit
Course will provide content on proper nutritional planning, food shopping, food safety, and energy balance for older adults, as well as practical tips that can be used to connect with senior citizens as it relates to a healthy diet. (15/0/0/0)

HPER 1550 Lifetime Wellness 3 credits
Designed to develop an understanding of the principles necessary for promoting lifetime wellness. Focus will be on a holistic approach to recognizing and evaluating oneself in order to improve one's own quality of life. Includes a study of critical issues which affect the individual, such as stress, nutrition, weight control, physical fitness, infectious and noninfectious diseases, alcohol and drug abuse, environmental health, and human sexuality. (45/0/0/0)

HPER 1700 Introduction to Athletic Training 3 credits
An introductory course outlining all aspects of the profession of athletic training. Current issues in athletic training are covered, as well as the history and development of the profession. Injury recognition, working with different levels of athletes, and global issues facing athletic trainers will be presented. (45/0/0/0)

HPER 2060 Weight Training 1 credit
Weight training and body conditioning with emphasis on power and Olympic weight lifting in a practical awareness participation class. (7.5/15/0/0)

HPER 2110 Individual and Dual Sports 3 credits
Introduction to the fundamental theories, techniques, and methods of teaching individual and dual sports. (45/0/0/0)

HPER 2160 Team Sports 3 credits
Introduction to the fundamental theories, techniques, and methods of teaching team sports. (45/0/0/0)

HPER 2200 First Aid and CPR for the Healthcare Provider 3 credits
Study and application of the principles and techniques involved in the administration of first aid and basic life support for healthcare providers. This course focuses on the students who provide healthcare to patients in a wide variety of settings including in-hospital and out of hospital settings. The course deals with prevention of accidents, emergency first aid care and treatment including CPR and AED for the healthcare provider that can be given until the services of emergency personnel are available. This course meets all standards for the American Heart Association Heartsaver First Aid and the BLS for Healthcare Providers CPR and AED training courses. (45/0/0/0)

HPER 2210 Introduction to Exercise Science 4 credits
Introductory course designed to develop an understanding of the principles necessary for a degree in Exercise Science. Topics include components of fitness, general nutrition principles including weight management, functional anatomy and physiology, biomechanics, pre-exercise screening, assessment of physical fitness, exercise programming components, flexibility assessment and programming, and cardiovascular fitness programming. Prerequisites: HPER 1550 (*may be taken concurrently*) (45/30/0/0)

HPER 2300 Stress Management 3 credits
Course designed to combine theory with practical applications necessary to manage stress and promote wellness. Topics include but are not limited to, communicating, thinking, feeling, playing and working, self-responsibility, breathing, sensing, eating, moving, and finding meaning. (45/0/0/0)

HPER 2310 Community Health 3 credits
This course is designed to develop an understanding of the principles of community health. Knowledge and techniques used in identifying and solving community health problems are emphasized. (45/0/0/0)

HPER 2400 Care and Prevention of Athletic Injuries 3 credits
Survey of common athletic injuries, including prevention, evaluation, care, rehabilitation, training methods, taping methods, reconditioning, and other therapeutic modalities. (45/0/0/0)

HPER 2410 Advanced Exercise Science 4 credits
Advanced course designed to apply the principles

necessary for a career in Exercise Science. Topics include components of fitness, general nutrition principles including weight management, functional anatomy and physiology, biomechanics, pre-exercise screening, assessment of physical fitness, exercise programming components, flexibility assessment and programming, and cardiovascular fitness programming. Prerequisites: HPER 2210 OR PRTR 2210 AND BIOS 2250 (*may be taken concurrently*) AND HPER 1520 (*may be taken concurrently*) OR HOEC 1050 (*may be taken concurrently*) (30/60/0/0)

HPER 2510 Physical Education in the Elementary School **3 credits**
Designed for the prospective elementary teacher and the physical education student. Study of the curriculum and teaching of physical education to the elementary grades in relation to the needs and characteristics of the elementary school age child at various grade levels. (45/0/0/0)

Humanities (HUMS)

HUMS 1100 Introduction to Humanities **3 credits**
This is a survey course that focuses on disciplines within the Humanities including art, music, theatre, film, dance, literature, architecture, history, philosophy, and other cultural expressions. Students will examine the unfolding of global humanistic traditions in order to reawaken their sense of wonder and curiosity about the meaning of life. The course gives the students criteria from which to evaluate their own times and situations and in addition, enriches students' historical perspectives. It shows how various disciplines intersect, influence and are influenced by their times. (45/0/0/0)

Human Services (HUSR)

HUSR 1010 Introduction to Human Services and Counseling **3 credits**
An introduction to the field of human services and counseling which includes the study and practice of theories, principles, and techniques of counseling. Helping skills that are discussed and practiced include at least four of the following: active listening, reflective feedback, summarizing, self-disclosing, displaying empathy, confronting, establishing rapport, and communicating at the client's comprehension level. The historical and current theories of counseling are also explored. Counseling theories include at least 4 of the following: Psychoanalytic, Adlerian, Cognitive-Behavioral, Existential, Person-Centered, Gestalt, Behavior, Feminist, Reality, Solution Focused Brief Therapy (SFBT), and Narrative. (45/0/0/0)

HUSR 1220 Group Theory and Practice **3 credits**
The study and practice of group theories, processes, dynamic, techniques, methods and group counseling and facilitation. Prerequisites: HUSR 1010 with min grade of C (45/0/0/0)

HUSR 1230 Multicultural Counseling **2 credits**
This course focuses on cultural, social, lifestyle, spiritual, and economic factors as they affect diverse groups in counseling including but not limited to African Americans, Native Americans, Hispanics, and others. Attention is paid to multicultural barriers and to the impact of the counselor's own worldview on the counseling relationship. Adaptation of counseling techniques and theories will be examined in relation to multicultural counseling. Prerequisites: HUSR 1010 with min grade of C (30/0/0/0)

HUSR 2010 Introduction to Case Management and Professional Ethics **3 credits**
This course will introduce students to professional ethics and issues, including standards of conduct and professional behavior expectations for counselors. Ethical standards to be studied may include confidentiality of client information and records, counselor values and conflicts, non-discrimination, responsibilities and integrity, competence, moral standards, client welfare, legal issues, client relationships and boundaries, inter-professional relationships, remuneration and societal obligations. It will also introduce students to the casework skills of human services and substance use counseling. These include, but are not limited to: the process of collecting client data for making decisions regarding alcohol/drug disorder diagnosis, alcohol/drug assessment summary writing, level of care placement, treatment and referral assessment, interview techniques, treatment decisions and prioritizing client treatment goals, case presentation and reviews, collaborative team (multi-service) assessment and planning, confidentiality, referral and follow-up, treatment plans, progress notes, and discharge plans. Basic information on two or more objective screening instruments for alcohol/drug disorders, such as the Michigan Alcoholism Screening Test (MAST), Substance Abuse Subtle Screening Inventory (SASSI), Addiction Severity Index (ASI), Comprehensive Adolescent Severity Inventory (CASI), and others are studied. Prerequisites: HUSR 1010 with min grade of C (45/0/0/0)

HUSR 2020 Medical and Psycho-Social Aspects of Chemical Use **3 credits**
This course is the study of physiological, psychological, and sociological aspects of chemical use, dependence, and abuse. Classification and basic pharmacology of drugs and their physiological effects; etiological, behavioral, cultural, demographic, and spiritual aspects and belief systems concerning alcohol/drug use; processes of dependence and addiction; and signs, symptoms, and behavioral patterns will be discussed. (45/0/0/0)

HUSR 2030 Treatment Issues in Chemical Dependency **2 credits**
This course is designed to provide students with knowledge of treatment issues specific to chemical dependency such as denial, resistance, minimization, family dynamics, relapse, cross-addiction, co-occurring disorders, spirituality, and influences of self-help groups. It will include studying chemical dependency clinical treatment needs of individuals taking into consideration gender, culture, and lifestyle. (30/0/0/0)

HUSR 2040 Human Services Practicum **1 credit**
Under supervision, students will work at selected sites and apply acquired skills and principles studied in the

classroom. Students may register for this class two times. Prerequisites: HUSR 1010 with min grade of C (0/0/45/0)

Heating, Ventilation, Air Conditioning (HVAC)

HVAC 1010 Electricity for HVAC 2.5 credits
Introduction to electrical theory, electrical components, and DC and AC circuits. Solid state devices and their function in a circuit are covered along with circuit analysis, circuit diagrams, and the proper use of basic test equipment. (37.5/0/0/0)

HVAC 1020 Electricity for HVAC Lab 4 credits
Practical application in the use of electrical meters, wiring of simple electric circuits, analyzing the different components in a HVAC system and interpreting simple wiring diagrams. Corequisites: HVAC 1010 (22.5/112.5/0/0)

HVAC 1110 Basic Refrigeration Principles 2.5 credits
Laws of physics and principles of chemistry that apply to refrigeration and air conditioning. Also, a study of refrigerators and freezers. (37.5/0/0/0)

HVAC 1120 Basic Refrigeration Principles Lab 4 credits
Practical application in the process of brazing-soldering different metals, study of different hand tools and specialty equipment used on HVAC-R systems and proper installation of a basic refrigeration system. Corequisites: HVAC 1110 (22.5/112.5/0/0)

HVAC 1130 Sheet Metal 3 credits
Function, proper use, and safety of sheet metal equipment. Covers pattern drafting and fabrication of ducts and fittings for skill development and for use in projects, including ductwork sizing. (45/0/0/0)

HVAC 1210 HVAC Controls 3 credits
Introduction to electrical energy, electrical symbols, and wiring diagrams, including operation of relays, starters, and protectors. Prerequisites: HVAC 1010 (45/0/0/0)

HVAC 1220 HVAC Controls Lab 4 credits
Practical applications of motors and motor starting controls, repair of different HVAC controls and troubleshooting and reading of wiring diagrams to solve system problems. Prerequisites: HVAC 1020 Corequisites: HVAC 1210 (22.5/112.5/0/0)

HVAC 1230 HVAC-R Refrigerant Certification Training 1 credit
This is a preparatory class for air conditioning and refrigeration service personnel to become certified in proper refrigerant handling techniques. This class covers section 608 Clean Air Act, stationary equipment, that includes small appliances, home and commercial air conditioners, refrigeration, and large tonnage chillers. This class is for all personnel who maintain, service, repair, or dispose of appliances that contain regulated refrigerants. (15/0/0/0)

HVAC 1250 Residential Air Conditioning 3 credits
Study of the construction, installation, and service of residential air conditioners including tools and service instruments used in residential refrigeration. Prerequisites: HVAC 1110 (45/0/0/0)

HVAC 1260 Residential Air Conditioning Lab 4 credits
This lab will provide experience in the operation and troubleshooting of room air conditioners along with the study of the construction, installation, and troubleshooting of residential air conditioning system. Prerequisites: HVAC 1220 (*may be taken concurrently*) Corequisites: HVAC 1250 (22.5/112.5/0/0)

HVAC 1300 Cooperative Internship I 1 - 6 credits
Work-study program for in-depth instruction on the job. The college gives both related and vocational instruction before and-or during this period, including seminars directly related to the work experience. These experiences are planned and supervised by the college and the employers so that each contributes to the student's education and employability. First year completion of the Heating Ventilation and Air Conditioning program or permission of instructor. (0/0/0/360)

HVAC 2010 Heating Technology 2.5 credits
A study of the procedures used in servicing heating systems including gas fired and electric furnaces. Covers the combustion process in conventional and high efficiency heating appliances for residential and light commercial applications. Prerequisites: HVAC 1210 AND HVAC 1220 AND HVAC 1250 AND HVAC 1260 (37.5/0/0/0)

HVAC 2015 HVAC-R Refrigerant Certification Training 1 credit
This is a preparatory class for Air Conditioning and Refrigeration service personnel to become certified in proper refrigerant handling techniques. This class covers section 608 Clean Air Act, stationary equipment, that includes small appliances, home and commercial air conditioners, refrigeration, and large tonnage chillers. This class is for all personnel who maintain, service, repair, or dispose of appliances that contain regulated refrigerants. If prerequisite is not met must have permission of instructor to enroll. Prerequisites: HVAC 1110 (15/0/0/0)

HVAC 2020 Heating Technology Lab 4 credits
Practical application of residential heating systems, including installation and service procedures for gas combustion and electric furnaces using variable speed technology. Prerequisites: HVAC 1210 AND HVAC 1220 AND HVAC 1250 AND HVAC 1260 Corequisites: HVAC 2010 (22.5/112.5/0/0)

HVAC 2110 Commercial Refrigeration 3 credits
Refrigeration applied to commercial fields, including compressors, condensers, receivers, and evaporators, and application and construction of refrigerant controls, water valves, refrigerant oils, and special equipment. Prerequisites: HVAC 1110 (45/0/0/0)

HVAC 2120 Commercial Refrigeration Lab 4 credits
Practical application of HVAC compressors, condensers, receivers, evaporators and construction of refrigerant

controls, water valve, refrigerant oils, and special equipment required in service procedures. Prerequisites: HVAC 1120 Corequisites: HVAC 2110 (22.5/112.5/0/0)

HVAC 2210 Heat Pump Technology 2.5 credits
This course covers the principles of air source and water source heat pumps. Emphasis is placed on safety, modes of operation, defrost systems, refrigerant charging, and system performance. Upon completion, students should be able to understand and analyze system performance and perform routine service procedures. Prerequisites: HVAC 1210 and HVAC 1220 and HVAC 1250 and HVAC 1260 (37.5/0/0/0)

HVAC 2220 Heat Pump Technology Lab 4 credits
This course provides instruction on the principles, application, and operation of residential air source and water source heat pumps. Topics include: installation procedures, servicing procedures, electrical components, geothermal ground source energy supplies, dual fuel, troubleshooting, valves and safety. Prerequisites: HVAC 1210 AND HVAC 1220 AND HVAC 1250 AND HVAC 1260 Corequisites: HVAC 2210 (22.5/112.5/0/0)

HVAC 2230 Physics of Building Science 2 credits
Study of basic principles of building science to assess energy efficiency in a home while also monitoring conditions that have a direct impact on human health and safety. Students will learn how to perform calculations to meet ventilation requirements and determine thermal efficiency. Students will also learn how to use diagnostic equipment to ensure systems are functioning together correctly to maximize home performance, comfort, energy efficiency, safety, and durability. (30/0/0/0)

HVAC 2310 Commercial Air Conditioning and Refrigeration 3 credits
Refrigeration pipe sizing, installation and soldering for a complete system layout with the necessary calculations. Various aspects of employer-employee relationships and responsibilities. Prerequisites: HVAC 2110 (*may be taken concurrently*) (45/0/0/0)

HVAC 2320 Commercial Air Conditioning and Refrigeration Lab 4 credits
Practical application of the construction, installation, and service for commercial refrigeration and air conditioning coolers, ice machines, and piping layouts. Prerequisites: HVAC 2220 Corequisites: HVAC 2310 (22.5/112.5/0/0)

Machining and Manufacturing Automation (INDT)

INDT 1015 Introduction to Manufacturing 2 credits
This is a broad exploratory course that introduces students to 21st century manufacturing concepts. The course is designed to provide instruction in the commonalties of theory and skills associated with production basics in a variety of branches of the manufacturing industry. A strong sense of personal effectiveness and responsibility, team work, communication, and respect is emphasized. Shop floor etiquette, workplace cleanliness, safety and health, and common powered and non-powered hand tools will be covered. Students will further investigate career pathways and job searching techniques in relation to area employers. (30/0/0/0)

INDT 1025 Introduction to Industrial Safety 2 credits
This course covers OSHA policies, procedures, and standards, as well as general safety and health principles. Topics include the scope and application of the OSHA general industry standards. Special emphasis is placed on those topics that are required in the 10- hour program as well as on those that are the most hazardous, using OSHA standards as a guide. In addition, students will complete the AHA Heartsaver critical skills needed to respond to and manage a first aid, choking, or sudden cardiac arrest emergency through CPR and AED usage. (30/0/0/0)

INDT 1030 Boiler Fundamentals I 2 credits
This course provides familiarization with and general operations of boilers. (30/0/0/0)

INDT 1035 Basic Boiler Fundamentals 1 credit
This course provides familiarization with and general operations of boilers. (15/0/0/0)

INDT 1040 Industrial Process Dynamics 2 credits
This course is an introduction to the basic principles of industrial physics that are frequently encountered in the work place. Principles of mass, velocity, flow, temperature, pressure, heat, gases, liquids, solids, fluid systems, energy, work, power, torque and heat energy transfer are covered. (30/0/0/0)

INDT 1055 Print Reading for the Industrial Trades 2 credits
This introductory course will instruct students in the fundamentals of blueprint reading, piping and instrumentation diagrams (P&ID's) and basic electrical diagrams. The course introduces students to reading and interpreting machine shop symbols, welding blueprints, and working drawings used in the industrial trades. The course focuses on dimension, shape, fabrication, and assembly. (30/0/0/0)

INDT 1060 Machinist Fundamentals I 3 credits
Basic machinist theory required for simple lathe, milling machine, and grinding operations. Classroom theory on measuring and laying out metals, sawing, filing, drilling, reaming, threading, and grinding. (45/0/0/0)

INDT 1065 Manufacturing Technologies and Measurement 2 credits
This course will enable the student to apply basic measurement skills, system calibration skills, measurement system analysis, and become familiar with the various tools utilized in the manufacturing industry. Students will study manufacturing processes and properties of materials, the behavior of materials, and the advantages and disadvantages of types of materials in an industrial setting. (30/0/0/0)

INDT 1070 Introduction to Welding 3 credits
Introduction to arc stick and oxyacetylene welding,

including study of arc filler metals, application, classification, and related arc processes. Theory of arc flat, vertical, horizontal and overhead welding positions and oxyacetylene cutting, brazing and fusion welding on pipe and mild steel. Corequisites: INDT 1075 (45/0/0/0)

INDT 1075 Welding Fundamentals Lab 2 credits
Lab experience for INDT 1070. Extensive practice in arc welding on ferrous metals in all welding positions. Samples are prepared and inspected. Documentation via weld symbols is required. Safe use of oxy-acetylene torch will be practiced. Corequisites: INDT 1070 (0/90/0/0)

INDT 1080 Precision Measurement 2 credits
The study of graduated measurement as it applies to manufacturing. Applications of instruments to determine size, distance, temperature, time, flow, moisture, and pressure. (30/0/0/0)

INDT 1085 Industrial Maintenance Fundamentals 3 credits
This course covers the introductory principles of operating and maintaining most types of equipment found in an industrial environment. Providing a sound foundation of basic knowledge, the course begins with a general introduction to hand tools, fasteners and basic mechanical principles-progressing through belt and chain drives, couplings and basic mechanical drive alignment. Emphasis will be placed on providing the technician with a thorough grounding in industrial mechanics and maintenance. (45/0/0/0)

INDT 1090 Introductory Machining 0.5 credits
This course introduces non-machinists to machining operations in the use of lathes, milling, surface grinding, cutting, drilling, and tapping. (7.5/0/0/0)

INDT 1095 Introductory Machining Lab 1 credit
This course exposes non-machinists to the procedures and hands-on use of lathes, milling, surface grinding, cutting, drilling, and tapping. Corequisites: INDT 1090 (0/45/0/0)

INDT 1140 Metrology 2 credits
Studies the principles of measurement and calibration as applicable to quality assurance and quality control. Students will gain knowledge in determining appropriate levels of accuracy for inspection, understand datum identification, and gain skills in the interpretation of GT&D. (30/0/0/0)

INDT 1150 Machining Fundamentals 2 credits
This course provides a fundamental understanding of the concepts and applications of horizontal and vertical band saws, vertical knee mills, manual lathers, grinders/abrasives, and drill presses. Corequisites: INDT 1160 (30/0/0/0)

INDT 1160 Machining Fundamentals Lab 2 credits
Practical application of horizontal and vertical band saws, vertical knee mills, manual lathers, grinders/abrasives, and drill presses. Corequisites: INDT 1150 (0/90/0/0)

INDT 1170 Introduction to Total Quality Management 2 credits
This course introduces students to the concepts, tools, and techniques used in the management and measurement of quality, productivity, and competitiveness in an industrial environment. The course not only introduces students to the concepts of quality assurance and quality control, but also connects leadership, supplier-customer relationships, employee engagement, data collection and analysis, productivity, statistical process control, and other topics to quality and customer satisfaction. Students gain practical experience in decision-making and basic troubleshooting techniques in relation to quality. (30/0/0/0)

INDT 1180 Computerized Manufacturing Technologies Theory 1 credit
This course introduces students to the high-tech, innovative nature of modern manufacturing by exposing students to the fundamentals of computerized manufacturing equipment. Students will gain a basic understanding of CNC equipment operation, tooling, and introductory programming. Students will further be introduced to robotics and its use for materials handling and assembly operations. Prerequisites: INDT 1150 Corequisites: INDT 1190 (15/0/0/0)

INDT 1190 Computerized Manufacturing Technologies Lab 1 credit
This hands-on course provides training in the setup, operation, and basic programming of computer numerical control (CNC) machines and robotic systems. Students will apply knowledge in tool selection, using G codes to program the equipment, and establish speed and feed rates for differing applications and materials. Students will further be introduced to the functionality, operation, and troubleshooting of robotic systems. Prerequisites: INDT 1160 Corequisites: INDT 1180 (0/45/0/0)

INDT 1200 Fabrication Fundamentals Lab 1 credit
The course introduces basic metal fabrication principles and practices. Students gain practical experience in the identification, maintenance, setup, and use of precision measuring tools, fasteners, hand tools, power tools, as well as forming, cutting, and finishing equipment used in metal fabrication. (0/45/0/0)

INDT 1230 Manufacturing Technology Applications 1 credit
This is a lab applications course designed to instruct students in the use of advanced technology applications. This course will address the interface of CAD-CAM (computer design – computer aided manufacturing) with CNC machining (computerized numerical control machining), the applications of 4th Axis programming and machining, and robotic integration applications with CNC machines. (0/45/0/0)

INDT 2030 SMAW Pipe Welding and Fitting Theory 1 credit
Theory class to explain approach to lab objectives instructed in INDT 2040. Extensive practice in SMAW arc welding on ferrous pipe in all welding positions. Coupons are prepared and inspected. Safe use of oxy-acetylene torch will be practiced. Focus on preparation for 6G Qualification. (15/0/0/0)

INDT 2040 SMAW Pipe Welding and Fitting Lab 2 credits
Extensive practice in SMAW arc welding on ferrous pipe in all welding positions. Coupons are prepared and inspected. Safe use of oxy-acetylene torch will be practiced. Focus on preparation for 6G Qualification. Corequisites: INDT 2030 (0/90/0/0)

Information Technology (INFO)

INFO 1000 Basic Computer Applications 2 credits
An introduction to basic computer operations using personal computers operating in a Windows environment. Students learn to use the computer to create and edit word processing and spreadsheet documents and use the Internet as a resource for information. (30/0/0/0)

INFO 1010 Fundamentals of Information Technology 3 credits
Overview of the basic concepts of information technology and computer systems of all sizes, including hardware, software, and processing methods. This course includes an introduction to electronic spreadsheet, database management, presentation, and word processing software through the use of the Microsoft Office Suite. Basic keyboarding skills are essential. (45/0/0/0)

INFO 1020 Introduction to Information Technology 3 credits
This course provides an overview of information technology. Concepts to be covered include: digital evolution, social media, security, the latest technologies, computer hardware, computer software and careers. (45/0/0/0)

INFO 1100 Microcomputer Applications 3 credits
Covers the command and functions available on microcomputers including a word processor, a spreadsheet, and a database. Basic keyboarding skills are essential. (45/0/0/0)

INFO 1170 Operating Systems I 3 credits
This course provides an overview of operating systems from a network and administrative point of view. Topics include: operating system installation options, joining workgroups and domains, creating and maintaining user and group accounts and permissions, file sharing, configuring security, and configuring and installing printers. (45/0/0/0)

INFO 1420 Introduction to Programming in C# 4 credits
This course uses C# to write computer programs to run in the Microsoft Windows environment. Includes writing, testing, and debugging of programs. (45/45/0/0)

INFO 1440 Advanced Programming in C# 3 credits
This course uses C# to write computer programs to run in the Microsoft Windows environment. Includes proper design and implementation of advanced programming concepts including database CRUD functions, ADO.Net, web forms, XAML, and LINQ. Prerequisites: INFO 1420 AND INFO 2330 (45/0/0/0)

INFO 1510 Introduction of Computer Programming 3 credits
This course introduces students to the fundamentals of computer programming. Students will explore essential programming concepts such as variables, data types, control structures, functions, file handling, error handling, and object-oriented programming. Through hands-on exercises and projects, students will learn to write, test and debug programs that solve practical problems. Students will learn to design a combination of both console-based and simple graphical user interface (GUI) applications. (45/0/0/0)

INFO 1600 Personal Computer Systems Maintenance and Repair 3 credits
Introduction to the maintenance, upgrading, and repair of personal computer systems. This course prepares the student for taking CompTIA's A+ Core hardware certification test. Lecture and lab experience on system hardware such as mother boards and memory, hard disk drives, expansion boards, video circuits, printers, monitors, power supplies, and I/O devices. Corequisites: INFO 1610 (45/0/0/0)

INFO 1610 Personal Computer Systems Maintenance and Repair Lab 1 credit
This lab is for hands-on system hardware such as motherboards, memory, hard disk drives, expansion cards, video cards, printers, monitors, power supplies, and other I/O devices. (0/45/0/0)

INFO 1710 Web Page Development 1 credit
The Web Page Development course is intended to show students what the basic HTML code is behind a web page and how to use HTML to construct a site. Topics covered include finding and using images, linking pages, making tables, frames, javascript, navigation, backgrounds, and design elements of a website. (15/0/0/0)

INFO 1725 HTML, CSS, and JavaScript 3 credits
This course provides a working knowledge of HTML, CSS, and JavaScript to gain the perspective and skills needed to develop professional web pages. Fundamentals of HTML and CSS standards, components and processes of web applications, and how JavaScript integrates into the web development process are included. Students will create web pages, learn how to use Javascript to enhance the web pages, and learn how to provide pages for mobile devices. (45/0/0/0)

INFO 1750 Infrastructure Management 3 credits
This course is designed to test the knowledge from an information technology infrastructure perspective. Topics will include planning, design, implementation, and management of an IT infrastructure. Servers and networking equipment will be used to demonstrate and practice skills learned in class. Students will conduct reinforcement of protocols, troubleshooting, and other industry best practices. (45/0/0/0)

INFO 1800 Microcomputer Applications II 3 credits
Covers more advanced features and switches utilized in word processing, spreadsheet, database, and email applications. Skills acquired will include customizing toolbars and menus, integrating applications, and automating tasks. Prerequisites: INFO 1100 (45/0/0/0)

INFO 1850 Operating Systems II **3 credits**
This course provides students with the skills to acquire advanced knowledge in each of the stand-alone Microsoft Operating Systems and experience with the Linux and MAC operating systems. Topics include: network connectivity, installation, command line interface, registry editing, troubleshooting, security, recovery, and file systems. Prerequisites: INFO 1170 (45/0/0/0)

INFO 2020 Systems Analysis and Design **3 credits**
Involves the study of the Systems Development Life Cycle. Including study of present system, designing a more optimum system, system development, implementation, and testing as well as creating systems documentation. Students will also prepare and present a project briefing. Prerequisites: INFO 1440 (45/0/0/0)

INFO 2040 Project Management **3 credits**
This course examines the organization, planning, and controlling of projects and provides practical knowledge on managing project scope, schedule, and resources as they relates to Information Technology. Topics include project life cycle, work breakdown structure and Gantt charts, network diagrams, scheduling techniques, and resource allocation decisions. Concepts are applied through team projects and tutorials using project management software. (45/0/0/0)

INFO 2110 Access Database Applications **3 credits**
A hands-on introduction to microcomputer database applications. Topics include: database creation, maintenance, data rearrangement, search techniques, indexing, variables, arithmetic, data fields, reports, control breaks, labels, and multiple files. Basic keyboarding skills are essential. (45/0/0/0)

INFO 2220 Web Page Development for Graphics **3 credits**
This course covers the use of graphics, animations, and multimedia in webpage design and production. Fundamentals of graphics production, layout design principles, animations, and the development principles of multimedia are included. A final project will incorporate graphics and multimedia. (30/45/0/0)

INFO 2230 Web Page Development **3 credits**
This course covers the use of graphics, animations, and multimedia in webpage design and production. Fundamentals of graphic production, layout design principles, animations, and the development principles of multimedia are included. A final project will incorporate graphics and multimedia. (45/0/0/0)

INFO 2250 Web Development using HTML and CSS **3 credits**
This course provides a working knowledge of HTML (Hypertext Markup Language) and CSS (Cascading Style Sheets) to gain the essential concepts and skills needed to develop professional web pages. Fundamentals of HTML and CSS standards, the latest approaches to page layout, and Responsive Web Design are included. Students will create web pages and learn how to use HTML and CSS to provide a website with responsive web design. (45/0/0/0)

INFO 2330 Database Concepts, Design and Application **4 credits**
A study of database theory, design and management through application, development and implementation. Topics include: Database planning and organization, common database models, normalization, the total DBMS concept, logical and physical model design, program database strategies control and recovery, security and integrity, query application, and advanced database topics. Emphasis is placed on application assignments using SQL that encompass topics and concepts presented in the course. (45/45/0/0)

INFO 2400 Advanced Web Programming **4 credits**
Participants will create dynamic web pages, services, and applications using a variety of software tools. Emphasis will be placed upon proper construction and utilization of modern web application framework technologies. Students will design, write, and debug programs. Prerequisites: INFO 1420 AND INFO 1725 AND INFO 1440 (45/45/0/0)

INFO 2500 Programming in C++ **3 credits**
A study of programming in the C++ language. Topics include: data types, arithmetic, text screen I/O, data conversions, statements to implement the three basic structures of programming, preprocessor, user-defined functions, scope and classes of variables, arrays, strings, structures, unions, memory allocation, disk files, classes, inheritance, and polymorphism. Students will design, code, test, and debug programs. (45/0/0/0)

INFO 2550 Programming in JAVA **4 credits**
A study of programming in the JAVA language. Topics include fundamental data types, classes, applets, graphics, decisions, iterations, methods, objectives, input, testing and debugging, inheritance, interfaces, events, arrays, vectors, graphical user interfaces, streams, exceptions, object oriented design, algorithms, introduction to data structures, linked lists, binary search trees, multi threading, animation, and SQL for JAVA. Students will design, code, test, and debug programs utilizing both PC Windows based and AS 400 operating systems. Prerequisites: INFO 1420 OR INFO 2500 (45/45/0/0)

INFO 2610 Computer Support Technology **3 credits**
This course develops advanced troubleshooting skills to prepare the student for industry certification. Students will learn DOS commands and Windows operating system installation and configuration, along with troubleshooting and connectivity of internal and external devices that are used in today's industry. Prerequisites: INFO 1600 AND INFO 1610 (30/15/0/0)

INFO 2650 Network Servers **3 credits**
This course is an introduction to network server operating systems and their most commonly used roles, features, and services. Students will gain experience in server installation, configuration, and management. Specific areas of study include remote access, virtualization, directory services, DNS, file & print services, group policy, and DHCP. Prerequisites: INFO 1850 (45/0/0/0)

INFO 2660 Network + 3 credits
This course is an introduction into computer networking. Students will utilize TestOut's curriculum as a preparatory program to take the TestOut Network Pro and CompTIA Network+ N10-008 certifications. The concepts in this course cover how to troubleshoot, configure, and manage common network devices; basic network connectivity; understand and maintain network documentation; identify network limitations and weaknesses; and implement network security, standards, and protocols. The candidate will have a basic understanding of enterprise technologies including cloud and virtualization technologies. (45/0/0/0)

INFO 2700 Cisco Networking I 4 credits
This course is an introduction into computer networking. It uses Cisco's Networking Academy Program-CNAP curriculum and covers the first semester of the CNAP. The CNAP teaches networking basics and is intended to be a preparatory program for the Cisco Certified Network Associate-CCNA Exam. The concepts covered in this course are networking terminology and protocols, LAN basics, the OSI model layers, network cabling, network topologies, IP addressing, and basic networking standards. (45/30/0/0)

INFO 2710 Cisco Networking II 4 credits
This course is the second in a series of courses covering computer networking. It uses Cisco's Networking Academy Program-CNAP curriculum and covers the second semester of the CNAP. The CNAP teaches networking basics and is intended to be a preparatory program for the Cisco Certified Network Associate- CCNA Exam. The concepts covered in this course are introductory WAN concepts, basic router operation, router configuration, router components and IOS images, details of IP addressing, and routing protocols. Prerequisites: INFO 2700 (*may be taken concurrently*) (45/30/0/0)

INFO 2720 Principles of Information Security 3 credits
This course presents an in-depth exposure of the current risks and threats to an organization's data. Methods of auditing and safeguarding critical electronic assets will be discussed. Historical background of various types of security breaches and theoretical vulnerabilities for information security in businesses will be included in the curriculum. Corequisites: INFO 2730 (45/0/0/0)

INFO 2730 Information Security Lab 1 credit
This course allows students to apply the basics of their introductory security knowledge in a hands-on environment with detailed exercises using a computer operating system. Coverage includes scanning, operating system vulnerability analysis and resolution, firewalls, security maintenance, forensics, and more. Full versions of security software will be included with the course and training using this software will be provided. Corequisites: INFO 2720 (0/45/0/0)

INFO 2750 Cisco Networking III 4 credits
This course is the third in a series of courses covering computer networking. It uses Cisco's Networking Academy Program-CNAP curriculum and covers semester 3 of the CNAP. The CNAP teaches networking basics and is intended to be a preparatory program for the Cisco Certified Networking Associate-CCNA Exam. The concepts covered in this course are the basics of classless routing, the intermediate level routing protocols, switch configuration, LAN design, Virtual LANs, switch protocols, and wireless. Prerequisites: INFO 2710 (45/30/0/0)

INFO 2760 Cisco Networking IV 4 credits
This course is the fourth in a series of courses covering computer networking. It uses Cisco's Networking Academy Program-CNAP curriculum and covers semesters 4 of the CNAP. The CNAP teaches networking basics and is intended to be a preparatory program for the Cisco Certified Networking Associate-CCNA exam. The concepts covered in this course are IP Address scaling using NAT; and also the standards and protocols of WANs such as PPP, ISDN, and Frame Relay. Network management issues are also discussed. Prerequisites: INFO 2750 (*may be taken concurrently*) (45/30/0/0)

INFO 2770 Systems Security & Compliance 3 credits
This course will cover best practices and industry standards for deploying, managing, and maintaining both LINUX and Windows systems. The course is split into two consecutive 8-week periods one covering Windows and the other covering Linux. Students will obtain the knowledge to configure baseline security to meet federal and other mandated guidelines for each system environment. Prerequisites: INFO 1850 (45/0/0/0)

INFO 2800 CompTIA Security+Certification 1 credit
This course is the certification globally trusted to validate foundational, vendor-neutral IT security knowledge and skills. As a benchmark for best practices in IT security, this certification covers the essential principles for network security and risk management, making it an important stepping stone of an IT security career. (15/0/0/0)

INFO 2820 Internship 3 credits
Work-study program for in-depth instruction on the job. The college gives both related and vocational instruction before and-or during this period, including seminars directly related to the work experience. These experiences are planned and supervised by the college and employers so that each contributes to the student's education and employability. Prerequisites: BSAD 2050 (*may be taken concurrently*) AND INFO 1020 (*may be taken concurrently*) AND INFO 1100 (*may be taken concurrently*) AND INFO 1170 (*may be taken concurrently*) AND INFO 1420 (*may be taken concurrently*) (0/0/0/180)

Journalism (JOUR)

JOUR 1010 Introduction to Mass Media 3 credits
An introduction to the history and technology of mass media. The history of print, radio, television, recorded music and the internet will be introduced along with a study of advertising, ethics, social impact, new technologies, government regulation and the future of media. Students are also introduced to audio and video editing tools in an effort to create projects such as podcasts and music videos. (45/0/0/0)

JOUR 1150 Applied Journalism I 3 credits
Students may receive one to three hours of credit per semester as a member of the college newspaper staff, as arranged with the instructor. Prerequisites: JOUR 1200 (*may be taken concurrently*) (30/45/0/0)

JOUR 1160 Applied Journalism II 3 credits
Continuation of JOUR 1150. Students may receive one to three hours of credit per semester as a member of the college newspaper staff, as arranged with the instructor. Prerequisites: JOUR 1150 with min grade of C (30/45/0/0)

JOUR 1200 Writing for Print and Digital Media 3 credits
Course provides instruction in the various writing styles and techniques required of mass media in the digital age. Students will gain experience in writing for broadcast, print and web media. Some specific areas of focus will be Associated Press Style guidelines, writing clear, precise and accurate news and feature copy, fundamental graphic design principles, copyright issues, and use of editing and layout software. (45/0/0/0)

Learning Skills (LNSK)

LNSK 1000 Study Skills for College 1 credit
Presents techniques that foster success in academic life. Topics include learning styles; study strategies to improve reading, memory, note-taking and test-taking; time management and organization; and physical and emotional well-being. (15/0/0/0)

LNSK 1010 First Year Experience 2 credits
Successful transition to college happens by design, not accident. Increase likelihood of attaining and maintaining academic personal, and career success in this engaging and rewarding class. Presents techniques that foster success in college and in life. (30/0/0/0)

Mathematics (MATH)

MATH 0900 Prescriptive Mathematics I 1 - 2 credits
Provides a survey and review of necessary mathematics skills. Any student can take the course, for it meets two distinct needs. The course could provide arithmetic skills necessary for success in other math courses, or it could provide the student with a survey of mathematics topics of his or her interest. The course is presented on an individualized basis; an Individual Educational Plan is developed for each student. Prerequisites: Appropriate Placement Score(s) (30/0/0/0)

MATH 0910 Prescriptive Mathematics II 1 - 2 credits
This course is a continuation of MATH 0900. It provides a survey and review of mathematics skills necessary for success in another math course, or it could provide the student with a survey of mathematics topics of his or her interest. The course is presented on an individual basis; and Individual Educational Plan is developed for each student. Prerequisites: MATH 0900 (30/0/0/0)

MATH 0930 Individualized Mathematics I 1 - 2 credits
This course provides academic support to the student. The student must be enrolled in a mathematics-based course or have permission from the instructor. (30/0/0/0)

MATH 0935 Individualized Mathematics II 1 - 2 credits
This course is a continuation of MATH 0930. It provides academic support to the student. The student must be enrolled in a mathematics-based course or have permission from the instructor. Prerequisites: MATH 0930 (30/0/0/0)

MATH 0940 Pre-Algebra 3 credits
Begins to develop pre-algebra skills necessary for success in specific fields and course of study. The topics covered include numeration, measurement and geometry, ratios and proportions, percentages, signed numbers, and an introduction to algebra. Prerequisites: Appropriate Placement Score(s) (45/0/0/0)

MATH 0975 Math Literacy Support 2 credits
Math Literacy Co-Requisite examines the prerequisite topics that are needed to support student success in the Math Literacy course. Topics covered will include numeracy, proportional reasoning, algebraic reasoning, probabilistic reasoning, and quantitative reasoning in personal finance and civic life. Corequisites: MATH 1075 (30/0/0/0)

MATH 1010 Math for Elementary Teachers 3 credits
Designed for the elementary education major. Covers general development of the real number system, number systems other than base ten, set theory, introductory algebra, and elementary probability and statistics. Prerequisites: Appropriate Placement Score(s) OR MATH 1045 with min grade of C OR MATH 1075 with min grade of C OR MATH 1100 with min grade of C OR MATH 1140 with min grade of C OR MATH 1150 with min grade of C OR MATH 1200 with min grade of C OR MATH 1220 with min grade of C (45/0/0/0)

MATH 1015 Geometry for Elementary Teachers 3 credits
Designed for students in elementary education. Covers development of geometry including reasoning and proof, construction, lines, angles, polygons, area, volume, Pythagorean theorem, basic trigonometry, measurement and transformations, as well as probability and data analysis. Prerequisites: Appropriate Placement Score(s) OR MATH 1045 with min grade of C OR MATH 1075 with min grade of C OR MATH 1100 with min grade of C OR MATH 1140 with min grade of C OR MATH 1150 with min grade of C OR MATH 1200 with min grade of C OR MATH 1220 with min grade of C (45/0/0/0)

MATH 1020 Technical Mathematics I 3 credits
This course provides the math skills required in career/technical fields. The course includes a review of arithmetic operations, exponents, algebraic operations, and right triangle trigonometry with emphasis placed applications. Prerequisites: Appropriate Placement Score(s) OR MATH 0940 with min grade of C (45/0/0/0)

MATH 1025 Math for Health Care Professionals 3 credits
Designed for nursing and health care profession majors. Covers general development of skills involving computations of fractions, decimals, ratios, percents, and

basic algebra equations. Basic systems of measurement are used to calculate dosages between metric, apothecary and household systems. Basic mathematical computations are used to reconstitute medications and prepare irrigating solutions. Prerequisites: Appropriate Placement Score(s) OR MATH 0940 with min grade of C OR MATH 1045 with min grade of C OR MATH 1075 with min grade of C OR MATH 1100 with min grade of C OR MATH 1140 with min grade of C OR MATH 1150 with min grade of C OR MATH 1200 with min grade of C (45/0/0/0)

MATH 1045 Elementary Algebra 3 credits
This course begins to develop algebra skills used to simplify expressions, solve equations and inequalities, solve systems of equations, graph equations, perform operations with polynomials, factor polynomials, and simplify rational and radical expressions. Prerequisites: Appropriate Placement Score(s) OR MATH 0940 with min grade of C (45/0/0/0)

MATH 1060 Technical Mathematics II 3 credits
Continuation of MATH 1020 developing skills in algebra, geometry, and trigonometry for success in specific vocational and technical fields. Numerical methods presented in MATH 1020 are supplemented by geometric methods. Use of a scientific calculator still plays a prominent role in the course. The topics to be covered include algebraic operations and properties, equations and formulas, graphing, geometry and constructions, and trigonometry. Prerequisites: MATH 1020 (45/0/0/0)

MATH 1075 Math Literacy 4 credits
Math Literacy is a one semester course for non-math and non-science majors integrating numeracy, proportional reasoning, algebraic reasoning and functions. Students will develop conceptual and procedural tools that support the use of key mathematical concepts in a variety of contexts. Throughout the course, college success content will be integrated with mathematical topics. Credit earned does not count toward any degree, nor does it transfer. Upon successful completion of the course, students may take Foundations of Math, Statistics, or Intermediate Algebra. Prerequisites: Appropriate Placement Score(s) OR MATH 0940 with min grade of C (60/0/0/0)

MATH 1100 Topics and Ideas In Mathematics 3 credits
This course is designed to give the students a survey of mathematics topics including set theory, logic, voting methods, financial calculations and management graph theory, probability and statistics. Main emphasis will be the application of problem solving methods while studying topics. Prerequisites: Appropriate Placement Score(s) OR MATH 1045 with min grade of C OR MATH 1075 with min grade of C (45/0/0/0)

MATH 1140 Intermediate Algebra 4 credits
Development of the real numbers as a working replacement set for equations and expressions. Main emphasis is placed on algebraic operations related to polynomials, rational expressions and equations, radical expressions and equations, exponential expressions, and logarithmic expressions. Concepts of relations and functions are introduced allowing for further study in math. Prerequisites: Appropriate Placement Score(s) OR MATH 1045 with min grade of C OR MATH 1075 with min grade of C (60/0/0/0)

MATH 1150 College Algebra 3 credits
This course is the study of relations, functions and their graphs, equations and inequalities, polynomial and rational functions, exponential and logarithmic functions, systems of equations and inequalities. Prerequisites: Appropriate Placement Score(s) OR MATH 1140 with min grade of C (45/0/0/0)

MATH 1220 Trigonometry 3 credits
Study of circular and trigonometric functions, trigonometric identities, trigonometric equations, solutions of triangles, inverse trigonometric functions, graphs, complex numbers. Prerequisites: Appropriate Placement Score(s) OR MATH 1140 with min grade of C (45/0/0/0)

MATH 1600 Calculus I Analytic Geometry 5 credits
This course is a study of analytical geometry and single variable calculus. Topics includes limits, continuity, derivatives, applications of derivatives, integrals, and applications of integrals. Prerequisites: Appropriate Placement Score(s) OR (MATH 1150 with min grade of C AND MATH 1220 with min grade of C) OR MATH 1200 with min grade of C (75/0/0/0)

MATH 2010 Analytic Geometry and Calculus II 5 credits
Covers differentiation and integration of inverse trigonometric and hyperbolic functions. It also looks at techniques of integration, infinite series, select topics from analytic geometry, and polar coordinates. Prerequisites: MATH 1600 with min grade of C OR MATH 2000 with min grade of C (75/0/0/0)

MATH 2020 Analytic Geometry and Calculus III 5 credits
Covers multivariate and vector calculus, with an introduction to differential equations. Prerequisites: MATH 2010 with min grade of C (75/0/0/0)

MATH 2050 Applied Business Calculus 3 credits
A realistic approach to calculus that will have an impact on the managerial, social, or life science student presenting the fundamentals of calculus intuitively, not theoretically. Emphasis is on examples and applications. Major topics are functions, derivatives, techniques of differentiation, exponential and logarithmic functions, integration, and techniques of integration. Prerequisites: Appropriate Placement Score(s) OR MATH 1150 with min grade of C AND MATH 1220 with min grade of C OR MATH 1200 with min grade of C (45/0/0/0)

MATH 2100 Ordinary Differential Equations 3 credits
This course covers first-order and second-order methods for ordinary differential equations, separation of variables, homogeneous equations, power series methods, Laplace transforms, and linear differential equations. The course also covers matrix methods and makes use of a Computer Algebra System. Prerequisites: MATH 2010 with min grade of C (45/0/0/0)

MATH 2170 Applied Statistics 3 credits
The course is an introduction to basic probability and

statistical methods that are used in a wide variety of disciplines. Topics include descriptive statistics, probability distributions, sampling distributions, methods of statistical inference and bivariate relationships. Prerequisites: Appropriate Placement Score(s) OR MATH 1140 with min grade of C OR MATH 1150 with min grade of C OR MATH 1075 with min grade of C OR MATH 1100 with min grade of C OR MATH 1600 with min grade of C (45/0/0/0)

Music (MUSC)

MUSC 1010 Introduction to Music **3 credits**
An introduction and overview of the history of Western art music, from the middle ages to modern times. Includes the elements of music, historical style periods, major composers, and selected works. (45/0/0/0)

MUSC 1030 Improvisational Techniques I – Brass **1 credit**
Individual or group instruction in brass. Structured for the learning and performance of jazz and related styles. Students may register for this class four times. Permission of instructor required. (15/0/0/0)

MUSC 1031 Improvisational Techniques I – Guitar and Strings **1 credit**
Individual or group instruction in guitar and strings. Structured for the learning and performance of jazz and related styles. Students may register for this class four times. Permission of instructor required. (15/0/0/0)

MUSC 1032 Improvisational Techniques I – Percussion **1 credit**
Individual or group instruction in percussion. Structured for the learning and performance of jazz and related styles. Students may register for this class four times. Permission of instructor required. (15/0/0/0)

MUSC 1033 Improvisational Techniques I – Piano **1 credit**
Individual or group instruction in piano. Structured for the learning and performance of jazz and related styles. Students may register for this class four times. Permission of instructor required. (15/0/0/0)

MUSC 1034 Improvisational Techniques I – Voice **1 credit**
Individual or group instruction in voice. Structured for the learning and performance of jazz and related styles. Students may register for this class four times. Permission of instructor required. (15/0/0/0)

MUSC 1035 Improvisational Techniques I – Woodwinds **1 credit**
Individual or group instruction in woodwinds. Structured for the learning and performance of jazz and related styles. Students may register for this class four times. Permission of instructor required. (15/0/0/0)

MUSC 1040 Improvisational Techniques II – Brass **1 credit**
Continued development of improvisational skills in brass. Students may register for this class four times. Prerequisites: MUSC 1030 (15/0/0/0)

MUSC 1041 Improvisational Techniques II – Guitar and Strings **1 credit**
Continued development of improvisational skills in guitar and strings. Students may register for this class four times. Prerequisites: MUSC 1031 (15/0/0/0)

MUSC 1042 Improvisational Techniques II – Percussion **1 credit**
Continued development of improvisational skills in percussion. Students may register for this class four times. Prerequisites: MUSC 1032 (15/0/0/0)

MUSC 1043 Improvisational Techniques II – Piano **1 credit**
Continued development of improvisational skills in piano. Students may register for this class four times. Prerequisites: MUSC 1033 (15/0/0/0)

MUSC 1044 Improvisational Techniques II – Voice **1 credit**
Continued development of improvisational skills in voice. Students may register for this class four times. Prerequisites: MUSC 1034 (15/0/0/0)

MUSC 1045 Improvisational Techniques II – Woodwinds **1 credit**
Continued development of improvisational skills in woodwinds. Students may register for this class four times. Prerequisites: MUSC 1035 (15/0/0/0)

MUSC 1051 Applied Music Basics I – Brass **1 credit**
Individual instruction in brass. Structured for the beginning student. Class includes performance techniques and methods for the discipline. Students may register for this class four times. Permission of instructor required. (15/0/0/0)

MUSC 1052 Applied Music Basics I – Percussion **1 credit**
Individual instruction in percussion. Structured for the beginning student. Class includes performance techniques and methods for the discipline. Students may register for this class four times. Permission of instructor required. (15/0/0/0)

MUSC 1053 Applied Music Basics I – Piano **1 credit**
Individual instruction in piano. Structured for the beginning student. Class includes performance techniques and methods for the discipline. Students may register for this class four times. Permission of instructor required. (15/0/0/0)

MUSC 1054 Applied Music Basics I – Strings **1 credit**
Individual instruction in strings. Structured for the beginning student. Class includes performance techniques and methods for the discipline. Students may register for this class four times. Permission of instructor required. (15/0/0/0)

MUSC 1055 Applied Music Basics I – Voice **1 credit**
Individual instruction in voice. Structured for the beginning student. Class includes performance techniques

and methods for the discipline. Students may register for this class four times. Permission of instructor required. (15/0/0/0)

MUSC 1056 Applied Music Basics I – Woodwinds **1 credit**
Individual instruction in woodwinds. Structured for the beginning student. Class includes performance techniques and methods for the discipline. Students may register for this class four times. Permission of instructor required. (15/0/0/0)

MUSC 1061 Applied Music Basics II – Brass **1 credit**
A more advanced individual instruction in brass. Structured for the beginning student. Class includes fundamental performance techniques and methods for the discipline. Students may register for this class four times. Prerequisites: MUSC 1051 (15/0/0/0)

MUSC 1062 Applied Music Basics II – Percussion **1 credit**
Individual instruction in percussion. Structured for the beginning student. Class includes performance techniques and methods for the discipline. Students may register for this class four times. Prerequisites: MUSC 1052 (15/0/0/0)

MUSC 1063 Applied Music Basics II – Piano **1 credit**
Individual instruction in piano. Structured for the beginning student. Class includes performance techniques and methods for the discipline. Students may register for this class four times. Prerequisites: MUSC 1053 (15/0/0/0)

MUSC 1064 Applied Music Basics II – Strings **1 credit**
Individual instruction in strings. Structured for the beginning student. Class includes performance techniques and methods for the discipline. Students may register for this class four times. Prerequisites: MUSC 1054 (15/0/0/0)

MUSC 1065 Applied Music Basics II – Voice **1 credit**
Individual instruction in voice. Structured for the beginning student. Class includes performance techniques and methods for the discipline. Students may register for this class four times. Prerequisites: MUSC 1055 (15/0/0/0)

MUSC 1066 Applied Music Basics II – Woodwinds **1 credit**
Individual instruction in woodwinds. Structured for the beginning student. Class includes performance techniques and methods for the discipline. Students may register for this class four times. Prerequisites: MUSC 1056 (15/0/0/0)

MUSC 1070 Individual Music Lessons I – Baritone and Tuba **1 credit**
Individual instruction in baritone and tuba. Structured to meet the needs of students. Learning performance oriented. Students may register for this class four times. (15/0/0/0)

MUSC 1071 Individual Music Lessons I – Clarinet **1 credit**
Individual instruction in clarinet. Structured to meet the needs of students. Learning performance oriented. Students may register for this class four times. (15/0/0/0)

MUSC 1072 Individual Music Lessons I – Flute **1 credit**
Individual instruction in flute. Structured to meet the needs of students. Learning performance oriented. Students may register for this class four times. (15/0/0/0)

MUSC 1073 Individual Music Lessons I – French Horn **1 credit**
Individual instruction in French horn. Structured to meet the needs of students. Learning performance oriented. Students may register for this class four times. (15/0/0/0)

MUSC 1074 Individual Music Lessons I – Guitar **1 credit**
Individual instruction in guitar. Structured to meet the needs of students. Learning performance oriented. Students may register for this class four times. (15/0/0/0)

MUSC 1075 Individual Music Lessons I – Oboe and Bassoon **1 credit**
Individual instruction in oboe and bassoon. Structured to meet the needs of students. Learning performance oriented. Students may register for this class four times. (15/0/0/0)

MUSC 1076 Individual Music Lessons I – Percussion **1 credit**
Individual instruction in percussion. Structured to meet the needs of students. Learning performance oriented. Students may register for this class four times. (15/0/0/0)

MUSC 1077 Individual Music Lessons I – Piano **1 credit**
Individual instruction in piano. Structured to meet the needs of students. Learning-performance oriented. Students may register for this class four times. (15/0/0/0)

MUSC 1078 Individual Music Lessons I – Saxophone **1 credit**
Individual instruction in saxophone. Structured to meet the needs of students. Learning performance oriented. Students may register for this class four times. (15/0/0/0)

MUSC 1079 Individual Music Lessons I – Strings **1 credit**
Individual instruction in strings. Structured to meet the needs of students. Learning performance oriented. Students may register for this class four times. (15/0/0/0)

MUSC 1080 Individual Music Lessons I – Trombone **1 credit**
Individual instruction in trombone. Structured to meet the needs of students. Learning performance oriented. Students may register for this class four times. (15/0/0/0)

MUSC 1081 Individual Music Lessons I – Trumpet **1 credit**
Individual instruction in trumpet. Structured to meet the needs of students. Learning performance oriented. Students may register for this class four times. (15/0/0/0)

MUSC 1082 Individual Music Lessons I – Voice **1 credit**
Individual instruction in voice. Structured to meet the needs of students. Learning performance oriented. Students may register for this class four times. (15/0/0/0)

MUSC 1110 Individual Music Lessons II – Baritone and Tuba **1 credit**
Continued development of individual performance skills in baritone and tuba. Students may register for this class four times. Prerequisites: MUSC 1070 (15/0/0/0)

MUSC 1111 Individual Music Lessons II – Clarinet **1 credit**
Continued development of individual performance skills in clarinet. Student may register for this class four times. Prerequisites: MUSC 1071 (15/0/0/0)

MUSC 1112 Individual Music Lessons II – Flute **1 credit**
Continued development of individual performance skills in flute. Student may register for this class four times. Prerequisites: MUSC 1072 (15/0/0/0)

MUSC 1113 Individual Music Lessons II – French Horn **1 credit**
Continued development of individual performance skills in French horn. Student may register for this class four times. Prerequisites: MUSC 1073 (15/0/0/0)

MUSC 1114 Individual Music Lessons II – Guitar **1 credit**
Continued development of individual performance skills in guitar. Student may register for this class four times. Prerequisites: MUSC 1074 (15/0/0/0)

MUSC 1115 Individual Music Lessons II – Oboe and Bassoon **1 credit**
Continued development of individual performance skills in oboe and bassoon. Student may register for this class four times. Prerequisites: MUSC 1075 (15/0/0/0)

MUSC 1116 Individual Music Lessons II – Percussion **1 credit**
Continued development of individual performance skills in percussion. Student may register for this class four times. Prerequisites: MUSC 1076 (15/0/0/0)

MUSC 1117 Individual Music Lessons II – Piano **1 credit**
Continued development of individual performance skills in piano. Student may register for this class four times. Prerequisites: MUSC 1077 (15/0/0/0)

MUSC 1118 Individual Music Lessons II – Saxophone **1 credit**
Continued development of individual performance skills in saxophone. Student may register for this class four times. Prerequisites: MUSC 1078 (15/0/0/0)

MUSC 1119 Individual Music Lessons II – Strings **1 credit**
Continued development of individual performance skills in strings. Student may register for this class four times. Prerequisites: MUSC 1079 (15/0/0/0)

MUSC 1120 Individual Music Lessons II – Trombone **1 credit**
Continued development of individual performance skills in trombone. Student may register for this class four times. Prerequisites: MUSC 1080 (15/0/0/0)

MUSC 1121 Individual Music Lessons II – Trumpet **1 credit**
Continued development of individual performance skills in trumpet. Student may register for this class four times. Prerequisites: MUSC 1081 (15/0/0/0)

MUSC 1122 Individual Music Lessons II – Voice **1 credit**
Continued development of individual performance skills in voice. Student may register for this class four times. Prerequisites: MUSC 1082 (15/0/0/0)

MUSC 1130 College Chorus **1 credit**
Mixed vocal ensemble singing traditional to modern music. Studio recording, soloists, and special features included. Performs for a variety of on-campus and off-campus events. Tours as scheduled. Open registration. Students may register for this class four times. (0/30/0/0)

MUSC 1140 Swing Choir **1 credit**
Select mixed vocal group singing all popular music forms. Studio recording, soloists, and special selections included. Performs for a variety of on-campus and off-campus performances, and tours are scheduled. Students may register for this class four times. Audition and permission of instructor required. Student must also enroll in individual voice lessons. (0/30/0/0)

MUSC 1150 Vocal Ensemble **1 credit**
Singing groups designed to meet the needs and abilities of the students. Music chosen according to the level and function of the group. Studio recording, on-campus and off-campus performances, and tours as scheduled. Students may register for this class four times. Audition and permission of instructor required. Student must also enroll in individual voice lessons. (0/30/0/0)

MUSC 1160 Jazz Band I **1 credit**
Select jazz band playing all popular music forms. Professional arrangements. Studio recording, soloists, special features included. Performs for a variety of on-campus and off-campus events. Tours scheduled. Students may register for this class four times. Audition and permission of instructor required. Student must also enroll in individual instrumental lessons or improvisational techniques. (0/30/0/0)

MUSC 1170 Jazz Band II **1 credit**
Instrumental groups and jazz bands designed to meet the needs and abilities of students. Studio recording, soloists, special features included. Performs for a variety of on-campus and off-campus events. Tours scheduled. Students may register for this class four times. Audition and permission of instructor required. (0/30/0/0)

MUSC 1180 College and Community Concert Band **1 credit**
Performs traditional to modern music. Studio recording, soloists, and special features included. Performs for a variety of on-campus and off-campus events. Tours as scheduled. Open registration. Students may register for this class four times. (0/30/0/0)

MUSC 1190 College and Community Orchestra **1 credit**
Instrumental group designed to meet the needs and

abilities of the students. Music chosen according to the level and ability of the group. The group will perform for a variety of on-campus and off-campus events as designated by the instructor. Students may register for this class four times. (0/30/0/0)

MUSC 1195 Men's Ensemble 1 credit
A men's vocal ensemble singing traditional to modern music. Studio recording, soloists, and special features included. Performs a variety of on-campus and off-campus events. Tours as scheduled. Students may register for this class four times. Permission of instructor required. Student must also enroll in individual voice lessons. Corequisites: MUSC 1130 (0/30/0/0)

MUSC 1196 Women's Ensemble 1 credit
A women's vocal ensemble singing traditional to modern music. Studio recording, soloists, and special features included. Performs a variety of on-campus and off-campus events. Tours as scheduled. Students may register for this class four times. Permission of instructor required. Student must also enroll in individual voice lessons. Corequisites: MUSC 1130 (0/30/0/0)

MUSC 1200 Foundations of Music Theory 3 credits
Introduction to basic music writing skills. A learning experience that applies to all types and styles of music. (45/0/0/0)

MUSC 1220 Music Theory I 3 credits
Beginning development of music writing skills. A learning experience with background needed in composing, arranging, and understanding music construction. Applies to all types of music. Corequisites: MUSC 1250 (45/0/0/0)

MUSC 1225 Introduction to Music Technology 2 credits
An introduction to music technology software with emphasis on its use in music education and music production. Prerequisites: MUSC 1200 (30/0/0/0)

MUSC 1230 Music Theory II 3 credits
Continued development of music theory skills. Prerequisites: MUSC 1220 with min grade of C AND MUSC 1250 with min grade of C Corequisites: MUSC 1260 (45/0/0/0)

MUSC 1250 Ear Training I and Sight Singing 2 credits
Beginning the development of music performance and analysis skills. A learning experience with background needed in performance, understanding, and creation of music. Applied to all types of music. Corequisites: MUSC 1220 (30/0/0/0)

MUSC 1260 Ear Training II and Sight Singing 2 credits
Continued development of music performance and analysis skills. Prerequisites: MUSC 1250 with min grade of C Corequisites: MUSC 1230 (30/0/0/0)

MUSC 1550 Introduction to Music 3 credits
An introduction and overview of history of Western art music, from the middle ages to modern times. Includes the elements of music, historical style periods, and major composers. (45/0/0/0)

MUSC 1920 Introduction to Movement for the Stage 1 credit
An introduction to the basic dance forms commonly utilized in musical theatre productions, including ballet, jazz, and modern dance. Students will also become acquainted with basic dance terminology. Prerequisites: MUSC 1960 (*may be taken concurrently*) OR THEA 1960 (*may be taken concurrently*) (0/30/0/0)

MUSC 1940 Jazz Literature and Performance I 1 credit
Highly select jazz band playing all the popular jazz styles. Professional arrangements. Group and solo performance and individual development stressed. Performs for a variety of professional events and studio recordings. Tours as scheduled. Associated with the Northeast Area Jazz Ensemble. Audition and permission of instructor required. (15/0/0/0)

MUSC 1950 Jazz Literature and Performance II 1 credit
Continued individual development and performance and membership in the Northeast Area Jazz Ensemble. Permission of instructor required. Prerequisites: MUSC 1940 (15/0/0/0)

MUSC 1960 Musical Theatre Recital 1 credit
Designed to serve as a demonstration of voice and movement skills learned in the first year of the musical theatre program. Prerequisites: THEA 1920 (*may be taken concurrently*) OR MUSC 1920 (*may be taken concurrently*) AND MUSC 1122 (*may be taken concurrently*) (0/15/0/0)

MUSC 2030 Improvisational Techniques III – Brass 1 credit
Continued development of individual improvisational skills in brass. Students may register for this class four times. Prerequisites: MUSC 1040 (15/0/0/0)

MUSC 2031 Improvisational Techniques III – Guitar and Strings 1 credit
Continued development of individual improvisational skills in guitar and strings. Students may register for this class four times. Prerequisites: MUSC 1041 (15/0/0/0)

MUSC 2032 Improvisational Techniques III – Percussion 1 credit
Continued development of individual improvisational skills in percussion. Students may register for this class four times. Prerequisites: MUSC 1042 (15/0/0/0)

MUSC 2033 Improvisational Techniques III – Piano 1 credit
Continued development of individual improvisational skills in piano. Students may register for this class four times. Prerequisites: MUSC 1043 (15/0/0/0)

MUSC 2034 Improvisational Techniques III – Voice 1 credit
Continued development of individual improvisational skills in voice. Students may register for this class four times. Prerequisites: MUSC 1044 (15/0/0/0)

MUSC 2035 Improvisational Techniques III – Woodwinds 1 credit
Continued development of individual improvisational

skills in woodwinds. Students may register for this class four times. Prerequisites: MUSC 1045 (15/0/0/0)

MUSC 2040 Improvisational Techniques IV – Brass **1 credit**
Continued development of individual improvisational skills in brass. Students may register for this class four times. Prerequisites: MUSC 2030 (15/0/0/0)

MUSC 2041 Improvisational Techniques IV – Guitar and Strings **1 credit**
Continued development of individual improvisational skills in guitar and strings. Students may register for this class four times. Prerequisites: MUSC 2031 (15/0/0/0)

MUSC 2042 Improvisational Techniques IV – Percussion **1 credit**
Continued development of individual improvisational skills in percussion. Students may register for this class four times. Prerequisites: MUSC 2032 (15/0/0/0)

MUSC 2043 Improvisational Techniques IV – Piano **1 credit**
Continued development of individual improvisational skills in piano. Students may register for this class four times. Prerequisites: MUSC 2033 (15/0/0/0)

MUSC 2044 Improvisational Techniques IV – Voice **1 credit**
Continued development of individual improvisational skills in voice. Students may register for this class four times. Prerequisites: MUSC 2034 (15/0/0/0)

MUSC 2045 Improvisational Techniques IV – Woodwinds **1 credit**
Continued development of individual improvisational skills in woodwinds. Students may register for this class four times. Prerequisites: MUSC 2035 (15/0/0/0)

MUSC 2070 Individual Music Lessons III – Baritone and Tuba **1 credit**
Continued development of individual performance skills in baritone and tuba. Students may register for this class four times. Prerequisites: MUSC 1110 (15/0/0/0)

MUSC 2071 Individual Music Lessons III – Clarinet **1 credit**
Continued development of individual performance skills in clarinet. Students may register for this class four times. Prerequisites: MUSC 1111 (15/0/0/0)

MUSC 2072 Individual Music Lessons III – Flute **1 credit**
Continued development of individual performance skills in flute. Students may register for this class four times. Prerequisites: MUSC 1112 (15/0/0/0)

MUSC 2073 Individual Music Lessons III – French Horn **1 credit**
Continued development of individual performance skills in French horn. Students may register for this class four times. Prerequisites: MUSC 1113 (15/0/0/0)

MUSC 2074 Individual Music Lessons III – Guitar **1 credit**
Continued development of individual performance skills in guitar. Students may register for this class four times. Prerequisites: MUSC 1114 (15/0/0/0)

MUSC 2075 Individual Music Lessons III – Oboe and Bassoon **1 credit**
Continued development of individual performance skills in oboe and bassoon. Students may register for this class four times. Prerequisites: MUSC 1115 (15/0/0/0)

MUSC 2076 Individual Music Lesson III – Percussion **1 credit**
Continued development of individual performance skills in percussion. Students may register for this class four times. Prerequisites: MUSC 1116 (15/0/0/0)

MUSC 2077 Individual Music Lessons III – Piano **1 credit**
Continued development of individual performance skills in piano. Students may register for this class four times. Prerequisites: MUSC 1117 (15/0/0/0)

MUSC 2078 Individual Music Lessons III – Saxophone **1 credit**
Continued development of individual performance skills in saxophone. Students may register for this class four times. Prerequisites: MUSC 1118 (15/0/0/0)

MUSC 2079 Individual Music Lessons III – Strings **1 credit**
Continued development of individual performance skills in strings. Students may register for this class four times. Prerequisites: MUSC 1119 (15/0/0/0)

MUSC 2080 Individual Music Lessons III – Trombone **1 credit**
Continued development of individual performance skills in trombone. Students may register for this class four times. Prerequisites: MUSC 1120 (15/0/0/0)

MUSC 2081 Individual Music Lessons III – Trumpet **1 credit**
Continued development of individual performance skills in trumpet. Students may register for this class four times. Prerequisites: MUSC 1121 (15/0/0/0)

MUSC 2082 Individual Music Lessons III – Voice **1 credit**
Continued development of individual performance skills in voice. Students may register for this class four times. Prerequisites: MUSC 1122 (15/0/0/0)

MUSC 2110 Individual Music Lessons IV – Baritone and Tuba **1 credit**
Continued development of individual performance skills in baritone and tuba. Students may register for this class four times. Prerequisites: MUSC 2070 (15/0/0/0)

MUSC 2111 Individual Music Lessons IV – Clarinet **1 credit**
Continued development of individual improvisational skills in clarinet. Students may register for this class four times. Prerequisites: MUSC 2071 (15/0/0/0)

MUSC 2112 Individual Music Lessons IV – Flute **1 credit**
Continued development of individual improvisational skills in flute. Students may register for this class four times. Prerequisites: MUSC 2072 (15/0/0/0)

MUSC 2113 Individual Music Lessons IV – French Horn **1 credit**
Continued development of individual improvisational skills in French horn. Students may register for this class four times. Prerequisites: MUSC 2073 (15/0/0/0)

MUSC 2114 Individual Music Lessons IV – Guitar **1 credit**
Continued development of individual improvisational skills in guitar. Students may register for this class four times. Prerequisites: MUSC 2074 (15/0/0/0)

MUSC 2115 Individual Music Lessons IV – Oboe and Bassoon **1 credit**
Continued development of individual improvisational skills in oboe and bassoon. Students may register for this class four times. Prerequisites: MUSC 2075 (15/0/0/0)

MUSC 2116 Individual Music Lessons IV – Percussion **1 credit**
Continued development of individual performance skills in percussion. Students may register for this class four times. Prerequisites: MUSC 2076 (15/0/0/0)

MUSC 2117 Individual Music Lessons IV – Piano **1 credit**
Continued development of individual performance skills in piano. Students may register for this class four times. Prerequisites: MUSC 2077 (15/0/0/0)

MUSC 2118 Individual Music Lessons IV – Saxophone **1 credit**
Continued development of individual performance skills in saxophone. Students may register for this class four times. Prerequisites: MUSC 2078 (15/0/0/0)

MUSC 2119 Individual Music Lessons IV – Strings **1 credit**
Continued development of individual performance skills in strings. Students may register for this class four times. Prerequisites: MUSC 2079 (15/0/0/0)

MUSC 2120 Individual Music Lessons IV – Trombone **1 credit**
Continued development of individual performance skills in trombone. Students may register for this class four times. Prerequisites: MUSC 2080 (15/0/0/0)

MUSC 2121 Individual Music Lessons IV – Trumpet **1 credit**
Continued development of individual performance skills in trumpet. Students may register for this class four times. Prerequisites: MUSC 2081 (15/0/0/0)

MUSC 2122 Individual Music Lessons IV – Voice **1 credit**
Continued development of individual improvisational skills in voice. Students may register for this class four times. Prerequisites: MUSC 2082 (15/0/0/0)

MUSC 2130 College Chorus II **1 credit**
Continued study in mixed vocal ensemble singing traditional to modern music. Studio recording, soloists and special features included. Performs for a variety of on-campus and off-campus events. Tours as scheduled. Students may register for this class four times. Permission of instructor required. Prerequisites: MUSC 1130 (0/30/0/0)

MUSC 2140 Swing Choir II **1 credit**
Continued study in select mixed vocal group singing of all popular music forms. Studio recording, soloists, and special selections included. Performs for a variety of on-campus and off-campus events. Tours are scheduled. Students may register for this class four times. Audition and permission of instructor required. Student must also enroll in individual voice lessons. Prerequisites: MUSC 1140 Corequisites: MUSC 2130 (0/30/0/0)

MUSC 2150 Vocal Ensemble II **1 credit**
Continued study in singing groups designed to meet the needs and abilities of the students. Music chosen according to the level and functions of the group. Studio recording, on-campus and off-campus performances, and tours are scheduled. Students may register for this class four times. Audition and permission of instructor required. Student must also enroll in individual voice lessons. Prerequisites: MUSC 1150 Corequisites: MUSC 2130 (0/30/0/0)

MUSC 2160 Jazz Band III **1 credit**
Continued study in select jazz band playing all popular music forms. Professional arrangements. Studio recording, soloists, special features included. Performs for a variety of on-campus and off-campus events. Tours scheduled. Students may register for this class four times. Audition and permission of instructor required. Student must also enroll in individual instrumental lessons or improvisational techniques. Prerequisites: MUSC 1160 (0/30/0/0)

MUSC 2170 Jazz Band IV **1 credit**
Continued study in instrumental groups and jazz bands designed to meet the needs and abilities of students. Studio recording, soloists, special features included. Performs for a variety of on-campus and off-campus events. Tours scheduled. Students may register for this class four times. Audition and permission of instructor required. Prerequisites: MUSC 1170 (0/30/0/0)

MUSC 2180 College and Community Concert Band II **1 credit**
Continued studies of performing traditional to modern music. Studio recording, soloists, and special features included. Performs for a variety of on-campus and off-campus events. Tours are scheduled. Students may register for this class four times. Permission of instructor required. Prerequisites: MUSC 1180 (0/30/0/0)

MUSC 2220 Music Theory III **3 credits**
Includes the development of music writing and analysis skills as they pertain to all types of music arranging and composition including the use of altered chords, modulations and unconventional harmonies and melodies. Prerequisites:

MUSC 1230 with min grade of C AND MUSC 1260 with min grade of C Corequisites: MUSC 2250 (45/0/0/0)

MUSC 2230 Music Theory IV 3 credits
Includes development and use of melodic and harmonic composition skills in all forms of music, complete in-depth structural and harmonic analysis and development of personal creativity. Prerequisites: MUSC 2220 with min grade of C AND MUSC 2250 with min grade of C Corequisites: MUSC 2260 (45/0/0/0)

MUSC 2250 Ear Training III and Sight Singing 2 credits
Includes sight singing in the treble, bass, alto and tenor clefs; major and minor modes; and melodies with the harmonic backgrounds of the principal chords. Study of singing modulations to related keys and modal melodies. Includes aural and keyboard study of superimposition, compound intervals, melodic and harmonic modulations. Also covers aural study of beats and their divisions and subdivisions. Prerequisites: MUSC 1230 with min grade of C AND MUSC 1260 with min grade of C Corequisites: MUSC 2220 (30/0/0/0)

MUSC 2260 Ear Training IV and Sight Singing 2 credits
Includes vocal, aural and keyboard study of unusual and mixed meters, remote modulations, altered chords and ninth, eleventh, and thirteenth chords. Prerequisites: MUSC 2220 with min grade of C AND MUSC 2250 with min grade of C Corequisites: MUSC 2230 (30/0/0/0)

MUSC 2350 Elementary School Music 3 credits
Development of creative skills and methods of teaching music in elementary schools. Five hours of volunteer service learning required. Prerequisites: EDUC 1110 with min grade of C (45/0/0/0)

MUSC 2920 Musical Theatre Performance 2 credits
Designed as a capstone for the Musical Theatre Program, this course assesses student participation in the Northeast Community College Musical. (0/60/0/0)

MUSC 2940 Jazz Literature and Performance III 1 credit
Advanced individual development and membership in Northeast Area Jazz Ensemble. Permission of instructor required. Prerequisites: MUSC 1950 (15/0/0/0)

MUSC 2950 Jazz Literature and Performance IV 1 credit
Continued advanced individual development and membership in Northeast Area Jazz Ensemble. Permission of instructor required. Prerequisites: MUSC 2940 (15/0/0/0)

Nurse Aide (NURA)

NURA 1110 Nurse Aide 3 credits
This course is designed to meet the Nebraska Health and Human Services System training requirements for nurse aide certification and employment in long-term care facilities. The course combines classroom lecture and laboratory application for the development of basic skills needed to provide safe, effective, and caring services to the elderly or chronically ill patient of any age, in a long-term care facility. Upon completion of this course, the student is eligible to take the state written and practical skills exam. After successfully passing this examination and completing the application procedure, the students name will be placed on the basic nurse aide registry at the Nebraska Health and Human Services Regulation and Licensure, Credentialing Division. (30/45/0/0)

Nursing (NURS)

NURS 1010 Nursing Process and Critical Thinking I 3 credits
The course provides an overview of nursing concepts and theories focusing on meeting basic human needs across the lifespan based on the wellness-illness continuum within the practical nurse scope of practice. Theoretical concepts focus on caring for the well client, elderly client, and clients with selected physiological, psychological, and mental health problems. Emphasis is on the role of the practical nurse as a competent practitioner who contributes to the nursing plan of care while utilizing established nursing diagnoses. Focus is on the development of safe clinical judgment and appropriate communication related to nursing care of clients in acute, long term, and community settings. Prerequisites: NURS 1060 with min grade of B (*may be taken concurrently*) AND NURS 1110 with min grade of B (*may be taken concurrently*) AND NURS 1120 with min grade of B (*may be taken concurrently*) AND NURS 1180 with min grade of B (*may be taken concurrently*) Corequisites: NURS 1100 (45/0/0/0)

NURS 1060 Pathophysiology of Disease Processes I 1.5 credits
This course provides the student with an understanding of common, chronic disease conditions encountered in clinical practice. Comprehension of pathophysiology provides the foundation for competency and clinical judgment in nursing practice. Topics include etiology, manifestations, and the physical and psychological reactions to common, chronic diseases and injury. These are discussed in order for the nurse to recognize and communicate client needs. Prerequisites: BIOS 2250 with min grade of C (*may be taken concurrently*) OR BIOS 2110 with min grade of C (*may be taken concurrently*) (22.5/0/0/0)

NURS 1070 Pathophysiology of Disease Processes II 1.5 credits
This course provides the student with an understanding of acute, complex disease conditions encountered in clinical practice. Comprehension of pathophysiology provides the foundation for competency and clinical judgment in nursing practice. Topics include etiology, manifestations, and the physical and psychological reactions to acute, complex diseases and injury. These are discussed in order for the nurse to recognize, interpret, and communicate client needs. Prerequisites: (BIOS 2250 with min grade of C OR BIOS 2110 with min grade of C) AND (NURS 1060 with min grade of B AND BIOS 2120 with min grade of C (*may be taken concurrently*) OR BIOS 2260 with min grade of C (*may be taken concurrently*) (22.5/0/0/0)

NURS 1100 Nursing Science I 3 credits
The course focuses on the development of caring and

clinical competency in the performance of selected nursing skills and procedures. Participation in the care of clients during alterations in health provides opportunities for the student to develop professional communication and clinical judgment. Clinical experiences include lab based, long term care, and community based settings. Holistic nursing concepts and theories are presented and related to health promotion, illness prevention, and health restoration of individuals. Prerequisites: NURS 1060 with min grade of B (*may be taken concurrently*) AND NURS 1110 with min grade of B (*may be taken concurrently*) AND NURS 1120 with min grade of B (*may be taken concurrently*) AND NURS 1180 with min grade of B (*may be taken concurrently*) Corequisites: NURS 1010 (0/67.5/67.5/0)

NURS 1110 Health Assessment and Health Promotion I **2 credits**

The focus of this course is on basic health assessment, history taking skills, effective communication, health promotion and illness prevention by using holistic nursing assessments for well clients. Using a developmental perspective, the course will provide the student with the opportunity to develop beginning knowledge and skills necessary to assess and care for the health status of the client by collecting health history, performing a physical assessment on well clients across the lifespan while using appropriate clinical judgment. The content builds upon the student's knowledge of sciences and humanities, as related to the holistic aspects of health. Assessment will focus primarily on recognizing normal, with some introduction to deviation of normal findings. The course provides supervised practice in the laboratory setting to assist the student with developing a foundation of skills, caring, and competence in the clinical setting. (15/45/0/0)

NURS 1120 Pharmacology and Nursing Practice I **1.5 credits**

This course provides the student with an in-depth working knowledge of the appropriate use of medications. Emphasis is placed on the nurse understanding the principles of drug actions, interactions, side effects, and adverse effects in relation to respiratory analgesics, gastrointestinal, and psychiatric medications. Medication administration principles are incorporated into the nursing process, providing the student with a framework for accountable medication administration. Dosage calculation concepts are integrated within the course to promote safe medication administration. This course emphasizes the importance of appropriate clinical decision making that considers the human needs of the client and appropriate client teaching and communication that addresses the impact of medications on the health of the individual. Prerequisites: MATH 1025 with min grade of C (*may be taken concurrently*) (22.5/0/0/0)

NURS 1125 Pharmacology and Nursing Practice II **1.5 credits**

This course provides the student with an in-depth working knowledge of the need for appropriate use of medications. Emphasis is placed on the nurse understanding drug actions, interactions, side effects, and adverse reactions in relation to cardiovascular, hematological, endocrine, and neurological medications. This course emphasizes the importance of appropriate clinical decision making that considers the human needs of the client and appropriate client teaching and communication that addresses the impact of medication on the health of the individual. Prerequisites: NURS 1120 with min grade of B (22.5/0/0/0)

NURS 1130 Nursing Process and Critical Thinking II **3 credits**

The course is focused on nursing concepts and theories to meet basic human needs across the life span based on the wellness-illness continuum. Theoretical concepts focus on the care of adult, perinatal and pediatric clients with selected alterations in health. Emphasis is on utilization of the nursing process and critical thinking related to nursing care of clients in acute, long term, and community settings. This course emphasizes the importance of the licensed practical nurse as being competent, utilizing appropriate clinical judgment, as well as, caring and with therapeutic communication skills. Prerequisites: NURS 1010 with min grade of B AND NURS 1100 with min grade of P AND NURS 1110 with min grade of B AND NURS 1180 with min grade of B AND NURS 1070 with min grade of B (*may be taken concurrently*) AND NURS 1125 with min grade of B (*may be taken concurrently*) Corequisites: NURS 1140, NURS 1185 (45/0/0/0)

NURS 1140 Nursing Science II **3 credits**

This course focuses on application of nursing concepts and theories related to health of individuals and families with stable and predictable basic human needs. It provides opportunities for continuing development of clinical competency in the performance of selected, increasingly complex nursing skills and procedures while caring for clients across the life span. The course provides for clinical practice experiences to facilitate development of clinical judgment while caring for clients in an acute medical surgical, long term care, maternal-child, and pediatric acute care settings. The student will focus on acute and chronic alterations of human needs. The student will be given opportunities to enhance communication skills, while learning to prioritize patient needs, identify legal and ethical implications for care, and learn how to appropriately design patient care assignments for unlicensed personnel. Prerequisites: NURS 1010 with min grade of B AND NURS 1100 with min grade of P AND NURS 1110 with min grade of B AND NURS 1180 with min grade of B AND NURS 1070 with min grade of B (*may be taken concurrently*) AND NURS 1125 with min grade of B (*may be taken concurrently*) Corequisites: NURS 1130, NURS 1185 (0/0/135/0)

NURS 1150 Intravenous Therapy for Practical Nursing **1 credit**

This course focuses on safe intravenous therapy (IV) including the administration of intravenous solutions and medications appropriate within the scope of practice of the Licensed Practical Nurse (LPN) in the state of Nebraska. Students will learn to apply the principles of observing, initiating, monitoring, discontinuing, maintaining, regulating, adjusting, documenting, assessing, planning,

intervening, and evaluating intravenous therapy as an LPN. Psychomotor skills related to peripheral intravenous line insertion in an upper extremity, as well as maintenance, and administration of approved IV medications in an adult client is addressed in a lab experience. Limitations related to central intravenous therapy and pediatric therapy will be investigated. This course emphasizes the importance of safe and appropriate clinical decision making of the medically stable client receiving intravenous therapy. Appropriate client teaching and communication techniques that address the diverse client needs are emphasized. Prerequisites: MATH 1025 with min grade of C AND NURS 1010 with min grade of B AND NURS 1060 with min grade of B AND NURS 1070 with min grade of B (*may be taken concurrently*) AND NURS 1100 with min grade of P AND NURS 1120 with min grade of B AND NURS 1125 with min grade of B Corequisites: NURS 1130, NURS 1140, NURS 1185 (10/15/0/0)

NURS 1180 Nursing's Role I **1 credit**
This course provides an overview of the role of the practical nurse with an emphasis on the transition from nursing assistant to practical nurse. It includes a focus on the core values of communication, caring, competence, and clinical judgment within Northeast's Nursing Program, nursing history, ethical, legal and practice standards, scope of practice, and communication skills. It focuses on the concepts and skills required of the practical nurse, including study skills and test taking skills. Prerequisites: NURS 1060 with min grade of B (*may be taken concurrently*) AND NURS 1120 with min grade of B (*may be taken concurrently*) (15/0/0/0)

NURS 1185 Nursing's Role II **1 credit**
This course provides an in-depth look at the role of the practical nurse with an emphasis on preparation to enter practice. It includes a focus on the course values of communication, caring, competence, and clinical judgment in Northeast's nursing program, as they apply to professional behavior, working with others, dealing with conflict and change, as well as maintaining a license. It focuses on assigning and directing care, teamwork, and leadership. Prerequisites: NURS 1010 with min grade of B AND NURS 1100 with min grade of P AND NURS 1110 with min grade of B AND NURS 1180 with min grade of B AND NURS 1070 with min grade of B (*may be taken concurrently*) AND NURS 1125 with min grade of B (*may be taken concurrently*) Corequisites: NURS 1130, NURS 1140 (15/0/0/0)

NURS 1410 Clinical Nurse Externship **3 credits**
The purpose of this course is to provide the student with expanded client care experiences in a preceptor supervised, faculty facilitated practice setting. The course focus is on improving student planning, organization and psychomotor skills, enabling students to enter their sophomore year and their professional practice more knowledgeable about the responsibilities of the nursing role, and more secure in their own capabilities. Prerequisites: NURS 1070 AND NURS 1125 AND NURS 1130 AND NURS 1140 AND NURS 1150 AND NURS 1180 (0/0/135/0)

NURS 2100 Health Care Ethics **3 credits**
This course focuses on contemporary ethical issues that affect health care practice. A review of the major theories related to ethics and sound ethical decision making in health care are discussed. Major topics of discussion include social, cultural, spiritual, gender, end-of-life, professional, and health delivery issues. This course prepares students to incorporate the concepts and principles of ethics within health care practice. (45/0/0/0)

NURS 2120 Pharmacology and Nursing Practice III **1 credit**
This course focuses on drug mechanism of actions, expected effects, side effects, adverse effects, contraindications, drug interactions, and nursing responsibilities in drug administration (for medically complex clients). Emphasis is placed on the importance of applying the principles of drug actions, intended effects, potential interactions, side effects and adverse reactions, and nursing responsibilities for intravenous anti-infective, antineoplastic, and cardiac medications. This course emphasizes the importance of safe and appropriate clinical decision making of the medically complex client receiving drug therapy. Appropriate client teaching and communication that addresses the impact of medications on the health of the individual is emphasized. Prerequisites: NURS 1125 with min grade of B AND NURS 2165 with min grade of B (*may be taken concurrently*) Corequisites: NURS 2150, NURS 2160 (15/0/0/0)

NURS 2150 Nursing Process and Critical Thinking III **4 credits**
This course focuses on meeting complex health and wellness needs of clients across the lifespan within the scope of practice of a registered nurse. Emphasis is on the development of safe clinical judgment and appropriate communication related to nursing care of high risk perinatal clients, and chronically and-or acutely ill clients with alterations in health involving multiple systems. There is a focus on the role of the registered nurse as a caring, competent practitioner while addressing client needs from a human needs perspective. Prerequisites: NURS 1130 with min grade of B AND NURS 1140 with min grade of P AND NURS 1185 with min grade of B AND NURS 2165 with min grade of B (*may be taken concurrently*) Corequisites: NURS 2120, NURS 2160 (60/0/0/0)

NURS 2160 Nursing Science III **5 credits**
This course focuses on application of holistic nursing care to meet the complex health-wellness needs of acutely and-or chronically ill clients and high risk clients with multiple system alterations in health, including high risk perinatal and adult clients. This course provides clinical opportunities in acute care and community settings to develop therapeutic communication while caring for clients across the lifespan. An emphasis is on the development of a safe and competent nurse functioning within the registered nurse's scope of practice. A focus on safe clinical judgment is the centerpiece of both direct care provision and care plan development in a variety of acute care and community settings. Prerequisites: NURS 1130 with min grade of B AND NURS 1140 with min grade

of P AND NURS 1185 with min grade of B AND NURS 2165 with min grade of B (*may be taken concurrently*) Corequisites: NURS 2120, NURS 2150 (0/0/225/0)

NURS 2165 Nursing's Role III **1 credit**
This course provides an overview of the role of the registered nurse with an emphasis on the transition from practical nurse to associate degree registered nurse. It includes a focus on the core values of communication, caring, competence, and clinical judgment within Northeast's Nursing Program, and includes content on evidence based practice decision making, nursing history, developing and maintaining quality in nursing practice, RN scope of practice, and team communication skills. It focuses on the concepts and skills required of the associate degree nursing student, including study skills and test taking skills. Prerequisites: NURS 1130 with min grade of B AND NURS1140 with min grade of P AND NURS 1185 with min grade of B (15/0/0/0)

NURS 2170 Nursing Process and Critical Thinking IV **4 credits**
This course focuses on the role of the registered nurse in developing appropriate clinical judgment and effective communication that is necessary when prioritizing, managing, and caring for clients in diverse health care settings. Emphasis is on providing competent nursing care for clients with acute pediatric illnesses, acute mental health alterations, and adult clients with complex, unstable health needs using a human needs approach to care delivery. Prerequisites: NURS 2120 with min grade of B AND NURS 2150 with min grade of B AND NURS 2160 with min grade of P AND NURS 2165 with min grade of B Corequisites: NURS 2180, NURS 2185 (60/0/0/0)

NURS 2180 Nursing Science IV **4 credits**
This course focuses on the application of nursing care aimed at meeting the complex human needs of the critically ill, clinically unstable, and high risk clients with alterations in health using a human needs model. This course provides for clinical practice experiences with adult and pediatric clients, families and small groups of clients in a variety of acute, mental health, and urgent care settings. An emphasis is on the development of a safe, caring, and competent nurse functioning within the scope of practice of a registered nurse. This course facilitates the development of effective communication, appropriate management skills, and prioritization of care for patient groups through sound clinical judgment. Prerequisites: NURS 2120 with min grade of B AND NURS 2150 with min grade of B AND NURS 2160 with min grade of P AND NURS 2165 with min grade of B Corequisites: NURS 2170, NURS 2185 (0/0/180/0)

NURS 2185 Nursing's Role IV **3 credits**
This course provides an overview of roles in nursing with emphasis on development of professional practice as a registered nurse. It includes a focus on the core values of communication, caring, competence, and clinical judgment in the Northeast Community College Nursing Program, and includes content on nursing roles, leadership, power and policy, and managing quality in health care. It focuses on the concepts and skills required of the registered nurse, including application of all the facets of prior learning via preceptor experience. Prerequisites: NURS 2120 with min grade of B AND NURS 2150 with min grade of B AND NURS 2160 with min grade of P AND NURS 2165 with min grade of B Corequisites: NURS 2170, NURS 2180 (22.5/0/67.5/0)

Administrative Professional (OFFT)

OFFT 1050 Introduction to Windows Operating Systems **1 credit**
This course provides an overview of operating system functions that are necessary in a microcomputer working environment. This course includes user interface, file, disk and system management techniques, along with basic operating system terminology. (15/0/0/0)

OFFT 1090 Microsoft Word I **3 credits**
Designed to give practical experience in operating word processing software. Emphasis on creating and editing documents using beginning to intermediate editing and formatting features. Basic computer and keyboarding skills are essential. (45/0/0/0)

OFFT 1500 Microsoft Office **3 credits**
This course will give the student practical experience in operating the word processing, spreadsheet, database, and presentation graphics portions of the Microsoft Office suite. (45/0/0/0)

OFFT 1510 Microsoft Word **1 credit**
This course will give the student practical experience in operating the word processing portion of the Microsoft Office suite. (15/0/0/0)

OFFT 1515 Microsoft Certified Application Specialist – Word **1 credit**
Designed to prepare the student for the Microsoft Certified Application Specialist MCAS exam in the Microsoft Word application using the most recent version. Upon completion of the course, the student will take the interactive exam. Certification will be awarded to the students when they pass this exam. Prerequisites: OFFT 1090 OR OFFT 1500 OR OFFT 1510 (15/0/0/0)

OFFT 1520 Microsoft Excel **1 credit**
This course will give the student practical experience in operating the spreadsheet portion of the Microsoft Office suite. (15/0/0/0)

OFFT 1525 Microsoft Certified Application Specialist – Excel **1 credit**
Designed to prepare the student for the Microsoft Certified Application Specialist MCAS exam in the Microsoft Excel application using the most recent version. Upon completion of the course, the student will take the interactive exam. Certification will be awarded to the students when they pass this exam. Prerequisites: OFFT 1500 OR OFFT 1520 OR INFO 2100 (15/0/0/0)

OFFT 1530 Microsoft Access **1 credit**
This course will give the student practical experience in operating the database portion of the Microsoft Office suite. (15/0/0/0)

OFFT 1540 Microsoft PowerPoint 1 credit
This course will give the student practical experience in operating the presentation graphics portion of the Microsoft Office suite. (15/0/0/0)

OFFT 1580 Microsoft Outlook 1 credit
This course provides an overview of Microsoft Outlook, a Microsoft mail application. Topics include using Outlook to manage email, calendars, contacts, and tasks. (15/0/0/0)

OFFT 1880 Office Procedures and Practicum 3 credits
Designed to give students realistic practice in business documentation and administrative professional skills involving a wide variety of real-world business activities. This project-based class will integrate administrative functions that are expected of a administrative professional. Prerequisites: OFFT 1500 AND BSAD 2050 (*may be taken concurrently*) AND OFFT 1420 (*may be taken concurrently*) (30/45/0/0)

OFFT 2090 Advanced Word Certification 3 credits
This course will provide in-depth, practical experience utilizing Microsoft Word to create, edit, and format a variety of professional documents. This course will prepare students for the Microsoft Word Specialist and Expert certification exams. Basic computer and keyboarding skills are essential. Prerequisites: OFFT 1500 (45/0/0/0)

OFFT 2110 Excel Spreadsheet Applications 3 credits
This course demonstrates features and applications of Microsoft Excel, a spreadsheet program designed to facilitate information management and data analysis. Students will learn how to create spreadsheets for storing, organizing, sorting, calculating, and charting data. Students will learn to create visually appealing content that represents data and work with advanced tools to analyze data and create data projections. Prerequisites: OFFT 1500 (45/0/0/0)

OFFT 2500 Advanced Office Integration 3 credits
This course will give the student an advanced hands-on experience in operating the word processing, spreadsheet, database, and presentation graphics portions of Microsoft Office. This project-based class will integrate data using Microsoft Office applications, computer input technologies, and the Internet. Students will work both independently and in teams to initiate and complete Microsoft integrated projects. Prerequisites: OFFT 1090 AND OFFT 2110 AND OFFT 1500 (45/0/0/0)

OFFT 2600 Administrative Professional Capstone 2 credits
The administrative professional capstone course is a comprehensive integration of various administrative competencies including management and business knowledge, computer techniques and communication skills. Permission of instructor, 2.0 GPA and sophomore standing required. Prerequisites: OFFT 2500 (*may be taken concurrently*) AND BSAD 1320 (*may be taken concurrently*) (30/0/0/0)

Philosophy (PHIL)

PHIL 1010 Introduction to Philosophy 3 credits
Students will explore the components of philosophy through readings from the history of philosophy (ancient, modern, and contemporary) combined with the examination of questions of metaphysics, ethics, epistemology, aesthetics, philosophy of religion, social and political philosophy, using the tools of logic and critical thinking. (45/0/0/0)

PHIL 2610 Comparative Religions 3 credits
This course will offer a cross-cultural introduction to the world's major religious and philosophical traditions or faith systems through a comparison of historical origins, rituals, beliefs, practices, world views, original religious texts, and other important sources. Interdisciplinary approach to study of religious systems are a part of the world religions traditions. Prerequisites: ENGL 1010 with min grade of C (45/0/0/0)

Physics (PHYS)

PHYS 1030 Technical Physics I 2 credits
Study and application of basic electricity, hydraulics and pneumatics. (15/45/0/0)

PHYS 1040 Technical Physics II 2 credits
Theory and experiments in atomic structure, density, specific gravity, elasticity, coefficient of friction, and other properties of matter. (15/45/0/0)

PHYS 1070 Applied Physics for Allied Health 4 credits
General study of mechanics, heat, energy, electricity, and wave interaction for allied health professions. (45/30/0/0)

PHYS 1100 Physical Science 4 credits
A survey course in the physical sciences with emphasis on scientific processes and problem solving. Areas of study will include selected topics in physics, chemistry, astronomy, geology and meteorology. A scheduled laboratory will supplement classroom activities. (45/30/0/0)

PHYS 1410 Elementary General Physics I with Algebra and Trigonometry 5 credits
Detailed algebra and trigonometry study of one and two dimensional motion. Topics will include kinematics, Newton's Laws, energy, momentum, and rotational motion. Additional topics from the areas of oscillations and waves, fluids, and thermal physics may also be covered. Prerequisites: MATH 1220 (60/30/0/0)

PHYS 1420 Elementary General Physics II with Algebra and Trigonometry 5 credits
Detailed algebra and trigonometry continuation of Elementary General Physics I. Topics covered will include electricity, magnetism, and optics. Additional topics from the areas of oscillation and waves, fluids, thermal physics, and modern physics may also be covered. Prerequisites: PHYS 1410 (60/30/0/0)

PHYS 2050 Modern Physics 4 credits
A general study of relativistic physics, wave and particle

physics, nuclear physics, and molecular and solid-state physics. Prerequisites: PHYS 2120 (60/0/0/0)

PHYS 2110 General Physics I with Calculus 5 credits
Detailed calculus-based study of one and two dimensional motion. Topics will include kinematics, Newton's Laws, energy, momentum, and rotational motion. Additional topics from the areas of oscillations and waves, fluids, and thermal physics may also be covered. Prerequisites: MATH 1600 (*may be taken concurrently*) (60/30/0/0)

PHYS 2120 General Physics II with Calculus 5 credits
Detailed calculus-based continuation of General Physics I. Topics covered will include electricity, magnetism, and optics. Additional topics from the areas of oscillations and waves, fluids, thermal physics, and modern physics may also be covered. Prerequisites: PHYS 2110 (60/30/0/0)

PHYS 2150 Structural Analysis 3 credits
Survey of mechanics, heat, sound and electromagnetism and their applications in the design and building of structures. Prerequisites: MATH 1060 OR MATH 1220 (45/0/0/0)

PHYS 2200 Statics 3 credits
The study of stationary bodies in equilibrium. Requires a general knowledge of Vector Algebra and Calculus. Two and three dimensional force systems are studied. Trusses, frames and machines, beams, and friction are discussed along with centroids and moments of inertia. Prerequisites: PHYS 2110 (45/0/0/0)

PHYS 2300 Dynamics 3 credits
The study of bodies in motion. Requires a general knowledge of Vector Algebra and Calculus. The course evaluates Newton's laws of motion as applied to particles and rigid bodies. Additional topics include absolute and relative motion, force, mass, and acceleration, work and energy, and impulse and momentum. Prerequisites: PHYS 2200 (45/0/0/0)

Plumbing (PLMB)

PLMB 1010 Electricity and Mechanics for Plumbers 3 credits
This course introduces fundamental electrical theory including electrical components and their effects on AC and DC circuits. Covers electrical measurement with emphasis on circuit analysis using Ohm's Law, circuit testing equipment, and the use of each instrument. Corequisites: PLMB 1020 (45/0/0/0)

PLMB 1020 Electricity and Mechanics for Plumbers Lab 2 credits
This course introduces fundamental electrical theory including electrical components and their effects on AC and DC circuits. Covers electrical measurement with emphasis on circuit analysis using Ohm's Law, circuit testing equipment, and the use of each instrument. Corequisites: PLMB 1010 (0/90/0/0)

PLMB 1025 Plumbing Safety 2 credits
This course covers OSHA policies, procedures, and standards, as well as general safety and health principles as applicable to the plumbing trades. Topics include the scope and application of the OSHA general industry standards. Special emphasis is placed on those topics that are required in the 10- hour general industry program as well as those applicable to the plumbing trade. In addition, students will complete the AHA Heartsaver critical skills needed to respond to and manage a first aid, choking, or sudden cardiac arrest emergency through CPR and AED usage. (30/0/0/0)

PLMB 1030 Plumbing Code and Print Reading 2 credits
This course presents in-depth coverage of plumbing codes and standards, including acceptable installation practices and acceptable materials. The course further introduces students to the basic drawing tools, measuring tools, lettering, drawings, and symbols commonly found on drawings and blueprints associated with the plumbing and pipe fitting industry. (30/0/0/0)

PLMB 1040 Plumbing and Pipefitting Fundamentals 3 credits
This course provides the student the ability to identify common pipe and fittings used for plumbing installations. Terminology of design, construction and sizing, as well as approved uses of different materials will be taught including potable water systems. Pipe joining, valves, venting, backflow prevention, and water quality are also addressed Corequisites: PLMB 1050 (45/0/0/0)

PLMB 1050 Plumbing and Pipefitting Fundamentals Lab 5 credits
This course provides hands-on experiences in basic plumbing and pipefitting. Students will gain practice in pipe joining techniques, pipefitting procedures and sizing, materials selection, leak testing, and basic troubleshooting Corequisites: PLMB 1040 (0/225/0/0)

PLMB 1060 Plumbing Tools and Processes 2 credits
The course provides students with the knowledge and insight into material handling, scope of work, and tool operations. The course emphasizes the proper use, care, and maintenance of hand and power tools, and proper working practices both in the shop and in the field. (30/0/0/0)

PLMB 1070 Trenching and Shoring 1 credit
This course is for employees working in trenching and excavation. This course addresses the requirements for working with and around trenches by ensuring individuals are knowledgeable in soil analysis, protective systems, access and egress, and regulatory requirements. (15/0/0/0)

PLMB 1110 Advanced Plumbing and Pipefitting 3 credits
This course further expands the student's knowledge of plumbing systems design and installation. Students further their skills in troubleshooting and repair of piping, fixtures, and appliances, as well as pump systems design. Indirect waste piping, receptors, and special wastes will also be discussed. Prerequisites: PLMB 1040 Corequisites: PLMB 1120 (45/0/0/0)

PLMB 1120 Advanced Plumbing and Pipefitting Lab **3 credits**
This course provides practical experience in all aspects of plumbing installations in a residential setting. Students will plan, design, and install a plumbing drain, a waste and vent system, plumbing fixtures, water distribution systems, and associated piping in accordance with state and local plumbing codes. Prerequisites: PLMB 1050 Corequisites: PLMB 1110 (0/135/0/0)

PLMB 1130 Gas Operations and Maintenance **2 credits**
This course introduces techniques for safe handling of natural gas, liquefied petroleum gas, and fuel oil. The course reviews fuel gas and fuel oil safety precautions and potential hazards, applications, systems installations, and testing. Corequisites: PLMB 1140 (30/0/0/0)

PLMB 1140 Gas Operations and Maintenance Lab **2 credits**
This course provides experience in the safe handling of natural gas, liquefied petroleum gas, and fuel oil containing systems. The course enables students to gain hands-on experience in fuel gas and fuel oil safety precautions, potential hazards, applications, systems installations, and testing. Corequisites: PLMB 1130 (0/90/0/0)

Political Science (POLS)

POLS 1000 American Government **3 credits**
A study of the functioning of the American political system through an analysis and application of its underlying theories. (45/0/0/0)

POLS 1600 International Relations **3 credits**
A survey of the actors, institutions, processes, and theories of international relations including a study of contemporary global issues. (45/0/0/0)

Personal Training (PRTR)

PRTR 2800 Personal Training Practicum **3 credits**
Practicum designed to give students the opportunity to lead and develop wellness programs, adult exercise programs, and personal training instruction. Prerequisites: HPER 2410 AND HPER 1520 (*may be taken concurrently*) OR HOEC 1050 (*may be taken concurrently*) (15/60/0/0)

Psychology (PSYC)

PSYC 1000 Human Relations **2 credits**
Exposure to practical information from psychology for use in everyday human relations and to improve communication skills. (30/0/0/0)

PSYC 1810 Introduction to Psychology **3 credits**
An introduction to the science of behavior and mental processes including the application of critical thinking to the study of learning theory, memory, personality, growth and development, biological and neurological aspects, abnormal behavior, therapies, intelligence, motivation, emotion, sensation, perception, and theoretical perspectives. (45/0/0/0)

PSYC 2110 Child and Adolescent Psychology **3 credits**
This course emphasizes the biosocial, cognitive, and psychosocial development of childhood through adolescence by examination of theories, behaviors, and terminology. Prerequisites: PSYC 1810 with min grade of C (45/0/0/0)

PSYC 2200 Human Development **3 credits**
Study of human development from conception to death. Emphasizes biological, cognitive, language, emotional, social, and personality changes throughout lifespan. Applies developmental theories to real-world challenges. Prerequisites: PSYC 1810 with min grade of C OR HUSR 1010 with min grade of C (45/0/0/0)

PSYC 2500 Social Psychology **3 credits**
An examination of the scientific field that seeks to understand the nature and causes of individual behavior and thought in social situations. Prerequisites: PSYC 1810 with min grade of C (45/0/0/0)

PSYC 2800 Abnormal Psychology **3 credits**
An examination of historical and contemporary views and issues of abnormal psychology to include explanations, diagnosis, and treatment of abnormal behavior. Prerequisites: PSYC 1810 with min grade of C (45/0/0/0)

PSYC 2900 Research Methods for the Social Sciences **3 credits**
This course is designed to introduce students to the basic principles of social science research including Psychology, Sociology, and Social Work. Various sociological and psychological research methods are examined that include experimental research, survey research, field research, and comparative-historical research. Procedures to evaluate the soundness of research designs are examined. Ethical issues related to research techniques are also considered. (45/0/0/0)

Physical Therapist Assistant (PTAS)

PTAS 1010 Medical Terminology for Physical Therapist Assistants **1.5 credits**
This course introduces the basic Greek and Latin roots including pronunciation, spelling, usage, and interpretation. The emphasis of physical therapy terminology and medical abbreviations utilized in healthcare will be integrated throughout the course. (22.5/0/0/0)

PTAS 1110 Functional Anatomy and Physiology **3 credits**
This course introduces the student to fundamental concepts of normal human anatomy and physiology. Students will explore body systems and physiological processes, laying groundwork for advanced coursework Corequisites: PTAS 1115 (45/0/0/0)

PTAS 1115 Functional Anatomy and Physiology Lab **0.5 credits**
This lab course is designed to complement the lecture component by providing hands-on learning experiences. Emphasis is placed on understanding relationships between anatomical structures and their roles in normal

movement and function as well as the major systems of the body building a foundation for advanced health-care courses. Corequisites: PTAS 1110 (0/22.5/0/0)

PTAS 1120 Rehab Skills I **2 credits**
This course introduces the student to basic patient care techniques. Topics demonstrated during this course include bed mobility, transfer training, positioning and draping, assistive device fit and gait training. Corequisites: PTAS 1255 (30/0/0/0)

PTAS 1125 Rehab Skills I Lab **1 credit**
This course introduces the student to basic patient care techniques. Topics demonstrated in the lab include bed mobility, transfer training, positioning and draping, assistive device fit and gait training. Corequisites: PTAS 1120 (0/45/0/0)

PTAS 1220 Pathophysiology **2 credits**
This course explores the physiologic processes underlying human disease and conditions. Students will gain a foundational understanding of the etiology and signs and symptoms associated with conditions affecting major organ systems. This course is ideal for those considering a career in physical therapy or related health care fields. (30/0/0/0)

PTAS 1225 Introduction to Physical Therapy **1 credit**
This course introduces the student to the field of physical therapy, covering the history and scope of the profession. Students will explore various practice settings, and the integral role physical therapy plays in health care. This course is ideal for those considering a career in physical therapy or related health care fields. (15/0/0/0)

PTAS 1230 Therapeutic Exercise **3 credits**
This course introduces the principles therapeutic exercise for rehabilitation. Students will be able to apply these exercise principles to future coursework in physical therapy interventions. Corequisites: PTAS 1235 (45/0/0/0)

PTAS 1235 Therapeutic Exercise Lab **0.5 credit**
This lab course provides hands-on experience in applying therapeutic exercise techniques. Students will develop foundational skills in exercise, progression, and modification, preparing them for practical application in future physical therapy courses and the clinical setting. Corequisites: PTAS 1230 (0/45/0/0)

PTAS 1240 Rehab Skills II **2 credits**
This course builds on the foundation of the basic patient care techniques taught in Rehab Skills I and applies skills to an inpatient setting. Topics emphasized during this course include infection control, special equipment, vital signs, patient safety and care, and documentation. (30/0/0/0)

PTAS 1245 Rehab Skills II Lab **1 credit**
This course builds on the foundation of the patient care techniques taught in Rehab Skill Lab I and applies skills to an inpatient setting. Topics demonstrated in the lab include infection control, special equipment, vital signs, patient safety and care, and documentation. Corequisites: PTAS 1240 (0/45/0/0)

PTAS 1250 Introduction to Kinesiology **1 credit**
This course introduces the student to the principles of kinesiology and human anatomy, focusing on the structure and function of the body as it relates to movement. Students will explore basic biomechanical concepts, muscle function, joint mechanics, and basic exercise principles. Emphasis will be placed on understanding how anatomical structures support movement and how kinesiology principles apply to exercise and rehabilitation. Corequisites: PTAS 1255 (15/0/0/0)

PTAS 1255 Introduction to Kinesiology Lab **0.5 credit**
This laboratory course complements the introduction to kinesiology lecture by providing hands-on experience in applying kinesiology principles to human movement. Students will practice identifying anatomical structures, anamuscle function basic biomechanical concepts, muscle analyzing joint mechanics, and assessing muscle function. and basic exercise principles. Emphasis will be placed on using biomechanical concepts to assess movement patterns, improve efficiency, and support rehabilitation. This course fosters critical thinking and practical skills essential for understanding the relationship between anatomy and functional movement. Corequisites: PTAS 1250 (0/22.5/0/0)

PTAS 2300 Clinical Affiliation I **1.5 credits**
This course provides the first hands-on clinical experience for students. Under the immediate supervision of the clinical instructor, students apply foundational skills and knowledge gained. Emphasis is placed on developing professional behavior, communication skills, and basic treatment techniques. (0/0/67.5/0)

PTAS 2310 Clinical Practice I **2 credits**
This course integrates key elements essential for a physical therapist assistant to be prepared the for clinical setting. The following components will be introduced and applied throughout the course: Health Insurance Portability and Accountability Act, Evidence-Informed Practice, fiscal management of a therapy clinic, clinical acceptance, and education. (30/0/0/0)

PTAS 2320 Cardiopulmonary Rehabilitation **1 credit**
This course offers an in-depth exploration of cardiopulmonary pathophysiology. Students will learn about common diagnostic procedures and treatments utilized by medical professionals, as well as develop an appreciation for the collaborative team approach essential for working with patients with cardiovascular and pulmonary conditions. Emphasis will be placed on evidence-based physical therapy interventions and strategies used to effectively support patients through the rehabilitation process. Corequisites: PTAS2325 (15/0/0/0)

PTAS 2325 Cardiopulmonary Rehabilitation Lab **1 credit**
This lab course provides hands-on experience with physical therapy assessment tools, treatment techniques, and rehabilitation strategies for common cardiovascular and pulmonary conditions. Students will practice evidence-based physical therapy and engage in patient scenarios to simulate collaborative care. Emphasis will be placed

on applying theoretical knowledge to practical settings, developing critical thinking and clinical decision-making. Corequisites: PTAS 2320 (0/45/0/0)

PTAS 2330 Physical Rehabilitation I 2 credits
This course provides a deeper understanding of therapeutic strategies and interventions specific to neurologic rehabilitation of conditions caused by pathologies or traumas. By the end of the course, students will recommend environmental adaptations, adaptive equipment, and technology, allowing for the highest level of function for an individual patient. Corequisites: PTAS 2335 (30/0/0/0)

PTAS 2335 Physical Rehabilitation I Lab 1 credit
This course provides the practice of therapeutic strategies and interventions specific to neurologic rehabilitation of conditions caused by pathologies or traumas. Students will create an environmental assessment complete with adaptive equipment, and technology recommendations based on an individual patient's ability and personal needs. Corequisites: PTAS 2330 (0/45/0/0)

PTAS 2340 Orthopedic Rehabilitation I 3 credits
This course focuses on the principles and techniques of orthopedic rehabilitation for the lower extremity and spine. Students will explore common musculoskeletal conditions of the lower extremity/spine and learn evidence-based approaches to treatment and recovery. Emphasis will be placed on assessment techniques, therapeutic exercise, manual therapy, and functional rehabilitation strategies aimed at restoring mobility strength, and function. Corequisites: PTAS 2345 (45/0/0/0)

PTAS 2345 Orthopedic Rehabilitation I Lab 1 credit
This course will integrate hands-on experience allowing students to develop the skills necessary to implement effective rehabilitation programs for lower extremity injuries and spine diagnoses, including post-surgical rehabilitation, chronic conditions, and sports-related injuries. Corequisites: PTAS 2340 (0/45/0/0)

PTAS 2400 Clinical Affiliation II 1.5 credits
This course provides a continuation of hands-on clinical experience in the same setting as the first affiliation. Students further develop their foundational skills under the immediate supervision of the clinical instructor. Emphasis is placed on refining professional behavior, enhancing communication skills, and gaining more experience with treatment techniques. Through this experience, students begin to develop their clinical reasoning, preparing them for more advanced clinical experiences in subsequent affiliations. (0/0/67.5/0)

PTAS 2410 Clinical Practice II 2 credits
This course integrates key elements essential for a physical therapist assistant to be prepared for the clinical setting. The following components will be introduced and applied throughout the course: therapy regulations, legislative advocacy, licensure and career opportunities. (30/0/0/0)

PTAS 2420 Therapeutic Modalities 3 credits
This course introduces the student to the principles and theories of pain, pain management, and properties of tissue inflammation and repair. An understanding of the following agents will be developed: thermal, mechanical and electromagnetic. Students will learn when each modality is indicated and contraindicated. Corequisites: PTAS 2425 (45/0/0/0)

PTAS 2425 Therapeutic Modalities Lab 0.5 credits
During this course the student will apply the following agents: thermal, mechanical and electromagnetic. Students will learn when each modality is indicated and contraindicated. Corequisites: PTAS 2420 (0/22.5/0/0)

PTAS 2430 Orthopedic Rehabilitation II 3 credits
This course focuses on the principles and techniques of orthopedic rehabilitation for the upper extremity. Students will explore common musculoskeletal conditions of the upper extremity and learn evidence-based approaches to treatment and recovery. Emphasis will be placed on assessment techniques, therapeutic exercise, manual therapy, and functional rehabilitation strategies aimed at restoring mobility strength, and function. Corequisites: PTAS 2435 (45/0/0/0)

PTAS 2435 Orthopedic Rehabilitation II Lab 1 credit
This course will integrate hands-on experience allowing students to develop the skills necessary to implement effective rehabilitation programs for upper extremity injuries, including post-surgical rehabilitation, chronic conditions, and sports-related injuries. Corequisites: PTAS 2430 (0/45/0/0)

PTAS 2440 Physical Rehabilitation II 3 credits
This course expands upon the assessment and intervention techniques for neurologic rehabilitation introduced in Physical Rehabilitation I. It advances students' knowledge in theory and treatment methods used in the rehabilitation of pediatric and adult populations with neurologic conditions. Special focus will be given to the distinct needs of both age groups, emphasizing the different rehabilitation strategies based on the patient's age and specific neurological condition. Corequisites: PTAS 2445 (45/0/0/0)

PTAS 2445 Physical Rehabilitation II Lab 1 credit
This lab course provides hands-on experience with physical therapy assessment tools, treatment techniques, and rehabilitation strategies specific to adult and pediatric neurologic conditions. Students will practice evidence-based physical therapy and engage in patient scenarios to simulate collaborative care. Emphasis will be placed on applying theoretical knowledge to practical settings, developing critical thinking and clinical decision-making. Corequisites: PTAS 2440 (0/45/0/0)

PTAS 2500 Clinical Affiliation III 5 credits
This course offers students an advanced clinical experience where they apply and refine clinical decision-making skills in the treatment of more complex patients. Working under reduced supervision, students are challenged to integrate knowledge, analyze patient needs, and assess treatment outcomes with greater independence. Emphasis is placed on critical thinking, progressing/regressing interventions,

and demonstrating confidence in managing patients. (0/0/225/0)

PTAS 2520 Introduction to Clinical Management **1 credit**
This course introduces the PTA students to various elements of a professional healthcare provider in order to prepare the student for a clinical setting. The following elements are introduced in this course: utilizing basic time management strategies, understanding the expectations of a professional healthcare provider, building an effective patient rapport, utilizing basic physical therapy billing procedures, and identifying the components of basic physical therapy documentation. (15/0/0/0)

PTAS 2550 Basic Physical Therapy Procedures **2 credits**
This course will introduce the student to basic patient care techniques. Topics emphasized during this course include: bed mobility training, transfer training, gait training, assistive device use, wheelchair use and management of complex medical patients. Corequisites: PTAS 2551 (30/0/0/0)

PTAS 2551 Basic Physical Therapy Procedures Lab **2 credits**
This course will introduce the student to basic patient care and documentation activities. Individualized techniques are integrated into a clinical application scenario. Techniques demonstrated during this course will include: bed mobility training, transfer training, gait training, assistive device use, wheelchair use and management of complex medical patients. Corequisites: PTAS 2550 (0/60/0/0)

PTAS 2570 Exercise Principles **2 credits**
This course introduces students to fundamental functional anatomy and kinesiology skills. Students learn palpation of bones, joints and skeletal muscles. Application of basic exercise principles, range of motion, stretching, balance, basic proprioceptive neuromuscular facilitation techniques, and manual resistive exercise.
Corequisites: PTAS 2571 (30/0/0/0)

PTAS 2571 Exercise Principles Lab **1 credit**
This course introduces students to fundamental functional anatomy and kinesiology skills. Students learn palpation of bones, joints and skeletal muscles. Application of basic exercise principles, range of motion, stretching, balance, basic proprioceptive neuromuscular facilitation techniques, and manual resistive exercise will be covered as well. Corequisites: PTAS 2570 (0/30/0/0)

PTAS 2600 Clinical Affiliation IV **4.5 credits**
This course provides the student with a final clinical experience, emphasizing independence and competence in clinical decision-making and patient care management. With minimal supervision, students will work with a diverse patient population including complex patients, and will demonstrate comprehensive skills in patient assessment, intervention adjustment, and treatment progression within the scope of a PTA. This experience refines the student's professional judgment, collaboration with other healthcare providers, and readiness for entry-level practice. (0/0/202.5/0)

PTAS 2620 Clinical Management **3 credits**
This course applies and integrates the various elements of a professional healthcare provider in order to prepare the student for the clinical setting that were introduced in PTAS 2520 Introduction to Clinical Management. The following elements will be introduced and implemented into this course- the Guide to Physical Therapy Practice, the Physical Therapy Nebraska Practice Act and Evidence Based Practice. Prerequisites: PTAS 2520 with min grade of C AND PTAS 2550 with min grade of C AND PTAS 2570 with min grade of C (45/0/0/0)

PTAS 2650 Physical Agents **2 credits**
This course introduces the student to the principles and theories of pain, pain management, and properties of tissue inflammation and repair. An understanding of the following agents will be developed: thermal, mechanical and electromagnetic. Students will learn when each modality is indicated and contraindicated. Prerequisites: PTAS 2520 with min grade of C AND PTAS 2550 with min grade of C AND PTAS 2570 with min grade of C Corequisites: PTAS 2651 (30/0/0/0)

PTAS 2651 Physical Agents Lab **2 credits**
During this course the student will apply the following agents: thermal, mechanical and electromagnetic. Students will learn when each modality is indicated and contraindicated. Corequisites: PTAS 2650 (0/60/0/0)

PTAS 2670 Orthopedic Assessment and Intervention I **3.5 credits**
This course will provide the student with the opportunity to understand the musculoskeletal structure and function of each major joint of the lower extremity and spine. The student will assess movement and strength through goniometry and manual muscle testing. The student will also learn application of interventions for specific orthopedic and surgical conditions for the lower extremity and spine. Prerequisites: PTAS 2520 with min grade of C AND PTAS 2550 with min grade of C AND PTAS 2570 with min grade of C Corequisites: PTAS 2671 (52.5/0/0/0)

PTAS 2671 Orthopedic Assessment and Intervention I Lab **2.5 credits**
This course will provide the student with the opportunity to understand the musculoskeletal structure and function of each major joint of the lower extremity and spine. The student will assess movement and strength through goniometry and manual muscle testing. The student will also learn application of interventions for specific orthopedic and surgical conditions for the lower extremity and spine. Corequisites: PTAS 2670 (0/75/0/0)

PTAS 2690 Clinical Pathophysiology **3.5 credits**
This course introduces the student to the pathophysiology, etiology, clinical signs and symptoms, and medical treatment of the pathological conditions most commonly encountered in the physical therapy field. An emphasis is placed on recognizing and problem solving how each condition may affect the physical therapy plan of care and

interventions. Prerequisites: PTAS 2520 with min grade of C AND PTAS 2550 with min grade of C AND PTAS 2570 with min grade of C Corequisites: PTAS 2691 (52.5/0/0/0)

PTAS 2691 Clinical Pathophysiology Lab 0.5 credits
This course introduces the student to cardiac, pulmonary, and wound assessment and treatment techniques utilized in rehabilitation. The student will demonstrate competency in assessment and treatment techniques used for cardiopulmonary and wound pathologies common to physical therapy. An emphasis is placed on critical thinking and problem solving how different conditions may affect the physical therapy plan of care and interventions. Corequisites: PTAS 2690 (0/15/0/0)

PTAS 2720 Advanced Clinical Management 0.5 credits
This course applies the various elements of a professional healthcare provider while in the clinical setting that were introduced in PTAS 2520 Introduction to Clinical Management and PTAS 2620 Clinical Management. Corequisites: PTAS 2700 (7.5/0/0/0)

PTAS 2770 Orthopedic Assessment and Intervention II 2.5 credits
This course will provide the student with the opportunity to understand the musculoskeletal structure and function of each major joint of the upper extremity. The student will assess movement and strength through goniometry and manual muscle testing. The student will also learn application of interventions for specific orthopedic and surgical conditions for the upper extremity. Prerequisites: PTAS 2620 with min grade of C AND PTAS 2650 with min grade of C AND PTAS 2670 with min grade of C AND PTAS 2690 with min grade of C Corequisites: PTAS 2771 (37.5/0/0/0)

PTAS 2771 Orthopedic Assessment and Intervention II Lab 1.5 credits
This course will provide the student with the opportunity to understand the musculoskeletal structure and function of each major joint of the upper extremity. The student will assess movement and strength through goniometry and manual muscle testing. The student will also learn application of interventions for specific orthopedic and surgical conditions for the upper extremity. Corequisites: PTAS 2770 (0/45/0/0)

PTAS 2790 Neurologic Rehabilitation 3 credits
This course will advance the student's knowledge in the areas of theory and treatment utilized in the rehabilitation of pediatric and adult populations with neurologic pathologies common to physical therapy. The student will learn about interventions used to influence normal and abnormal motor behaviors. This course will also introduce a neurologic treatment approach for amputee rehabilitation, as well as basic treatment techniques for balance and vestibular disorders. At the conclusion of this course, the student will have attained entry level knowledge and skills needed to work with clients with neurologic disorders Prerequisites: PTAS 2620 with min grade of C AND PTAS 2650 with min grade of C AND PTAS 2670 with min grade of C AND PTAS 2690 with min grade of C Corequisites: PTAS 2791 (45/0/0/0)

PTAS 2791 Neurologic Rehabilitation Lab 2 credits
This course will introduce the student to neurologic assessment and treatment techniques common to physical therapy. The student will demonstrate neurologic techniques used to facilitate normal motor behaviors and inhibit abnormal motor behaviors. The student will also demonstrate interventions utilized in amputee rehabilitation. Corequisites: PTAS 2790 (0/60/0/0)

Sign Language (SIGN)

SIGN 1000 Conversational Sign Language 1 - 2 credits
An introduction to sign language, including elements of ASL. This course will emphasize the development of receptive and expressive skills in the use of the manual alphabet, numbers, and basic signs. (30/0/0/0)

Sociology (SOCI)

SOCI 1010 Introduction to Sociology 3 credits
Introduction to the basic principles of sociology, including the study of sociological research, theoretical perspectives, culture, socialization, social structure, social institutions, deviance, social inequalities, stratification, demography, and population. (45/0/0/0)

SOCI 1100 Introduction to Family Living 3 credits
Study of basic social unit historically and culturally. Examines the socialization process, gender roles, love, conflict, marriage, divorce, relationships, parenting and alternate forms of family. (45/0/0/0)

SOCI 2150 Exploring Unity and Diversity 3 credits
This course will help students increase awareness and sensitivity of commonalities and differences among people and acquire knowledge of social structure and inequalities. The course will prepare students to more critically, actively, and effectively participate in an increasingly diverse and global society. (45/0/0/0)

SOCI 2200 Criminology 3 credits
Examines crime and criminology from a broad social perspective. Emphasizes the nature and causes of crimes, investigation and prosecution, and treatment and prevention. (45/0/0/0)

SOCI 2300 Sociology of Deviant Behavior 3 credits
Theoretical analysis of the relation of deviant behavior including crime, vice, innovation, individual pathology, and deviant subgroups to community standards of conventional behavior as expressed in law and norms. (45/0/0/0)

SOCI 2320 Social Problems 3 credits
This course is designed to give students an appreciation for the possibilities and difficulties inherent in a wide variety of social problems, to include economic inequality and poverty, work and unemployment, race and ethnicity, gender inequality and issues in sexual orientation, and crime and drugs. Problems related to the family,

education, health care, and political institutions, violence, terrorism, population, and the environment will also be discussed. Prerequisites: SOCI 1010 (45/0/0/0)

Social Work (SOWK)

SOWK 2000 Introduction to Social Work 3 credits
A basic introduction to the history, development, and current status of social welfare institutions and issues related to them. In addition, the course will review the profession of social work, to include the purposes, values, and skill base of the profession, the organization and functions of public and private social agencies, and the social service delivery system. The course will also address human needs and rights, the impact of social problems on individuals, families, and/or communities, and the response to them. (45/0/0/0)

SOWK 2100 Social Work Ethics and Skills 3 credits
The course prepares students with a working knowledge of the social work field. They will develop a keen understanding of the values and ethics of social work and be oriented into social work environments so they can analyze, evaluate, and respond to diverse individuals functioning in challenging social situations. Emphasis will be on skill building and interpersonal communications. Prerequisites: SOWK 2000 with min grade of C (45/0/0/0)

SOWK 2110 Social Work Practicum 1 credit
Under supervision, students will work at selected sites and apply acquired skills and principles studied in the classroom. Prerequisites: SOWK 2000 with min grade of C AND SOWK 2100 with min grade of C (*may be taken concurrently*) (0/0/45/0)

Spanish (SPAN)

SPAN 1005 Spanish in the Workplace I 1 credit
This course will cover the basic phrases and communication skills needed to interact with Spanish-speaking employees, patrons, co-workers and customers in the workplace. Emphasis is placed on oral communication and specific vocabulary used in a workplace context. (15/0/0/0)

SPAN 1010 Spanish in the Workplace II 1 credit
This course will cover vocabulary and communication skills dealing with career-specific workplace situations. Emphasis is placed on oral and written communication related to specific student career studies. (15/0/0/0)

SPAN 1200 Elementary Spanish I 4 credits
An introduction to the grammatical and conversational study of the Spanish language. Emphasis on the history and culture of the Spanish speaking world. (60/0/0/0)

SPAN 1210 Elementary Spanish II 4 credits
A continuation of the grammatical and conversational study of the Spanish language. Emphasis on reading Spanish at a literary level. Prerequisites: SPAN 1200 (60/0/0/0)

SPAN 2100 Intermediate Spanish I 4 credits
A grammar review and advanced presentation of the structure of the Spanish language. Emphasis on oral, conversational skills, reading and writing. Prerequisites: SPAN 1210 (60/0/0/0)

Theatre (THEA)

THEA 1010 Introduction to Theatre 3 credits
An introduction to the forms and functions of the dramatic arts within a historical perspective. Includes an introduction to basic theatre skills as well as an introduction to a range of dramatic literature. Prerequisites: ENGL 1010 with min grade of C OR ENGL 2070 with min grade of C (45/0/0/0)

THEA 1100 Theatre I 1 credit
Techniques and study in acting, rehearsal, performance, and stage production. (0/30/0/0)

THEA 1110 Theatre II 1 credit
Continuation of THEA 1100. Prerequisites: THEA1100 (0/30/0/0)

THEA 1200 Play Production 2 credits
This course informs students on the design and planning process necessary to produce a play. Included topics are light design and application, scenic design and application, sound design and application, and costume design and application. The course culminates in the production of the college's annual student play. Prerequisites: THEA 1100 (*may be taken concurrently*) OR THEA 1110 (*may be taken concurrently*) OR THEA 2120 (*may be taken concurrently*) OR THEA 2130 (*may be taken concurrently*) (30/0/0/0)

THEA 1340 Introduction to Acting 3 credits
An introductory course on the art of acting, which lays the foundation for the acting process. This course introduces the student to methods for analyzing theatrical works, methods for developing physical and vocal techniques, ways to build a deeper awareness of character and characterization, and theories related to exploring techniques which help an actor prepare for performance. (45/0/0/0)

THEA 1920 Introduction to Movement for the Stage 1 credit
An introduction to the basic dance forms commonly utilized in musical theatre productions, including ballet, jazz, and modern dance. Students will also become acquainted with basic dance terminology. Prerequisites: MUSC 1960 (*may be taken concurrently*) OR THEA 1960 (*may be taken concurrently*) (0/30/0/0)

THEA 1960 Musical Theatre Recital 1 credit
Designed to serve as a demonstration of voice and movement skills learned in the first year of the musical theatre program. Prerequisites: THEA 1920 *(may be taken concurrently*) OR MUSC 1920 (*may be taken concurrently*) AND MUSC 1122 (*may be taken concurrently*) (0/30 /0/0)

THEA 2120 Theatre III 1 credit
Continuation of THEA 1110. Prerequisites: THEA 1110 AND THEA 1200 (0/30/0/0)

THEA 2130 Theatre IV **1 credit**
Continuation of THEA 2120. Prerequisites: THEA 1200 AND THEA 2120 (0/30/0/0)

THEA 2150 Introduction to Directing **3 credits**
Introduction to various aspects of directing and staging techniques, including fundamentals of blocking, script analysis, and performance as they apply in theory, real-world examples, and practical application. Prerequisites: THEA 1100 (*may be taken concurrently*) OR THEA 1110 (*may be taken concurrently*) OR THEA 2120 (*may be taken concurrently*) OR THEA 2130 (*may be taken concurrently*) (22.5/45/0/0)

THEA 2920 Musical Theatre Performance **2 credits**
Designed as a capstone for the Musical Theatre Program, this course assesses student participation in the NECC College Musical. (0/60/0/0)

Utility Line (UTIL)

UTIL 1010 Concepts of Electricity I **4 credits**
Fundamentals of electrical theory and electrical components in DC circuits. Includes explanation and understanding of resistive circuit analysis using Ohm's law, circuit diagrams, and the proper operation of basic test equipment. Corequisites: UTIL 1020 (60/0/0/0)

UTIL 1020 Concepts of Electricity I Lab **1 credit**
Application of the fundamentals of electrical theory and electrical components in DC circuits. Lab includes demonstration and explanation of resistive loads in DC circuits, proper use of electrical test equipment, safety rules and procedures when working with electricity, and following circuit diagrams. Corequisites: UTIL 1010 (0/45/0/0)

UTIL 1030 Line Construction I **4 credits**
Study of the use of equipment, materials, and specifications for construction of various distribution systems. Proper and safe climbing techniques are a major element in the application of line construction. Corequisites: UTIL 1040 (60/0/0/0)

UTIL 1040 Line Construction I Lab **3 credits**
Application of fundamentals learned in the classroom regarding pole climbing, digger derrick set-up and operation, single phase overhead line construction including pole setting, plumbing, tamping, and learning basic tools of the trade. Corequisites: UTIL 1030 (0/135/0/0)

UTIL 1100 Commercial Drivers License **1 credit**
Includes all aspects of classroom instruction pertaining to the written portion of the commercial drivers license test as is now required by the electrical utility industry for those operating utility-owned trucks on public roadways and to meet state and federal requirements. Valid drivers license required. UTIL majors only or permission of instructor. (15/0/0/0)

UTIL 1110 Commercial Drivers License Lab **1 credit**
Lab experience for UTIL 1100. Involves the practical application of driving tractor trailer to meet the requirements of the State of Nebraska DOT Class A or A-O restriction CDL. Upon completion of this course, state testing for a commercial drivers license Class A will be done. Valid drivers license and CDL learners permit required. UTIL majors only or permission of instructor. (0/45/0/0)

UTIL 1120 Power Line Transformer Theory **2 credits**
Fundamentals of powerline transformer components, operation, and installation. Prerequisites: UTIL 1010 with min grade of C Corequisites: UTIL 1240 (30/0/0/0)

UTIL 1140 Line Construction II **4 credits**
Advanced study of the use of equipment, materials and specifications for the construction of various distribution systems. Proper, safe and advanced climbing techniques are a major element in the application of advanced line construction. Prerequisites: UTIL 1010 with min grade of C AND UTIL 1030 with min grade of C AND MATH 1020 Corequisites: UTIL 1150 (60/0/0/0)

UTIL 1150 Line Construction II Lab **3 credits**
Application of the fundamentals learned in the classroom of single phase and three phase line construction. Lab includes setting poles, attaching hardware, guying and anchoring, underground electrical systems both primary and secondary, conductors, and single phase transformer installation. Prerequisites: UTIL 1020 with min grade of C AND UTIL 1040 with min grade of C Corequisites: UTIL 1140 (0/135/0/0)

UTIL 1240 Concepts of Electricity II **4 credits**
Fundamentals of electrical theory and electrical components in AC circuits. Includes explanation and understanding of resistors, capacitors, inductors and transformers and how they affect the flow of alternating current. Prerequisites: UTIL 1010 with min grade of C AND UTIL 1030 with min grade of C AND MATH 1020 Corequisites: UTIL 1250 (60/0/0/0)

UTIL 1250 Concepts of Electricity II Lab **1 credit**
Application of the fundamentals of electrical theory and electrical components in DC and AC circuits. Lab includes demonstration and experiments containing resistors, inductors, capacitors, and transformers in both AC and DC circuits, proper use of electrical test equipment, safety rules and procedures when working with electricity, and following circuit diagrams. Prerequisites: UTIL 1020 with min grade of C AND UTIL 1040 with min grade of C Corequisites: UTIL 1240 (0/45/0/0)

UTIL 1260 Ropes and Riggings **1 credit**
Proper use and handling of ropes and related hardware in line construction. Includes care of ropes, determination of strengths and types, and knots. UTIL majors only. (15/0/0/0)

UTIL 1280 Computer Literacy **2 credits**
An introduction to basic computer operations using personal computers with Windows operating system. Students learn to use the computer to create and edit word processing and spreadsheet documents. UTIL majors only. (30/0/0/0)

UTIL 1300 Cooperative Internship I **1 - 6 credits**
Work-study program for in-depth instruction on the job.

The college gives both related and vocational instruction before and-or during this period, including seminars directly related to the work experience. These experiences are planned and supervised by the college and employers so that each contributes to the student's education and employability. Satisfactory completion of first year Utility Line program with all required classes and a minimum 2.0 GPA. Must have and maintain a valid Class 1 Commercial Drivers License. Prerequisites: UTIL 1140 with min grade of C AND UTIL 1150 with min grade of C AND UTIL 1240 with min grade of C AND UTIL 1250 with min grade of C AND UTIL 1120 with min grade of C AND UTIL 1260 with min grade of C AND MATH 1060 (0/0/0/360)

UTIL 1500 Rural Electric Job Training and Safety **1.5 credits**
To educate employees in the safe working procedures and maintenance of equipment to provide a safe work environment in the rural electric industry. (22.5/0/0/0)

UTIL 1510 Electrical Job Training and Safety **2 credits**
Course covers safe work practices and maintenance of equipment for electrical workers. (30/0/0/0)

UTIL 1520 Rural Electrical Job Training and Safety **2.5 credits**
To educate employees in the safe working procedures and maintenance of equipment in the rural electric industry. (37.5/0/0/0)

UTIL 2130 Advanced Power Line Construction and Maintenance **3 credits**
Techniques and theory of high voltage tools and equipment as well as application of rubber gloving and stick work techniques for working on energized high voltage lines along with theory and techniques of field engineering. Prerequisites: UTIL 1300 Corequisites: UTIL 2135 (45/0/0/0)

UTIL 2135 Advanced Power Line Construction and Maintenance Lab **3 credits**
Extensive practical field experience in the use of high voltage tools and equipment, rubber gloving procedures and hot stick procedures, along with proper maintenance, care and set up of digger derricks and aerial trucks for the construction and maintenance of high voltage power lines. Prerequisites: UTIL 1300 Corequisites: UTIL 2130 (0/135/0/0)

UTIL 2140 Advanced Power Line Construction and Maintenance **2 credits**
Advanced theory and techniques of overhead and underground power line construction, maintenance, and repair will be presented. Proper use of equipment such as a trencher, chainsaws, and the line trucks will be presented. Right of way clearing techniques and primary line trouble shooting. Prerequisites: UTIL 2130 AND UTIL 2135 Corequisites: UTIL 2145 (30/0/0/0)

UTIL 2145 Advanced Power Line Construction and Maintenance II Lab **3 credits**
Extensive practical field experience in the use of digger derricks, aerial trucks, trencher, brush chipper, and chainsaws for construction, maintenance, and right-of-way for transmission, distribution and secondary overhead and underground power lines. Prerequisites: UTIL 2130 AND UTIL 2135 Corequisites: UTIL 2140 (0/135/0/0)

UTIL 2150 Power Line Transformers II **3 credits**
Continuation of Power Line Transformer Theory. Transformer safety, single and transformer bank installation, and troubleshooting. Prerequisites: UTIL 1300 Corequisites: UTIL 2155 (45/0/0/0)

UTIL 2155 Power Line Transformers II Lab **3 credits**
Practical field experience in the construction and maintenance of a distribution system including the installation of electrical equipment commencing at the substation and terminating at the customer's premises. Prerequisites: UTIL 2150 AND UTIL 2155 Corequisites: UTIL 2160 (0/135/0/0)

UTIL 2160 Power Line Substation, Metering and Protective Devices **3 credits**
Practical field experience in the construction and maintenance of a distribution system including the installation of electrical equipment commencing at the substation and terminating at the customer's premises. Prerequisites: UTIL 2150 AND UTIL 2155 Corequisites: UTIL 2165 (45/0/0/0)

UTIL 2165 Power Line Substation, Metering and Protective Devices Lab **3 credits**
Practical field experience in the construction and maintenance of a distribution system including the installation of electrical equipment commencing at the substation and terminating at the customer's premises. Prerequisites: UTIL 2150 AND UTIL 2155 Corequisites: UTIL 2160 (0/135/0/0)

UTIL 2400 National Electric Safety Code **2 credits**
Course covers basic provisions from the NESC for safeguarding persons from hazards arising from the installation, operation, or maintenance of conductors and equipment in substations and with overhead and underground installations. The course also includes work rules for the construction, maintenance, and operation of an electric utility company. Prerequisites: UTIL 2130 AND UTIL 2135 Corequisites: UTIL 2140, UTIL 2145 (30/0/0/0))

Veterinary Technician (VTEC)

VTEC 1000 Animal Husbandry and Restraint **3 credits**
Introductory course to help students learn the proper husbandry, feeding, breeds and restraint techniques of the common domestic animals seen in a veterinary clinic. (45/0/0/0)

VTEC 1110 Veterinary Terminology **2 credits**
The veterinary technician student will be instructed in writing, speaking, and understanding medical terminology. (30/0/0/0)

VTEC 1120 Anatomy and Physiology of Domestic Animals I **3 credits**
A systems approach to studying the anatomy and physiology of domestic animals will be used. Students will learn the normal physiology of the tissues, skeletal, nervous, cardiovascular, blood, respiratory, and urinary systems. Species differences will be introduced. (45/0/0/0)

VTEC 1121 Anatomy and Physiology of Domestic Animals II **3 credits**
This course is a continuation of VTEC 1120. A systems approach to studying the anatomy and physiology of domestic animals will be used. Students will learn the normal physiology of the integument, muscle, digestive, endocrine, reproductive, and special senses systems. Species differences will be introduced. (45/0/0/0)

VTEC 1123 Anatomy and Physiology of Domestic Animals Lab **1 credit**
A systems approach to studying the anatomy and physiology of domestic animals will be used. Students will learn the normal physiology of each organ system as well as the gross and microscopic anatomy. Species differences will be introduced. (0/45/0/0)

VTEC 1211 Laboratory Techniques I Lab **1 credit**
This laboratory will include the demonstration and use of many diagnostic tests used in the veterinary clinic. Knowledge from VTEC 1210 will be used by the student to understand the basis of these tests. The diagnostic tests will include CBC, hematocrit, differentials urinalysis, and preparation for cytology. The student should gain an appreciation for the limits of each test, safety and quality control, and interpretation of the results. (0/45/0/0)

VTEC 1212 Laboratory Techniques I **3 credits**
Students will explore the areas of hematology, cytology, and urology. They will learn basic diagnostic tests commonly used in veterinary clinics. Laboratory safety and quality control will be covered. Common diseases affecting laboratory results in large, small, and exotic species will be discussed. (45/0/0/0)

VTEC 1220 Pharmacology **3 credits**
Provides the student with a working knowledge of the need for appropriate use and dispensing of medication in all levels in veterinary medicine. Emphasis is placed on the veterinary technician role as the student learns the principles of drug actions, drug groups, inventory management, dosage calculation, dispensing, adverse drug reactions, and proper storage and disposal. (45/0/0/0)

VTEC 1321 Radiology and Ultrasonography Lab **1 credit**
Students will expand upon knowledge gained in VTEC 1320. Students will demonstrate safety, positioning animals correctly for x-rays, and taking good quality x-rays. Students will also develop a technique chart and figure exposure factors and will demonstrate how to use and maintain the ultrasound machine. (0/45/0/0)

VTEC 1322 Radiology and Ultrasonography **3 credits**
Students will be instructed on x-ray production and ultrasonography imaging, radiation safety and how to produce quality radiographs. Other subject areas include film processing, developing technique charts, exposure factors, and appreciate clinical indications for performing ultrasound. Must be 18 years or older and meet special conditions for course. (45/0/0/0)

VTEC 1410 Clinical Nursing of Companion Animals **3 credits**
Students will learn various restraint techniques, nursing skills, and common diseases associated with small animals. Students will become acquainted with how to restrain small animals, recognize common clinical signs of ill animals, common tests used for diagnosis, treatments, and how to medicate small animals. Students will also learn how to provide assistance to the veterinarian, and safety will be emphasized. (45/0/0/0)

VTEC 1411 Clinical Nursing of Companion Animals Lab **1 credit**
The student will expand upon the knowledge gained in VTEC 1410. The student will demonstrate the ability to restrain patients, recognize clinical signs of ill patients, deliver medication, place and maintain catheters, perform diagnostic tests, monitor patients, and many other nursing techniques. Emphasis will be placed on safety, good medical communication and patient comfort. (0/45/0/0)

VTEC 1440 Lab Animal Science **2 credits**
This class will acquaint the student with basic principles of animal research. Basic lab animal husbandry, handling, and regulations will be the major topics of discussion. (30/0/0/0)

VTEC 2200 Veterinary Office Practices **3 credits**
This course presents material that will help the veterinary technician learn about veterinary practice management. Students will learn about the care and maintenance of the veterinary practice, administrative duties, computer software, interpersonal communication, customer service, and financial matters of a veterinary practice. (45/0/0/0)

VTEC 2520 Clinical Nursing of Large Animals **3 credits**
The student will learn various restraining techniques, nursing skills, and common diseases associated with large animals. The student will become acquainted with how to handle large animals, recognize common clinical signs of ill animals, common tests used for diagnosis, treatments and how to medicate large animals. (45/0/0/0)

VTEC 2521 Clinical Nursing of Large Animals Lab **1 credit**
The student will expand upon the knowledge gained in VTEC 2520. The student will demonstrate various methods of restraint, recognize clinical signs of ill patients, deliver medication, catheter placement, sample collection, perform diagnostic tests, monitoring patients, and many other nursing techniques. Emphasis will be on safety, good medical communication and patient comfort. (0/45/0/0)

VTEC 2561 Laboratory Techniques II Lab **1 credit**
This laboratory will build on the knowledge gained from

VTEC 2560. Diagnostic tests covered in this lab include fecals, eggs count, parasite identification, identification of bacteria, ELISA tests, and blood chemistries. The student should gain an appreciation for the limits of each test, safety and quality control and interpretation of the tests results. (0/45/0/0)

VTEC 2562 Laboratory Techniques II 3 credits
A continuation of VTEC 1212. Students will be exposed to the areas of parasitology, microbiology, and clinical chemistries. The students will learn common diagnostic tests that are used in veterinary clinics. Common disease processes will be discussed. Laboratory safety and quality control will be emphasized. (45/0/0/0)

VTEC 2570 Laboratory Techniques III 2 credits
In this course the student will cover the subject areas of microbiology as it pertains to veterinary medicine. The student will learn the common laboratory practices used to identify bacterial agents. The student will also learn about the common bacteria groups found in veterinary medicine and their impact on the animals they infect. (30/0/0/0)

VTEC 2571 Laboratory Techniques III Lab 1 credit
In this course the student will learn proper laboratory techniques to prevent contamination and zoonosis. The student will learn how to identify different bacteria through the use of agars, staining techniques, metabolic tests, and other methods. The student will also learn about the common bacteria groups found in veterinary medicine and their impact on the animals they infect. (0/45/0/0)

VTEC 2611 Principles of Veterinary Surgical Nursing and Dentistry Lab 1 credit
Prepares the student to participate as an integral part of the surgical team. The student will be able to prepare equipment and supplies for surgery as well as assist the veterinarian during surgical procedures. The student will be trained in anesthetic procedures and will exercise proper safety measures to prevent injury to patient and staff. Prerequisites: VTEC 2622 with min grade of C+ AND VTEC 2621 with min grade of C+ (0/45/0/0)

VTEC 2612 Principles of Veterinary Surgical Nursing 3 credits
Prepares the student to participate as an integral part of the surgical team. Material presented will assist the student in understanding the theory on surgical assisting and surgical nursing. The student will review proper safety measures pertaining to animal handling, OSHA, Zoonosis, and personal safety. (45/0/0/0)

VTEC 2621 Anesthesia for Veterinary Technician Lab 1 credit
This course will prepare the student to participate as an integral part of the surgical team. Material presented will assist the student in understanding the theory on anesthesia. The student will review machine function and maintenance, correct monitoring options, how to recognize emergency situations and appropriate steps to correct situation, advanced procedures used in both anesthesia and analgesia. (0/45/0/0)

VTEC 2622 Anesthesia for Veterinary Technicians 3 credits
This course will prepare the student to participate as an integral part of the surgical team. Material presented will assist the student in understanding the theory on anesthesia and dentistry. The student will review proper safety measures pertaining to animal handling, OSHA, Zoonosis, and personal safety. (45/0/0/0)

VTEC 2630 Clinical Nursing of Avian and Exotics 2 credits
The course is designed to introduce the student to the care of exotic animals. The student will learn various restraint techniques, nursing skills and common diseases associated with exotics. The student will become acquainted with how to handle exotics, recognize common clinical signs of the ill exotics, common tests used for diagnosis, treatments, and how to medicate exotic animals. (30/0/0/0)

VTEC 2660 Internship 6 credits
Allows the student hands-on experience in the veterinary clinic. The student will work under the supervision of the veterinarian to gain and hone their skills as a veterinary technician. This internship is completed during the last semester of the Veterinary Technology Program. At the end of this internship, the student will take a major comprehensive exam of all material presented in the veterinary technology curriculum. (0/0/360/0)

VTEC 2680 Veterinary Technician National Exam Review 1 credit
This is a review course that will help students review material from the veterinary technology program and prepare to take the Veterinary Technician National Exam. Emphasis will be placed on the seven domains of the VTNE. Students will be required to pass a comprehensive exam at the end of the course. (15/0/0/0)

VTEC 2700 Topics in Large Animal Nursing 1 credit
This course is designed for the student who wants to advance their skill level in large animal nursing. Students will select the topics that will be covered from the areas of anesthesia, radiology and ultrasound, reproductive management, and nursing skills. (7.5/22.5/0/0)

VTEC 2888 Topics in Small Animal Nursing 1 credit
This course is designed for the student who wants to advance their skill level in small animal nursing. Topics that will be covered include: anesthesia, emergency and critical care, toxicology, advanced nursing skills, nutrition, rehabilitation, chemotherapy and dentistry. Must be sophomore standing in Veterinary Technology Program. Prerequisites: VTEC 1410 AND VTEC 1411 AND VTEC 2621 AND VTEC 2622 (7.5/22.5/0/0)

Welding (WELD)

WELD 1010 Related Welding 0.5 credits
Basic welding fundamentals for vocational programs other than welding. Emphasizes shielded metallic arc welding and oxyacetylene welding. Corequisites: WELD 1020 (7.5/0/0/0)

WELD 1020 Related Welding Lab 1 credit
Lab experience for WELD 1010. Emphasizes shielded metallic arc welding and oxyacetylene welding. Corequisites: WELD 1010 (0/45/0/0)

WELD 1030 Shielded Metal Arc Welding Basic Theory (SMAW) 1.5 credits
Provides student with a technical understanding of arc welding, welding safety, power sources, electrode classifications and selection. It also provides theory to make quality shielded metal arc welds in all positions on various thicknesses of material using selected electrodes on AC and DC currents. Corequisites: WELD 1035 (22.5/0/0/0)

WELD 1035 Shielded Metal Arc Welding Basic Lab 3 credits
Provides student with a technical understanding of arc welding, welding safety, power sources, electrode classifications and selection. It also provides training to develop skill to make quality welds in all positions on mild steel from thin to thick material, single and multiple passes using selected electrodes and current. Course also provides training to develop skill to produce quality multi-pass groove welds with backing in all positions. Related information about welder qualification is provided. Corequisites: WELD 1030 (0/135/0/0)

WELD 1040 Gas Metal and Flux Cored Arc Welding Theory 1.5 credits
Provides student with a technical understanding of welding safety using gas metal arc and flux cored arc welding, equipment adjustments, metal transfer and shielding gases. It also illustrates problems associated with welding situations and provides corrective information. Corequisites: WELD 1045 (22.5/0/0/0)

WELD 1045 Gas Metal Arc and Flux Cored Arc Welding Lab 3 credits
Provides student with the training to develop the skill to make gas metal arc and flux corded arc welds in all positions on mild steel and materials with various thicknesses. Single and multiple pass welds using select modes of transfer will be used to produce welds on fillet and groove welds. Corequisites: WELD 1040 (0/135/0/0)

WELD 1050 Gas Tungsten Arc Welding Theory 1.5 credits
Course provides the student with a technical understanding of gas tungsten arc welding, arc characteristics and welding safety. It prepares students with a technical understanding to make welds on gage material using mild steel, stainless steel and aluminum and provides preparation for welding pipe. Prerequisites: WELD 1035 AND WELD 1045 Corequisites: WELD 1055 (22.5/0/0/0)

WELD 1055 Gas Tungsten Arc Welding Lab 3 credits
Course provides a technical understanding of gas tungsten arc welding, arc characteristics and welding safety. It provides training to develop the skill to make welds on mild steel, stainless steel and aluminum gage material. It also develops skill to produce groove welds on plate and pipe material in various positions. Student must reach a skill level on gage material and plate prior to getting on pipe. Prerequisites: WELD 1035 AND WELD 1045 Corequisites: WELD 1050 (0/135/0/0)

WELD 1060 Pipe Applications Theory 1.5 credits
This course provides the student with an understanding of pipe welding and weld quality plus information about the pipe welding industry. It also provides information about the different pipe welding positions and codes and how multiple processes can be used to weld out pipe. Prerequisites: WELD 1055 (*may be taken concurrently*) Corequisites: WELD 1065 (22.5/0/0/0)

WELD 1065 Pipe Applications Lab 3 credits
Course provides the student with an understanding of pipe welding and weld quality. This course helps to develop the welding skills necessary to produce welds on pipe in various positions using one or more processes to complete the weld. Prerequisites: WELD 1055 (*may be taken concurrently*) Corequisites: WELD 1060 (0/135/0/0)

WELD 1110 Introduction to Metals and Inspection 2 credits
Course will provide instruction and information on the basic principles of metallurgy as it relates to welding. It also covers why welds and welders are tested and why quality, reliability and strength are critical in weldments. (30/0/0/0)

WELD 1140 Print Reading and Symbols 2 credits
Provides student with a technical understanding to develop skills necessary to interpret working sketches and prints common to the welding field. Once the learner is familiar with the basic concepts and components of drawings, the American Welding Society standard weld symbols are introduced as well as pipe welding symbols and nondestructive examination symbols. (30/0/0/0)

WELD 1155 Fabrication Equipment and Operation Lab 2 credits
Course will provide student the information to identify, maintain, setup and safely use precision measuring tools, hand and power tools and other lab equipment related to the welding field. Metal forming, cutting and finishing equipment will also be discussed. Related welding and cutting processes will also be identified and practiced Corequisites: WELD 1035, WELD 1045 (0/90/0/0)

WELD 1170 Print Reading and Fabrication Lab 2 credits
Course provides students with skills to apply the aspects of blueprint reading and to use set-up tools to fabricate a weldment from a print. Corequisites: WELD 1055 (0/90/0/0)

Wind Energy (WIND)

WIND 1015 Principles of Electricity I 3 credits
Fundamental electrical theory including electrical components and their effects on AC and DC circuits. Covers electrical measurement with emphasis on circuit analysis using Ohms law and circuit testing equipment. Corequisites: WIND 1025 (45/0/0/0)

WIND 1025 Principles of Electricity I Lab **2 credits**
Fundamental electrical theory including electrical components and their effects on AC and DC circuits. Covers electrical measurement with emphasis on circuit analysis using Ohm's law and circuit testing equipment. Corequisites: WIND 1015 (0/90/0/0)

WIND 1035 Wind Industrial Safety **2 credits**
The study of safety guidelines in the wind industry including OSHA regulations for general industry as well as first aid and CPR. (30/0/0/0)

WIND 1040 Wind Industrial Safety Lab **3 credits**
Hands on practice of safety topics, and training in the safe access and rescue at heights aspect of the wind energy field. Corequisites: WIND 1035 (0/135/0/0)

WIND 1080 Wind Energy Fundamentals **3 credits**
Introduction to how wind energy works, its reliability, and its economic, environmental, and political issues. Introduces the various components and nomenclature of wind energy systems as well as fundamental maintenance principles. (45/0/0/0)

WIND 1150 Mechanical Systems I **1 credit**
Fundamental exploration of various electrical diagrams, symbols, and their associated devices commonly used for basic control of electrical motors and industrial loads. (15/0/0/0)

WIND 1165 Mechanical Systems I Lab **3 credits**
Practical application of various circuits commonly used to control electrical motors and industrial loads, including practice in troubleshooting, and wiring control circuits in a laboratory setting. Corequisites: WIND 1150 (0/135/0/0)

WIND 1230 Motor Control **2 credits**
Practical source on various circuits commonly used to control electrical motors, including practice in troubleshooting and wiring control circuits in a laboratory situation. Prerequisites: WIND 1015 with min grade of C (30/0/0/0)

WIND 1240 Motor Control Lab **2 credits**
Practical application in constructing circuits used to control motors. Includes troubleshooting and repair of motor control systems in a lab setting. Prerequisites: WIND 1025 with min grade of C Corequisites: WIND 1230 (0/90/0/0)

WIND 1255 Blueprint Reading **2 credits**
Study of electrical and structural blueprints used in the wind industry. Course includes creating a materials list and cost estimates for constructing wind turbines. Students will also learn how to use a CAD program to blueprint electrical and electromechanical devices used in the operation of wind turbines. (30/0/0/0)

WIND 1300 Cooperative Internship I **1 - 6 credits**
Work-study program for in-depth instruction on the job. The college gives both related and vocational instruction before and-or during this period, including seminars directly related to the work experience. These experiences are planned and supervised by the college and the employers so that each contributes to the student's education and employability. First year completion of the Wind Energy program or permission of instructor. (0/0/0/360)

WIND 2015 Principles of Electricity II Theory **2 credits**
This course is the student's next step up after understanding the concepts learned through the Basic Electricity course. Students will interpret complex electrical circuits and components typically found within AC circuits that cause the circuits to become reactive. They will identify how these electronic components cause the reactions and understand methods to discover and test these reactions and the methods used to correct them. Prerequisites: WIND 1015 with min grade of C AND WIND 1025 with min grade of C Corequisites: WIND 2025 (30/0/0/0)

WIND 2025 Principles of Electricity II Lab **2 credits**
This course is the student's next step up after understanding the concepts learned through the Basic Electricity course. Students will interpret complex electrical circuits and components typically found within AC circuits that cause the circuits to become reactive. They will identify how these electronic components cause the reactions and understand methods to discover and test these reactions and the methods used to correct them. Prerequisites: WIND 1015 with min grade of C AND WIND 1025 with min grade of C Corequisites: WIND 2015 (0/90/0/0)

WIND 2040 Programmable Controllers and Communications **2 credits**
This course introduces students to the program development and control of electromechanical equipment utilizing PLC type controllers and software as well as the communication (SCADA) protocol and connections required to complete this process locally and or remotely as would be required for a multi-tower wind farm site. Prerequisites: WIND 1230 with min grade of C AND WIND 1240 with min grade of C (*may be taken concurrently*) Corequisites: WIND 2042, WIND 2115, WIND 2120 (30/0/0/0)

WIND 2042 Programmable Controllers and Communications Lab **2 credits**
This course introduces students to the program development and control of electromechanical equipment utilizing PLC type controllers and software as well as the communication protocol and connections required to complete this process locally and or remotely as would be required for a multi-tower wind farm site. Prerequisites: WIND 1230 with min grade of C (*may be taken concurrently*) AND WIND 1240 with min grade of C Corequisites: WIND 2040, WIND 2115, WIND 2120 (0/30/0/0)

WIND 2052 Fluid Fundamentals Theory **2 credits**
The study of fluid characteristics, the operation of valves, pumps, and cylinders, and the basic steps in hydraulic troubleshooting. (30/0/0/0)

WIND 2062 Fluid Fundamentals Lab **2 credits**
Practical application in the safe use of high-pressure

hydraulic fluids. Students will draw and construct simple hydraulic circuits, analyze hydraulic systems, as well as connect and demonstrate the use of flow control components. Corequisites: WIND 2052 (0/90/0/0)

WIND 2095 Air Foils and Composite Repair Lab 2 credits
This course will enable the student to understand the construction, design and repair of wind turbine blades. This course will further cover the moving and transportation of wind turbines blades. Students will understand common industry terminology used in the manufacturing and repair of wind turbine blades. Students will also be exposed to traditional and new repair techniques. (0/90/0/0)

WIND 2115 Control Systems 2 credits
Students will learn to interpret, understand, and troubleshoot the various industrial control systems that utilize advanced electrical and electronic components and devices such as sensors, relays, proximity switches, and controllers. Prerequisites: WIND 1230 with min grade of C AND WIND 1240 with min grade of C Corequisites: WIND 2040, WIND 2042, WIND 2120 (30/0/0/0)

WIND 2120 Control Systems Lab 2 credits
Application of the concepts and principles of Control Systems. Students will experimentally test and evaluate control systems. Students will further troubleshoot and repair various industrial control systems utilizing advanced electrical and electronic components and devices such as sensors, relays, proximity switches and controllers. Prerequisites: WIND 1230 with min grade of C AND WIND 1240 with min grade of C Corequisites: WIND 2040, WIND 2042, WIND 2115 (0/90/0/0)

WIND 2210 Mechanical Systems II 1 credit
This course will cover the interaction and repair of wind turbine up-tower mechanical devices. Repairs and maintenance will follow the guidelines of re-manufacturing companies along with best practices by the Electrical Apparatus Service Association. Students will have an opportunity to obtain a torque certification credential. Prerequisites: WIND 1150 AND WIND 1165 (15/0/0/0)

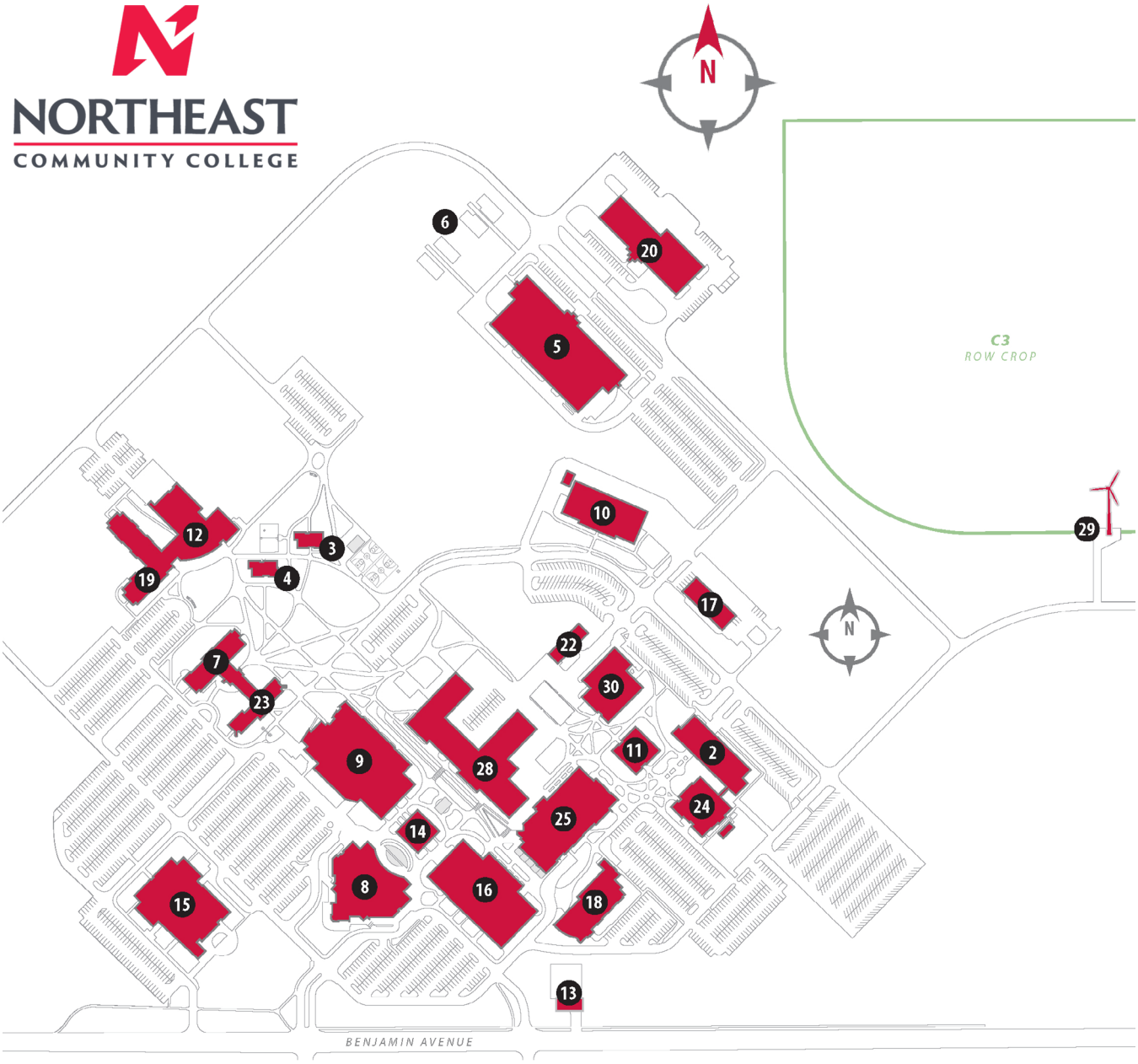
WIND 2220 Mechanical Systems II Lab 3 credits
The lab will cover hands on training with the various mechanical pieces of today's large scale wind turbines. Prerequisites: WIND 1150 AND WIND 1165 Corequisites: WIND 2210 (0/135/0/0)

WIND 2275 Wind Site Development and Operation 2 credits
This course will cover basic principles of how to determine suitability of sites for wind energy production, including societal and environmental impacts and mitigation, as well as continual responsibilities required throughout the operation of the site. Prerequisites: WIND 1080 (30/0/0/0)

WIND 2285 Power Generation and Distribution Theory 3 credits
Introduction to the function of rotating electrical equipment such as AC and DC motors and generators studying the construction, and fundamental elements required to allow these machines to function. Students will then study how the electricity produced through electrical power generation gets distributed and applied and dispersed through the power grid. Corequisites: WIND 2295 (45/90/0/0)

WIND 2295 Power Generation and Distribution Lab 2 credits
Introduction to the function of rotating electrical equipment such as AC and DC motors and generators studying the construction, and fundamental elements required to allow these machines to function. Students will then study how the electricity produced through electrical power generation gets distributed and applied and dispersed through the power grid. Corequisites: WIND 2285 (0/90/0/0)

NORTHEAST
COMMUNITY COLLEGE



1. Acklie Family College Farm (Map 3)
2. Agriculture/Allied Health
3. Apartment A
4. Apartment B
5. Applied Technology
6. Student Built Homes
7. Burkhardt Hall
8. College Welcome Center
9. Cox Activities Center
10. Diesel Technology
11. Echtenkamp
12. Hawks Point
13. Law and Public Safety Training Lab
14. L Building
15. Lifelong Learning Center
16. Maclay
17. Maintenance
18. McIntosh College of Nursing
19. Path Hall
20. Physical Plant
21. Pohlman Agriculture Complex (Map 3)
22. Surplus Building
23. Simon Hall
24. Science
25. Union 73
26. Utility Line/Truck Driving (Map 2)
27. Veterinary Technology (Map 3)
28. Weller
29. Wind Turbine
30. Wirth

NORTHEAST
COMMUNITY COLLEGE

MAIN CAMPUS
801 E. Benjamin Avenue / Norfolk, Nebraska 68701
(402) 371-2020 / (800) 348-9033

EXTENDED CAMPUS LOCATIONS
O'Neill, South Sioux City, and West Point

REGIONAL OFFICE LOCATIONS
Ainsworth and Hartington

NORTHEAST.EDU