NORTHERN MAINE COMMUNITY COLLEGE

COURSE CATALOG

24 26

Northern Maine Community College is accredited by the New England Commission of Institutions of Higher Education (NECHE). The business technology department is nationally accredited by the Association of Collegiate Business Schools and Programs (ACBSP) for the offering of its business programs that culminate in the associate in applied science degree. The associate degree nursing program is accredited by the Accreditation Commission for Education in Nursing (ACEN) and approved by the Maine State Board of Nursing. The emergency medical services program and the medical assistant program are accredited by the Commission on Accreditation of Allied Health Professions (CAAHEP). The automotive collision repair, automotive technology, and diesel hydraulics technology programs have each achieved Master Level Certification by the National Institute for Automotive Excellence (ASE). The computer numerical controls program is accredited by the National Institute of Metalworking Skills (NIMS). The college is a member of the American Association of Community Colleges, the American Council on Education, and the Maine Higher Education Council.

Northern Maine Community College expressly reserves the right to change in any manner, including terminating or eliminating, the courses and programs offered or otherwise presented in this catalog. The Maine Community College System expressly reserves the right to change in any manner, including increasing tuition or any other fees. While, where practicable, the College will attempt to give as much notice as each situation allows, the College reserves the right to make any such changes without notice.

Northern Maine Community College does not discriminate based on race, creed, color, national origin, religion, sex, sexual orientation, gender identity or expression, disability, genetic information, age, or Vietnam-era veteran status in its programs and activities. Inquiries regarding the College's compliance with policies that prohibit discrimination on these bases may be directed to any or all the following:

Affirmative Action Officer
Northern Maine Community College
33 Edgemont Drive
Presque Isle, ME 04769
Telephone: 207-768-2848
E-mail: affirmativeaction@nmcc.edu
Internet: http://www.nmcc.edu

and/or

Maine Human Rights Commission (MHRC)
51 State House Station
Augusta, ME 04333-0051
Telephone: 207-624-6050
TTY/TDD: 207-624-6064
Fax: 207-624-6063
Internet: http://www.state.me.us/mhrc/index.shtml

U.S. Department of Education Office for Civil Rights
33 Arch Street, Suite 900
Boston, MA 02110
Telephone: 617-289-0111
TTY/TDD: 617-289-0063
Fax: 617-289-0150
E-mail: OCR.Boston@ed.gov
Internet: http://www.ed.gov

and/or

Equal Employment Opportunity Commission
475 Government Center
Boston, MA 02203
Telephone: 617-565-3200 or 1-800-669-4000
TTY/TDD: 617-565-3204 or 1-800-669-6820
Fax: 617-565-3196
Internet: http://www.eeoc.gov

The College's practices are in full accord with the Family Educational Rights and Privacy Act. In addition to policies and procedures of the College, NMCC adheres to the policies and procedures of the Maine Community College System.

Changes may be made after print. For the most current version please visit ***www.nmcc.edu.***

Office of the President

Dear Students,

Welcome to the 2024/2026 academic year at Northern Maine Community College! As Interim President, it is my privilege to lead this exceptional institution that is committed to transforming lives through education and creating an educated workforce.

NMCC is a tight-knit and supportive community, and we are dedicated to providing you with the resources, opportunities, and guidance needed to achieve your academic and career goals. Our diverse range of programs is designed to equip you with the skills and knowledge essential for success in today's dynamic and evolving job market.

In this course catalog, you will find detailed information about the courses, programs, and services we offer. I encourage you to explore the many options available and to take full advantage of the support systems in place to help you succeed.

Our faculty and staff are here to support and inspire you every step of the way. Together, we can create a vibrant learning environment where you can thrive both academically and personally.

Thank you for choosing NMCC. I look forward to seeing all that you will accomplish this year.

Warm regards,

Angela R. Buck

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2024 - 2025 Academic Calendar

SEPTEMBER 2024						
S	M	T	W	TH	F	S
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8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

Sep 2 Labor Day (No Classes)
Sep 3 End of Add/Drop*
Sep 20 Grades due for Spring 2024 incomplete courses

OCTOBER 2024						
S	M	T	W	TH	F	S
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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		

Oct 14 & 15 Indigenous Peoples' Day (No classes | Offices Closed Oct 14)
Oct 18 NMCC Open House
Oct 18 Mid-Semester

NOVEMBER 2024						
S	M	T	W	TH	F	S
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10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

Nov 11 Veterans Day (No Classes | Offices Closed)
Nov 15 Last day to drop classes with no academic penalty
Nov 27-29 Thanksgiving Break (No classes | Offices closed Nov 28 & 29)

DECEMBER 2024						
S	M	T	W	TH	F	S
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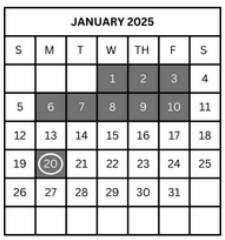
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Dec 13 Last Day of Classes (End at noon)
Dec 16 - Jan 10 Semester Break
Dec 17 Grades due by noon



JANUARY 2025						
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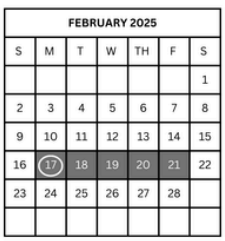
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

Jan 9 Faculty Administrative Day (No classes)
Jan13 First day of classes
Jan 20 MLK Day (No classes | Offices closed
Jan 21 End of add/drop day



FEBRUARY 2025						
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23	24	25	26	27	28	

Feb 7 Grades due for the Fall 2024 incomplete courses
Feb 17 Presidents' Day (No classes | Offices closed)
Feb 18 - 21 Winter Break (No classes)

MARCH 2025						
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16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

Mar 7 Mid-semester
Mar 31 - Apr 4 Spring Break (No classes)

APRIL 2025						
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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			

Apr 11 Last day to drop classes without academic penalty
Apr 21 Patriots' Day (No classes | Offices closed)
Apr 30 Evening of Excellence

MAY 2025						
S	M	T	W	TH	F	S
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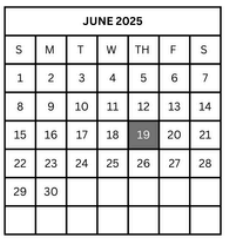
4	5	6	7	8	9	10
11	12	13	14	15	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

May 7 Last day of classes (End at noon)
May 9 Grades due by noon
May 10 60th Commencement Ceremony



JUNE 2025						
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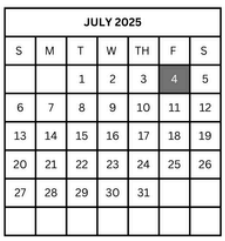
22	23	24	25	26	27	28
29	30					

Jun 19 Juneteenth



JULY 2025						
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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		

Jul 4 Independence Day

AUGUST 2025						
S	M	T	W	TH	F	S
					1	2
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10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

Aug 20 & 21 Faculty Administrative Day (No classes)
Aug 25 First Day of Class

No classes ◯ Offices closed

2025-2026 Academic Calendar

SEPTEMBER 2025

S	M	T	W	TH	F	S
	(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				

Sep 1 Labor Day (No Classes | Offices Closed)
Sep 2 End of Add/Drop*
Sep 19 Grades for Spring 2024 Incomplete Courses

OCTOBER 2025

S	M	T	W	TH	F	S
			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	

Oct 13 & 14 Indigenous Peoples' Day (No Classes | Offices Closed Oct 13)
Oct 17 NMCC Open House
Oct 17 Mid-Semester

NOVEMBER 2025

S	M	T	W	TH	F	S
						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						

Nov 11 Veterans' Day Observed (No Classes | Offices Closed)
Nov 14 Last day to drop classes without academic penalty
Nov 26 - 28 Thanksgiving Break (No Classes | Offices Closed Nov 27 & 28)

DECEMBER 2025

S	M	T	W	TH	F	S
	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			

Dec 12 Last Day of Classes (End at Noon)
Dec 16 Grades Due by Noon

JANUARY 2026

S	M	T	W	TH	F	S
				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

Jan 8 Faculty Administrative Day (No Classes)
Jan 12 First Day of Classes
Jan 19 Martin Luther King Jr. Day (No Classes | Offices Closed)
Jan 20 End of Add/Drop*

FEBRUARY 2026

S	M	T	W	TH	F	S
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

Feb 6 Grades Due for Fall 2024 Incomplete Courses
Feb 16 Presidents' Day (No Classes | Offices Closed)
Feb 17 - 20 Winter Break (No Classes)

MARCH 2026

S	M	T	W	TH	F	S
1	2	3	4	5	6	7
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15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Mar 6 Mid - Semester
Mar 30 - Apr 3 Spring Break (No Classes)

APRIL 2025

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			1	2	3	4
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12	13	14	15	16	17	18
19	(20)	21	22	23	24	25
26	27	28	29	30		

Apr 10 Last Day to Drop Classes Without Academic Penalty
Apr 20 Patriots' Day (No Classes | Offices Closed)

MAY 2025

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10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

May 6 Last Day of Classes (End at Noon)
May 8 Grades Due by Noon
May 9 Graduation

JUNE 2026

S	M	T	W	TH	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
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28	29	30				

JULY 2026

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Sep 2
Sep 3
Sep 20

AUGUST 2026

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23	24	25	26	27	28	29
30	31					

No classes ◯ Offices closed

General Information

Northern Maine Community College was authorized in 1961 by the Maine Legislature and became operational in 1963. One of seven colleges in the Maine Community College System, the campus is located one mile from the center of Presque Isle. The college has undergone ongoing improvements and renovations and has modern facilities to house its programs.

NMCC currently offers more than 30 full-time associate degrees, advanced certificate, and certificate programs. A wide range of credit and non-credit courses are also offered in the evening, during the summer term, and online.

All individuals are encouraged to enroll in programs considered nontraditional for their gender. Qualified people with disabilities are also encouraged to apply and are provided with appropriate support services. Most programs are designed to give students the technical knowledge and skills as well as the essential general education with which to pursue a career after graduation. The liberal studies program offers students the opportunity to obtain their first two years of a baccalaureate credential before transferring to another college or university.

Many graduates of technical programs choose to continue their education at an institution offering a baccalaureate degree. Several transfer agreements with other accredited institutions assist students in continuing their education.

Institutional Accreditation
Northern Maine Community College is accredited by the New England Commission of Higher Education (NECHE), one of seven regional higher education accrediting bodies in the United States. Through its evaluation activities, the Commission provides public assurance about the educational quality of degree-granting institutions that seek or wish to maintain accreditation. Each of the standards articulates a dimension of institutional quality. In applying the standards, the Commission assesses and determines the effectiveness of the institution as a whole. As such, it is not a guarantee of every course or program offered, or of the competence of individual graduates. Rather, it provides reasonable assurance about the quality of opportunities available to students who attend the institution.

Vision Statement
Transforming lives through education.

The Mission of the College
Northern Maine Community College is committed to maintaining its tradition of providing high-quality career and transfer programs that lead to associate degrees, certificates, and specialized training necessary for an educated, skilled, and adaptable workforce. Through its affordable programs of study, courses, and specialized training seminars, the College is a catalyst for economic growth and the development of human potential.

Core Values
The faculty, staff, alumni, and current students of NMCC are committed to the following core values:

- **Student-Centered:** We offer a learning environment focused on supporting students as they strive toward their individual success.
- **Excellence in Learning:** We provide quality teaching and learning experiences as a means of promoting lifelong learning to all.
- **Diversity:** We promote mutual respect and equality as a means of recognizing and embracing diversity.
- **Service:** We foster excellence in service to the College and the community, including business, industry, and society.
- **Integrity:** We subscribe to and promote high standards of ethics and integrity, understanding that they are the foundation upon which our reputation is built.
- **Sustainability:** We practice continuous improvement as a means of being relevant to the economy, workforce, environment, and future of the College.

Diversity Statement
The concept of diversity encompasses acceptance and respect. It includes but is not limited to ability, age, class, culture, education, ethnicity, family structure, gender, ideologies, political beliefs, race, religion, sexual orientation, style, and values. Diversity is each of us and all of us.

Awards
The College awards the Associate in Applied Science, the Associate in Science, and the Associate in Arts degrees, as well as certificate and advanced certificate credentials.

NMCC Philosophy of General Education
The general education core provides broad exposure to the main fields of human knowledge (humanities, social sciences, sciences, and mathematics) to provide the foundational knowledge, skills, and values of an educated person. The core also supports students in mastering a technical field and developing active and responsible citizens.

An educated person is fully literate, able to read, write, listen, speak, and think with clarity and precision; has the capability for lifelong learning, including the skills of information literacy and the ability to think critically; understands and can relate scientific and technological knowledge to the issues that affect the quality of human life on this planet; uses numerical data with ease and precision; and uses the aforementioned knowledge and experience to find meaning and purpose in life.

An educated person engages in work that is fulfilling and does it to the best of their ability; understands their role as a citizen with a logical system of ethics and values; and is able to apply those values and morality every day within society in a reasoned and rational manner. To that end, the faculty have identified what they deem to be the essential knowledge, skills, and values of an educated person.

Admissions

Northern Maine Community College welcomes applications for admission from prospective students of all ages and backgrounds. Applicants are encouraged to explore programs considered nontraditional for their gender. Qualified applicants with physical, learning or health disabilities are also encouraged to apply and are provided with appropriate support services. All applicants for credit programs must have earned a high school diploma (or the equivalent) and meet program-specific entrance requirements.

Admissions Policy

A modified open admission policy allows candidates who meet the stated entrance requirements to be accepted into most degree programs on a rolling basis for the Fall, Spring, and Summer semesters. Most major courses within programs begin in the Fall semester. Starting programs out of sequence may delay program completion.

Most programs are filled on a first-qualified, first-admitted basis, so students are encouraged to apply as soon as possible to ensure space availability in their program of choice. Certain competitive admission programs have additional application and entrance requirements. Applications will not be processed more than twelve months before the start of a semester. Applications received within one week of the first day of classes may be deferred to a future semester.

Application Procedure

1. Submit an NMCC admission application.
2. Proof of high school completion. Documentation must be official and sent directly to NMCC by the issuing institution. Applicants should request or provide one of the following:
3. An official high school transcript, for all years attended, sent to the Admissions Office by the issuing school (mail, fax, or email). Applicants may drop off official copies of transcripts provided by the issuing institutions in a sealed envelope. Transcripts for current high school seniors must include grades for the ranking periods completed at the time of application to NMCC. A final transcript must be received by the admissions office no later than two weeks before the first day of classes.
4. GED/HiSET test scores must be submitted to the Admissions Office by the issuing institution for applicants who have not received a high school diploma.
5. A parent-generated transcript will be accepted for homeschooled/home-educated applicants. The transcript must include a list of all secondary education courses completed with grades, a graduation date, and a parent’s signature.
6. Applicants who completed secondary/high school outside of the United States must request a document evaluation (and translation, if not in English) with GPA calculation from a NACES approved member organization. Applicants who have an I-94 arrival record as a refugee, asylee, or victim of human trafficking and cannot request proof of secondary school completion from their home country should contact the Admissions office.
7. An official college transcript with at least 60 transferable credits earned toward a bachelor's degree.

8. Official college transcripts should be submitted to the Admissions Office directly by the issuing institution for applicants who have attended other colleges or post-secondary schools, including transcripts for dual/concurrent enrollment college classes taken during high school. Failure to submit official transcripts for all prior colleges attended could impact federal financial aid eligibility.
9. An Admissions Counselor Meeting is required for most programs. Competitive admission programs require a formal interview.

Additional requirements for certain programs or applicants:

- Applicants with a first language other than English will be required to demonstrate proficiency in the English language. NMCC accepts TOEFL (minimum score: 500 paper-based test, 61 internet-based test), DuoLingo (minimum score: 115), and IELTS (minimum score: 6). Applicants residing in Maine may take the NexGen Accuplacer exams to demonstrate proficiency. The English proficiency requirement can be waived at the discretion of the Director of Admissions for applicants who have attended high school or college in the United States of America or another majority English language school.
- Some programs may have additional application requirements, specified in the table on pages 12 - 14.
- International applications that require an F-1 visa to study in the United States have additional application and enrollment requirements. Please visit www.nmcc.edu for more information.
- For applicants of Nursing and Allied Health programs: transfer credit for science courses will only be considered if taken within 10 years of the program start date.
- Campus tours are strongly recommended and can be scheduled by contacting the Admissions office.

Course Placement and Conditional Admission

Academic readiness is key to success in any college program. NMCC uses multiple measures to evaluate college readiness through evaluation of transcripts, college-level experience, and available test scores (SAT, PSAT, HiSET, GED, Accuplacer, CASAS) to make course placement decisions. Additional placement assessments (Accuplacer) will be administered by the college after acceptance, if necessary. The results of placement tests may affect an applicant's acceptance into a program at the college. Students who decline placement testing may be conditionally admitted to the college and required to complete developmental coursework in reading, writing, and/or mathematics during their first semester of enrollment, either on-campus or with our Adult Education partners.

Additional information about placement testing is available at www.nmcc.edu

Entrance Requirements for Academic Programs

The following table specifies entrance requirements for academic programs at NMCC. The admissions team uses multiple measures to determine if applicants meet entrance requirements. Applicants who do not meet programmatic entrance requirements based on available transcripts and/or test scores can take the Accuplacer exam (or an approved alternative) to meet the requirement.

PROGRAM NAME	HIGH SCHOOL ACADEMIC REQUIREMENTS FOR ADMISSION		APPLICATION REQUIREMENTS	ENROLLMENT REQUIREMENTS
	REQUIRED	PREFERRED		
Accounting	Algebra I	Algebra II & Accounting	General Requirements	General Immunizations
Automotive Collision Repair	Algebra I	Algebra II, Geometry & Physics	General Requirements	General Immunizations; Medical Clearance Form
Automotive Technology	Algebra	Algebra II, Geometry & Physics	General Requirements	General Immunizations
Building Construction Technology	Algebra I	Algebra II, Geometry & Physics	General Requirements	General Immunizations
Business Administration	Algebra I	Algebra II & Accounting	General Requirements	General Immunizations
Career Studies	Algebra I	Algebra II & Two Lab Sciences	General Requirements	General Immunizations
Community Paramedicine	Algebra I & Two lab sciences	Algebra II, Geometry, Chemistry, Physics	General Requirements; Active Paramedic License	General Immunizations; Additional Immunizations; BLS; CHRC; Medical Clearance Form; Driver's license preferred
Computer-Aided Machining	Algebra I & II, Geometry	Physics	General Requirements	General Immunizations
Diesel Hydraulics Technology	Algebra I	Algebra II, Geometry & Physics	General Requirements	General Immunizations
Early Childhood Education	Algebra I	Algebra II & Two Lab Sciences	General Requirements	General Immunizations; Additional Immunizations; State of Maine finger printing; Transportation
Electrical Construction & Maintenance	Algebra I & Geometry	Algebra II & Physics	General Requirements	General Immunizations
Emergency Medical Services	Algebra I & Two lab sciences	Algebra II, Geometry, Physics	General Requirements; EMT-B Certificate	General Immunizations; Additional Immunizations; BLS; CHRC; Medical Clearance Form; Driver's license preferred

Advanced EMT	Algebra I	Algebra II, Geometry, Physics, two Lab Sciences	General Requirements; EMT-B Certificate	General Immunizations; Additional Immunizations; BLS; CHRC; Medical Clearance Form; Driver's license preferred
Paramedicine	Algebra I	Algebra II, Geometry, Physics, two Lab Sciences	General Requirements; Prerequisites: ENG 111 & MAT 116; Active AEMT or PCP Licensure	General Immunizations; Additional Immunizations; BLS; CHRC; Medical Clearance Form; Driver's license preferred
Entrepreneurship		Algebra I & Accounting	General Requirements	General Immunizations
Liberal Studies	Algebra I	Algebra II, Physics & two Lab Sciences	General Requirements	General Immunizations
Medical Assisting	Algebra I & Two lab sciences	Algebra II, Chemistry, Accounting	General Requirements	General Immunizations; Additional Immunizations; BLS; CHRC
Medical Coding	Algebra I	Algebra II, Chemistry, two Lab Sciences, Accounting	General Requirements; Prerequisites: ALH 220 & MDC 100 & BIO 114	General Immunizations
Network Administration & Cybersecurity	Algebra I	Algebra II	General Requirements	General Immunizations
Nursing	Algebra I, Chemistry, Two Lab Sciences	Algebra II & Physics	General Requirements; Two letters of recommendation; Supplemental Questionnaire; TEAS scores; Interview; Prerequisites: ENG 111, MAT 116/125, BIO 201	General Immunizations; Additional Immunizations; BLS; CHRC; Transportation; Driver's license preferred

Office Assistant		Algebra I	General Requirements	General Immunizations
Plumbing and Heating	Algebra I	Algebra II & Geometry	General Requirements	General Immunizations
Practical Nursing	Algebra I	Algebra II, Physics & Chemistry, Two Lab Sciences	General requirements; Two letters of recommendation; Supplemental Questionnaire; Interview; Pre-requisite: ALH 124	General Immunizations; Additional Immunizations; BLS; CHRC; Transportation
Structural Welding		Algebra I, Algebra II, Geometry, Physics	General requirements	General Immunizations
Water Treatment Technology	Algebra I, Chemistry, Two Lab Science	Algebra II, Geometry & Physics	General requirements	General Immunizations
Wind Power Technology	Algebra I	Algebra II, Geometry & Physics	General requirements	General Immunizations; Medical Clearance Form

KEY:

General Requirements = Official proof of high school completion & admissions counselor meeting

BLS = Basic Life Support Provider Level Certification

CHRC = Criminal History Records Check

General Immunization = MMR (Measles, Mumps, Rubella) or Titers & Tetanus/Diptheria (within last 10 years)

Additional Immunizations = Hepatitis B series, Varicella or Titer, Tuberculosis (PPD), Influenza

***Nursing Pre-requisites:** *High school applicants who meet all other admission criteria can be accepted into the program with the condition of completing any missing pre-requisites during the summer semester before starting nursing courses.*

Special Conditions of Admission, Enrollment, and Participation

In certain circumstances, an applicant's personal experiences may affect their admission, enrollment, and/or participation in college offerings. Please see MCCS Policy 504 for an explanation of such circumstances and the college's authority to limit or exclude applicants.

Immunization
Maine Law (22-MRSA§6359) requires that all students born after 1956 attending any public or private post-secondary institution in Maine have on file at the institution a "Certificate of Immunization" signifying that they are in compliance with the above-stated Maine law, as amended. Some programs will require additional medical clearance. Students enrolled in only online courses are exempt from the immunization requirements.

CREDIT FOR PRIOR LEARNING

Northern Maine Community College recognizes the value of college-level knowledge students may have acquired outside the traditional college classroom through past work, independent reading and study, corporate training programs, in-service courses, volunteer services, or other experiences. Prior learning assessment (PLA) is a term used to describe the process by which an individual's experiential learning is assessed and evaluated for purposes of awarding college credit.

Student Eligibility
To be eligible for PLA credit, a student must be matriculated in a degree program at NMCC, with one or more requirements to which prior learning credits could apply.

Types of Prior Learning
The following are methods of prior learning that a college may assess for the award of academic credit:

Transfer Credits
See page 14

Examinations
Academic credit will be awarded for learning demonstrated by successfully passing examinations from the following national examination programs when there is a relevant course requirement in the student's program: College Level Examination Program (CLEP), DANTES Subject Standardized Test (DSST), Advanced Placement (AP), International Baccalaureate (IB —Higher Level), and Foreign Language Achievement Testing. The College awards credit for examinations based on current American Council on Education (ACE) recommendations.

Credential Review
Students may receive academic credit for some non-credit courses, certifications, licenses, Registered Apprenticeships, etc. gained outside of a higher education setting when there is an appropriate subject matter expert to review the learning and the prior learning experience is applicable in a student's program. A credential review assessment requires valid proof of learning (e.g. the license, certification copy, course materials, certificates, or other reliable information confirming completion of the training for which academic credit is sought.)

Military Service Review
Academic credit may be awarded for formal military service school training programs and off-duty educational activities, including basic training, military service schools recommended by the American Council on Education (ACE), and U.S. Armed Forces Institute correspondence courses.

Challenge Exam
A student with significant prior learning for whom none of the assessment methods listed above are available or adequate to demonstrate learning for academic credit may access a campus-based Challenge Exam if available. The following terms apply to Challenge Exams. Students seeking academic credit through a Challenge Exam must complete a college's PLA form and pay the Challenge Exam fee ($100 per course, non-refundable).

Portfolio Review
A student with significant prior learning and none of the prior learning assessment methods listed above are available or adequate to demonstrate learning for academic credit may assemble and submit a prior learning assessment portfolio for review. A prior learning assessment portfolio is a written presentation that includes tangible evidence of college-level learning equivalent to specific course/content area elective learning outcomes. Academic credit will be awarded for learning that demonstrates a balance between theory and practical application. ($125 per course non-refundable.) For complete policy please refer to the Maine Community College Policy Section 312: https://bit.ly/4hDjZAI

Transfer Credit
See MCCS Policy Section 307

Transfer Credit to NMCC
Transfer credit may be awarded for courses completed from institutions or programs of post-secondary education accredited by organizations recognized by the Council for Higher Education Accreditation and/or the U.S. Department of Education, or for international institutions, by their country's Ministry of Education based upon the equivalency of course content to program requirements and the equivalency of academic credit hours. Official transcripts from each institution previously attended will need to be sent to the Admissions Office in order to be reviewed for transfer credit. A grade of "C" or better must be achieved in order to have the transfer credit awarded. Courses accepted for transfer credits are not included as part of any student's grade point average (GPA) at NMCC.

Transfer Credit from Earned Bachelor's Degree or Graduate Credential
Students who previously earned a bachelor's degree or graduate credential from institutions or programs of post-secondary education accredited by organizations recognized by the Council for Higher Education Accreditation and/or the U.S. Department of Education, or for international institutions, by their country's Ministry of Education may have transfer credit awarded for the general education block required for the student's MCCS academic program. Students may be required to take specific/essential or higher level natural and physical science, English, mathematics, and social science courses required by the MCCS program of study.

Nursing and Allied Health
Individuals entering with advanced standing (upgrading credential) or re-entering the program after a break in attendance may be required to take or repeat all major courses within the program. Related science courses may need to be repeated if they were taken more than 10 years prior.

TAKING COLLEGE COURSES WHILE IN HIGH SCHOOL

The On Course for College program offers qualified high school students the opportunity to earn college credit for free or at a reduced tuition rate. With parental permission and school approval, high school students can take courses on-campus, online, or at their high school/ CTE school through concurrent enrollment agreements.

For more information, contact the On Course for College Coordinator at (207) 760-1198 or jdonohue@mainecc.edu

On-Campus/Online Courses:
Qualified students may request to register for NMCC courses for which they meet the prerequisites. Students must work with the On Course for College Coordinator to choose courses aligning with an academic or career pathway and complete a mandatory student orientation during their first semester. Students must purchase their textbooks.

For registration information and deadlines, visit **oncourse.mccs.me.edu**

Students should check with their high school counselor to verify if the course will count for high school credit.

Concurrent Enrollment Courses:
Students may complete college-level coursework at their high school or CTE school. Courses are taught by qualified instructors with the College's syllabus and materials. Qualified students who complete the registration process may earn both high school and college credit for their work.

The College will coordinate with the high school faculty and school counselor to guide students through the registration process in the OnCourse Portal.

NMCC has partnered with the following schools to offer articulation pathways and concurrent enrollment coursework:

High School or CTE School	Course Agreements
Biddeford Regional Center of Technology	• Intro to Auto Tech • Thin Metals Welding
Brunswick Region 10 Technical High School	• Thin Metals Welding
Canaan Career Center	• Emergency Medical Technician - Basic
Caribou Technology Center	• Thin Metals Welding • Occupational Safety • Intro to Auto Tech • Motor Vehicle Inspection • Emergency Medical Technician - Basic • Intro to Healthcare Professions • Health and Safety Compliance for Healthcare Professions

East Grand High School	• Entrepreneurship • Intro to Business • Personal Finance • Business Math
Presque Isle Technical Center	• Healthy Learning Environments for Children • Advancing Intellectual & Social Development in the Young Child • Field Experience I in ECE • Building Science I • Occupational Safety • Intro to Business • Effective Customer Service • Personal Finance • Principles of Marketing • Entrepreneurship • Introduction to Micro Computer Applications • Principles of Accounting I • Basic Residential Wiring
Region 2 School of Applied Technology	• Healthy Learning Environments for Children • Advancing Intellectual & Social Development in the Young Child • Field Experience I in ECE • Industrial Safety • Medical Terminology • Emergency Medical Technician – Basic • Intro to Auto Tech • Intro to Welding
St. John Valley Technical Center	• Healthy Learning Environments for Children • Advancing Intellectual & Social Development in the Young Child • Field Experience I in ECE • Intro to Diesel Hydraulics • Occupational Safety • A+ Certification Preparation • A+ Certification Preparation Lab • Medical Terminology • Intro to Healthcare Professions • Health and Safety Compliance for Healthcare Professions • Medical Assisting Office Procedures • Intro to Business • Effective Customer Service • Entrepreneurship • E-Commerce • Personal Finance • Principles of Management • Principles of Accounting I
Oxford Hills Technical School Region 11	• Thin Metals Welding
Lake Region Vocational Center	• Healthy Learning Environments for Children • Advancing Intellectual & Social Development in the Young Child • Field Experience in ECE

Lewiston Regional Technical Center	• Basic Residential Wiring
United Technology Center	• Intro to Welding • Intro to Automotive Technology • Medical Terminology
Northern Penobscot Tech Region III	• Medical Terminology

Maine High School Aspirations Tuition Waiver Program

Maine State Statute specifies that qualified public high school students (including home-educated students who have filed a letter of intent with their school district and the MDOE) are eligible to enroll in twelve (12) college credits annually without paying tuition or fees. Students' annual credit allocation begins with each summer semester. The aspirations tuition waiver can be used at any UMS or MCCS system school for courses taken online, in-person, or at a high school/CTE school.

Per MCCS policy, students who exceed 12 credits annually (across all institutions) will be billed at the reduced early college rate of 50% in-state tuition for up to two additional courses.
The Aspiration program does not provide funding for textbooks.

Aspirations Tuition Waiver Eligibility Exceptions:

- Students attending Greater Houlton Christian Academy are eligible for a Presidential Scholarship for up to 12 credits annually.
- Rising 9th graders are not eligible during the summer between their 8th and 9th grade years.
- Students who pay tuition to attend their high school (except for GHCA students as noted above).
- Home-educated students without a letter of intent on file with their local school district and the MDOE.
- Students who are not successful in an early college course must appeal to the On Course for College Coordinator in writing to take additional courses.
- Students are limited to less than 30 credits annually.

EMBARK

Embark is a high-school-to-college transition program designed for high school students who are unsure about what comes next. Enrolling in this program is a great way to explore the benefits of a community college education. Your Embark advisor will meet you at your high school and guide you to the academic, personal, and financial resources you need for success in and beyond community college.

Available for students at over 80 Maine high schools, Embark offers:

- Personalized encouragement and advising in high school and college
- Guidance through the college application and financial aid processes

For scholarship recipients:

- Continued support and guidance as you enroll at a Maine community college
- A scholarship to a Maine community college (up to $2,000 over 2 years)

For more information, contact Jennifer Donohue (jdonohue@mainecc.edu)

Continuing Education

Commercial Driving Academy
This 8-week driving academy is licensed by the State of Maine and complies with the FMCSA guidelines for entry-level driver training. This hands-on training program is designed to help students become professional class A drivers, ready to enter this high-wage and in-demand career.

Classroom instruction includes logbooks, trip planning, air brakes, hazmat, and doubles/triples/tankers. Students receive hands-on experience both on the driving range and on the road, learning how to handle a tractor and trailer safely and efficiently.

This program is approved for the use of GI Bill® benefits.

Mechanized Logging Operations Training Program
To address the immediate need for skilled entry-level operators trained on increasingly sophisticated harvesting equipment, Maine's community colleges developed the Mechanized Logging Operations Training Program offered at Northern Maine Community College.

This is a 12-week hands-on program designed to help students move directly into a career as an operator.

Bringing together expertise from woodland owners, current logging contractors in northern, central and western Maine, and other industry professionals, the non-credit mechanized logging operations certificate program is designed to prepare professional equipment operators with the knowledge and skills necessary for productive mechanical forest operations.

In classroom and hands-on settings, students will learn machine operation and basic repair, maintenance of equipment, harvesting laws, and regulations and safety. Graduates will be prepared to work in commercial forestry operations as a crane operator or equipment operator. This program is approved for the use of GI Bill® benefits.

Web-Based Training
Web-based, non-credit training is also available through a wide range of highly interactive courses that you can take entirely online. In addition, we offer online open enrollment programs designed to provide the skills necessary to acquire professional-level positions for many in-demand occupations. A complete listing and registration options are available at nmcc.edu.

Customized Training for Organizations
Customized training will be tailored to meet the needs of groups, organizations and businesses and can be offered on campus or at the business location. A range of courses and workshops are offered in a flexible and creative manner to assist companies with their training needs.

Professional staff members dedicated to contract training are available to provide information and assistance for securing funding support for training needs.

Information about the customized training options are available by calling (207) 768-2768.

Tuition & Fees

Residency
A student is classified as a Maine resident or non-resident for tuition purposes at the time of admission to a community college. No student, once having registered as a non-resident student, is eligible for resident classification unless he/she has been a bona fide domiciliary of the state for at least one year immediately prior to registration for the term for which resident status is claimed.

If the student is enrolled in a full academic program, as defined by the College, it will be presumed that the student is in Maine for educational purposes and that the student is not in Maine to establish a domicile as a permanent residence; thus, the burden will be on the student to prove that they have established a Maine domicile by the time of such registration. The domicile of the student who is claimed as a dependent for tax purposes follows that of the parents or legally appointed guardian of the student.

If a student classified as a non-resident marries a person who is domiciled in Maine and asserts the establishment of a domicile in Maine, the student shall be presumed to be eligible for resident status at such resident's next registration. In general, members of the Armed Forces and their dependents are normally granted resident status during the period of active duty.

TUITION 2024-2026	
Maine Resident	$96 per credit hour
New England Regional Student Program	$144 per credit hour
*New Brunswick Student	$144 per credit hour
Non-Resident	$192 per credit hour

For planning purposes, 15 credit hours per semester may be considered average.

NOTE: Changing financial conditions, state legislative action and other considerations may necessitate adjustment of charges and expenses. The College reserves the right to make such adjustments as may, from time to time, be necessary in the opinion of the Board of Trustees.

*Students admitted under the MCCS/NBCC agreement are eligible to take classes at resident tuition rates. For more information on the agreement, contact the Admissions Office.

Free Tuition Initiative

To support the students who have been most impacted by the COVID-19 pandemic, graduates from the classes of 2020, 2021, 2022, 2023, 2024 and 2025 are eligible for two years of free tuition and mandatory fees at Northern Maine Community College.

To qualify, students must:

- Have a high school diploma or equivalent. This includes home-schooled students and students earning a GED or Hi-SET during those years.
- Enroll full-time (waivers available for special circumstances) and remain on track for program completion.
- Pursue an associate degree or academic credential.
- Accept all federal and state grants and scholarships.
- Participate in academic planning.
- Live in Maine at the time of enrollment and while enrolled in the program.
- 2022 grads - enroll no later than during the 2024-25 academic year, 2023 grads - enroll no later than during the 2025-26 academic year, 2024 grads - enroll no later than during the 2026-27 academic year, and 2025 grads - enroll no later than during the 2027-28 academic year.

Student Business Accounts

All monetary transactions are handled through the Business Office. Payment for all bills, including tuition, assessed fees, and room and board is due and payable on or before registration day for each semester.

ROOM & BOARD FEES	
Housing Deposit	$100
Double Room with 19 meals/week	$8,598
Double Room with 14 meals/week	$7,720
Double Room with 12 meals/week	$7,068
Single Room with 19 meals/week	$9,938
Single Room with 14 meals/week	$9,060
Single Room with 12 meals/week	$8,406
Early Cancellation	$350
All residential students must purchase a meal plan	

MANDATORY FEES		
General Fee		$13/credit Hour
Comprehensive		$29/credit hour
Accidental Insurance		$16
Liability Insurance	Nursing Students	$15
Liability Insurance	EMS Students	$61.50
Liability Insurance	ECE Students	$17

NOTE: *Books and supplies vary with demands of individual programs. Many trade programs also have additional costs for tools. Insurance costs are subject to change based on premium changes.*

Tuition & Fee Changes

The Maine Community College System reserves the right to change in any manner, including increasing tuition or any other fees. While, where practicable, the College will attempt to give as much notice as each situation allows, the College reserves the right to make any such changes without notice.

Refund Policy

Students terminating enrollment at NMCC before the completion of any given semester are entitled to a refund of tuition, assessed fees (as indicated in the fees section), and room and board based on the date official notification is given to the college or the last date of attendance, whichever is latest.

Students withdrawing from NMCC should go to the student affairs office to complete a withdrawal form. This will expedite the processing of any refund due. All refunds will be made in accordance with the official date of withdrawal. The refund will be based on the current policy of the Maine Community College System.

For tuition and fee refunds, a student who officially withdraws from courses within six business days of the semester's first day of classes will receive a 100 percent refund of each dropped course. Withdrawal between seven and ten business days of the semester's first day of classes will result in a 50 percent refund. No tuition refunds are awarded for withdrawal after the first 10 business days of the semester's first day of class, or for unofficial withdrawal at any time. Official withdrawal from a college residence prior to the semester's first day of classes will receive a 100 percent refund.

Those officially leaving housing by the end of the semester's second week of classes will receive an 80 percent refund. By the end of the third week of classes is a 60 percent refund. By the end of the fourth week of classes is a 40 percent refund. By the end of the fifth week of classes is a 20 percent refund. Official withdrawal from campus housing after the fifth week of the semester, or unofficial withdrawal at any time, will result in no refund.

Alternative meal plans may be established by the college president based on approved board charges. Refunds for alternative meal plans follow the guidelines above.

The financial aid awarded is based upon the expectation that a student will complete the entire period for which aid is awarded. Students withdrawing from college before the term completes are subject to the prorated refund policy and may be required to repay disbursed financial aid. The total refund amount is calculated on a prorated basis through 60 percent of the payment period (the payment period is the semester of enrollment).

The period of enrollment will be based on calendar days. Scheduled breaks of five consecutive days or longer will be excluded from the calculation, based on the regulations set forth by the Higher Education Amendments of 1998.

Students who feel that individual circumstances warrant exceptions from the published policy may appeal by completing the Withdrawal & Tuition Refund Appeal form located on the portal.

Appeals may be made for the following reasons: death of an immediate family member, the student's medical incapacitation, military duty or computational/administrative error by the College. The complete appeal process is outlined on the appeal form. Refunds for non-credit courses are determined on an individual basis.

Student Payment Plan
The College offers students the option of paying for college expenses in monthly installments over the course of the semester. Required payments will be approximately 25 percent of the balance owed to the College after considering financial aid, scholarships, and other support from outside agencies. If a payment is not made by the due date, the balance is immediately due.

Transcript Fee
Students requesting a transcript be sent to a business or another college must sign a transcript release form. These forms are available in the registrar's office as well as on the college website (nmcc.edu). NMCC has partnered with Parchment, Inc. to provide our students with a secure, online method for requesting transcripts. The parchment transcript request service is simple, secure, and available 24/7. The cost of an official transcript through Parchment is $6.00.

Student Credit Balances
Payment of student credit balances will be made to students no earlier than the day following the completion of four weeks of classes of each semester. Student credit balances will be mailed to the student's address on file at the College.

Student Loan Checks
Student loan checks will be mailed no later than 14 calendar days from the college's receipt of the loan(s) in accordance with U.S. Department of Education regulations.

NOTE: First-time federal student loan borrowers must be in attendance a minimum of 30 calendar days in the semester in which they receive their first student loan before any loan proceeds may be disbursed to them.

Laptop Purchasing Program
All students are required to have a notebook-type computer with wireless internet capability and camera. Minimum specifications are available from the IT Office. We do not recommend chrome books or Windows S mode laptops. Computers are available for purchase through the college bookstore.

Financial Aid

The purpose of financial aid is to serve students who need assistance in meeting the basic cost of their education. Because funds are limited, federal and state regulations require that these funds go to students who demonstrate financial need. This section outlines the application procedure, how student needs and eligibility are determined, and some of the major financial aid programs available at NMCC. For more information, students who think they may be eligible for financial aid should visit the Financial Aid Office in the Student Affairs area located in the A.K. Christie Building.

How to Apply for Aid

1. Apply for admission to the College.
2. Get a Federal Student Aid ID number at http://www.studentaid.ed.gov to electronically sign FAFSA (Free Application for Federal Student Aid).
3. Access and complete the FAFSA at www.studentaid.gov
4. The school code is 005760.
5. Complete and return all forms requested by the Financial Aid Office.

NOTE: *Priority is given to early applicants.*

All documents must be received before the processing of a student's financial aid award. A new application with supporting documents must be filed every academic year for financial aid. Eligible students will be offered a financial aid award consisting of a combination of grants, work, and/or loans.

Financial aid consists of programs that are funded and regulated by the federal and state governments. The programs are of three different kinds: grants, work-study, and loans.

Grants

- A grant is money for which students do not have to work or repay. Students with bachelor's degrees are not eligible for grants.
- Federal: Pell Grants range from $740 - $7,395 annually.
- Federal Supplemental Educational Opportunity Grant (FSEOG): Awarded according to a formula based on student need and generally will range from $300-$1,000 per academic year.
- State of Maine Grants: Provide college scholarships to Maine residents whose family resources are not sufficient to meet the cost of higher education. Awards are based on student need and generally will range from $625 to $2,500 per academic year.

NOTE: *FAFSA must be received by May 1 for a state grant.*

Work-Study

Work is offered under the Federal Work-Study program to students who are found eligible for financial aid.

Federal Work-Study (FWS) allows students to earn money through part-time work while classes are in session and full-time work during vacations and summer. Jobs are available on campus, throughout the community and with the America Reads program in the elementary schools. This work can add to the educational experience and be a valuable asset when seeking employment after graduation.

Loans
Loans are money that students borrow now but must pay back after leaving college. Students with bachelor's degrees may be eligible. Students receiving loans are required to do both an entrance and an exit online counseling session. Federal Direct Student Loan Programs that NMCC students may participate in include:

- Federal Direct Subsidized Loans
- Federal Direct Unsubsidized Loans
- Federal Direct PLUS Loans for Parents
- Alternative Education Loans

NOTE: *If the student transfers to or from another college and wishes to delay loan repayments, a deferment/forbearance request is obtained from the lender and must be submitted to the lender.*

Scholarships
Annually, the Financial Aid Office evaluates applications for scholarships awarded by the Northern Maine Community College Foundation as well as privately sponsored scholarships offered to students currently attending or transferring to NMCC. Scholarships are available to both first-year and second-year students. Students may apply for these scholarships online through the financial aid section at my.nmcc.edu.

College Policy and Procedures on Financial Aid
All financial aid at NMCC is administered in accordance with policies and procedures which have been established nationally. The basis of such programs is the belief that students and their parents have the primary responsibility to meet educational costs and that financial aid is available only to fill the gap between the family's and/or student's contribution and allowable educational expenses. The amount of expected student or family contribution is determined by a careful analysis of financial strength: income and net assets versus the allowable expenses that the family may have.

Education expenses which are considered a basis for establishing student needs include tuition, fees, books and supplies, room, board, tools, transportation, and personal expenses. The NMCC Financial Aid Office has an established student budget to reflect the costs of each of these items based on local cost data.

General Eligibility for Financial Aid
Specific eligibility requirements vary from program to program. The following criteria apply to all financial aid programs.

To receive financial aid, a student must:

1. Have a high school diploma or equivalent.
2. Be enrolled or accepted for enrollment in an eligible program leading to an associate degree or certificate.
3. Be a U.S. citizen, permanent resident or refugee with an appropriate visa.
4. Have demonstrated financial need.
5. Maintain satisfactory progress in course of study according to standards and practices of NMCC.

6. Not owe a refund on a Pell Grant or Supplemental Grant at NMCC.
7. Not be in default of any Federal Student Loan.
8. Complete their academic program of study within 150% of the program's catalog time for completion.

NOTE: *Current federal regulations now prohibit the awarding of Pell Grants for more than 12 full-time semesters of collegiate attendance. Only courses required in your academic major are eligible for financial aid. While financial aid rules do not prohibit individuals from taking courses outside of your program of study, those courses will not count toward the determination of the financial aid load.*

1/2 time = 6-8 credit hours in your program of study (major) per semester
3/4 time = 9-11 credit hours in your program of study (major) per semester
Full time = 12 or more credit hours in your program of study (major) per semester

Determining Financial Need
The amount of financial aid is subject to available federal and state funds. The type of aid and amount received will be determined by the Financial Aid Office. Financial aid awards are based on demonstrated financial need which is the difference between allowable educational expenses and the total of the parents' expected contribution and/or the student's own expected contribution.

Contributions are determined based on the information provided in the FAFSA. All information is held in strictest confidence.

Financial Aid Probation or Disqualification
Students must be matriculated in an academic major and maintain satisfactory academic progress (SAP) to be eligible for financial aid. SAP for financial aid includes meeting or exceeding College grade point average requirements (qualitative measurement) and PACE (quantitative measurement).

Academic progress is assessed at the end of each academic term, as stated in the handbook. Additionally, students must earn a cumulative total of 67 percent of credits attempted each term (PACE). Students failing to earn 67 percent of credits attempted in a given semester and/or failing to meet College academic progress requirements will automatically be placed on Financial Aid Warning. Any student placed on Financial Aid Warning may receive Title IV aid for the subsequent payment period. Failure to reestablish SAP as assessed at the end of the subsequent term will result in the loss of Title IV aid.

In order to comply with the Satisfactory Academic Progress standards for financial aid, students must have a 2.0 cumulative grade point average (GPA) at the end of the equivalent of two full academic years (64 credits).

Students who accept funds for a specified number of credits but who either drop credits or withdraw from school, thereby completing fewer credits than anticipated, will be placed on financial aid probation or disqualification as applicable.

Students in default on any Perkins or Stafford Loan or any other federal- or state-insured loans at NMCC will be disqualified from subsequent aid until repayment or satisfactory arrangements have been made.

Students who owe a refund on a Pell Grant or SEOG at NMCC will be disqualified from subsequent aid until repayment or satisfactory arrangements have been made. A student who has been denied financial aid for any reason or who wishes to request a waiver of the financial aid policy has the right to file an official appeal. Forms are available on the NMCC portal. For more information, contact the Financial Aid Office.

If a written petition is denied, students have the right to a personal appeal. If a personal appeal is denied, students have the right to appeal to the Financial Aid Advisory Committee, consisting of administrators, faculty and staff. The committee's decision is final.

Right to Information
Students have the right to a full explanation of NMCC financial aid programs, policies and procedures. Complete information is contained in the NMCC Financial Aid Policies and Procedures Manual and the other written regulations available in the Financial Aid Office.

For information on academic programs and facilities, faculty, accreditation, refund policies and non-discrimination policies, see the appropriate sections of this catalog.

Disbursement of Financial Aid
See "Student Credit Balances" and "Student Loan Checks" in the Student's Business Account section of this catalog.

Lifelong Learning
Maine residents who are 65 years of age or older may attend the College tuition-free, for up to six credit hours per semester and up to 23 credit hours total, where course space is available. The student is responsible for all other fees and cost of textbooks**.**

VETERANS, NATIONAL GUARD & RESERVES EDUCATIONAL BENEFITS

Programs at the College are approved by the Maine State Approving Agency for the Education and Training of Veterans and other GI Bill® eligible persons. There are several GI Bills®:

- Three for active duty service members, depending on dates of service
- One for disabled veterans with service-connected disabilities
- One for spouses and children of totally disabled or deceased veterans resulting from service-connected conditions
- Two for members of the Selected Reserve

NOTE: *Veterans receiving monthly non-educational benefits must include those amounts on their FAFSA form.*

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

Staff in the Financial Aid Office assist veterans, their dependents and members of the National Guard/Reserves in determining their eligibility for education benefits through a program administered by the Department of Veterans Affairs and provide assistance in filing for benefits.

Programs administered by the VA include:

- Montgomery G.I. Bill®: Chapter 30 (Active Duty Educational Assistance Program)
- VEAP: Chapter 32 (Post-Vietnam-era Veterans Educational Assistance Program)
- Vocational Rehabilitation: Chapter 31 (Disabled Veterans)
- Post-911 G.I. Bill®: Chapter 33
- Survivors' and Dependents' Educational Assistance: Chapter 35
- Montgomery G.I. Bill®: Chapter 1606 (Selected Reserve Educational Assistance Program)
- Reserve Educational Assistance Program: Chapter 1607 (Program for Selected Reservists who are called to active duty for at least 90 days)

As each program has a different set of eligibility, filing and compliance rules, students are encouraged to schedule an appointment with the Director of Financial Aid for an explanation of program benefits and requirements.

MAINE NATIVE AMERICAN TUITION WAIVER POLICY

Northern Maine Community College proudly serves all students and maintains the goal of assisting students in achieving a post-secondary education while keeping costs as low as possible. Northern Maine Community College waives all or a portion of tuition charges for matriculated students who are Maine residents with documentation of their membership or ancestry in a Maine-based Native American tribe.

Waiver Eligibility
To qualify for an NMCC Native American tuition waiver, the student must meet the following criteria:

- Tribal Membership or Ancestry: The student must be included on the current tribal census or have at least one parent or grandparent included on the current tribal census of the Passamaquoddy Tribe, the Penobscot Nation, the Houlton Band of Maliseet or Aroostook Band of Micmac.
- Maine Residency: The student must meet NMCC's criteria to qualify for in-state tuition charge.
- Enrollment: The student must be accepted into a degree or certificate program and enrolled in credit-bearing courses at NMCC. The student must remain in good academic standing as defined by the College and maintain satisfactory academic progress as defined by Title IV Federal financial aid regulations.

- NMCC Native American Waiver Application: The student must complete and submit an NMCC Native American Tuition Waiver Application to the NMCC Financial Aid Office. This application is available in the Financial Aid Office and on the NMCC portal. Once eligibility is established, re-application is not necessary.

- Financial Aid Application: Applicants for the Native American Tuition Waiver must complete the Free Application for Federal Student Aid (FAFSA) annually as soon as possible after January 1 and provide the documents required to determine aid eligibility. Applicants must meet the general eligibility requirements for receiving federal student aid.

- Waiver Amount: The waiver is equal to the in-state tuition charged to the student in a semester less any Federal or State need-based grants or scholarships for which the student qualifies. Other restrictions apply: charges other than tuition are not waived and tuition is not waived for courses with a grade of NS (no-show).

- Duration of Eligibility: Eligibility for the waiver ends after the student has completed one degree or two certificate programs from NMCC or up to 90 attempted credit hours from NMCC, regardless of whether or not the student has earned a credential. Native Americans who have already achieved an associate degree or two certificates from Northern Maine Community College and have been laid off due to downsizing or business closure may appeal to use this scholarship for another program to develop new employment skills. Appeals should be sent to the Assistant Director of Financial Aid, Northern Maine Community College, 33 Edgemont Drive, Presque Isle, ME 04769.

Student Affairs

The staff of the Student Affairs Office provides a wide variety of services and experiences that complement academic pursuits at NMCC. The College strives to foster an educational environment that empowers students to assume personal responsibility for their education, social and professional development, as well as for their emotional and physical health and well-being. The Dean of Students administers the area and encourages students to make use of available services, programs, facilities and development opportunities.

Admissions Office
The Admissions Office provides information about NMCC to prospective students and helps students throughout the admission process. Staff serves students who wish to apply for a second degree or continue studies after graduation.

Career Planning & Placement
Career planning and placement assistance is available from several sources at NMCC. The student affairs staff, as well as individual instructors, are willing to help graduates find jobs in their field. Because of their job market knowledge and employer contacts, instructors are often excellent sources of assistance. Each spring, seniors benefit from a strong effort to help them secure employment.

Student Support Services delivers information, workshops and assistance to aid students exploring career options and future plans. We encourage students to consider careers that are non-traditional for their gender. Informational sessions are held regularly on a wide variety of job search and career planning topics.

College Central Network is NMCC's career services website designed to meet students' career planning needs. Students have access to job boards and hundreds of articles, videos, and podcasts pertaining to various career-related topics including resume assistance and interview preparation. Please visit: http://www.collegecentral.com/nmcc/Student.cfm and click "Activate" to create your account. If you have any questions or need assistance creating an account, please contact the Counseling Office at (207) 768-2839.

Counseling Services
Counseling is offered to students through the Student Affairs Office. Services available include: academic, personal and career counseling; student advocacy; coordination of related support services, including childcare and emergency transportation assistance; referral to other service providers; and coordination of special accommodations for disabled students. Inquiries should be made to the Director of Counseling at (207) 768-2829.

Financial Aid Office
The Financial Aid Office provides counseling and assistance in obtaining aid from a variety of funding sources. Financial aid brochures, available in the office, provide information on sources of aid, application procedures and NMCC financial aid policies. (See the Financial Aid section for more information.) The office is also responsible for certifying qualified veterans for appropriate VA education benefits.

Registrar's Office
The Registrar's Office maintains official records for each past and present NMCC student. These records are maintained in full accord with the Family Educational Rights and Privacy Act. (For details on student files and the policies ensuring their privacy, please see the section on confidentiality of student records under academic information.)

Students who wish to have a transcript of their record sent to another academic institution or prospective employer must make their request in writing to this office. Also, students can register for classes, drop or add courses, and file graduation application forms here.

Students are invited to contact the Registrar's Office with questions regarding their records. The office is responsible for the evaluation and granting of credit earned at other institutions by students transferring to NMCC.

Services for Students in Academic Jeopardy
Students who are on academic probation, who have not met the minimum standard to advance in a major program of study, or who are in pre-probationary academic difficulty are required to meet with a college counselor to develop a written plan for academic success. This plan may include a reduced course load, re-taking courses, establishing a tutoring schedule, enrolling in a study skills class or workshop, reducing outside commitments, extending an expected graduation date, or participating in career counseling, etc. After this plan has been completed, the student will meet with the counselor regularly during the semester to monitor academic progress.

TRiO/Student Support Services Program
This student support services program is federally funded and offers a wide range of services to eligible students. In order to participate in this program, a student must have low-income status (as defined by federal guidelines), be a first-generation college student, or have a disability. Academic, personal, and career advising; tutoring; assistance with the financial aid process; job search and job placement workshops; and transfer advising are among the services provided to program participants. Enrollment is limited. For more information, contact the program's director at (207) 768-2829.

LEARNING RESOURCES

A variety of learning resources are available to assist students. Rooms for reading, research, completion of projects, and quiet study are available in the College's library. The library also has a group study room available for student use. Individual and group study areas are also available in the Academic Resource Center, Akeley Student Center, and lounge areas.

Academic Resource Center
The Academic Resource Center (ARC) offers a variety of services that are free and available to all NMCC students. Students may be referred to the RC by an instructor/counselor or seek these services themselves. A student may want to obtain feedback on a writing assignment, review for an exam, receive help with a homework assignment, complete assignments on a computer, receive supplemental instruction from instructors or peer tutors, improve study skills, or study individually or in a group. Services/facilities include individual and group tutoring; a writing resource center; math lab; online study skills information; academic success workshops; and supplemental instruction.

Library
The E. Perrin Edmunds Library offers a welcoming and comfortable environment on campus where students, faculty, and staff meet, study, collaborate, learn and relax. The library provides print and online collections to support the curriculum and mission of the College. Diverse resources are available to encourage academic investigation, personal growth, and access to all points of view. The library serves students, faculty, staff, and the community.

Information literacy instruction and reference and research assistance are available in person, online, and in classrooms. The library is committed to teaching students how best to collect, evaluate, and use information effectively. NMCC's definition of an information-literate student is one who can clearly articulate information needs, confidently search for and access information from a variety of sources, and evaluate and use the information ethically and legally for research and personal purposes.

Our library adheres to the American Library Association's Library Bill of Rights and Association of College and Research Libraries Intellectual Freedom Principles for Academic Libraries. We embrace and affirm the principles of equity, diversity, and inclusion in our library. For additional information about library services, events, hours, staff, and policies, visit the library's web page at www.nmcc.edu/academics/support/library/. The library is open to the public.

CAMPUS HOUSING

NMCC's campus housing offers three distinct options: Andrews Hall, Snow Hall, and Washington Hall. Andrews Hall accommodates around 40 students in spacious single rooms, each furnished with a single bed, chest of drawers, desk, and wardrobe. Snow Hall features three-bedroom suites, where residents share a comfortable common living space. Washington Hall provides two-bedroom apartments, offering additional privacy and a more independent living experience.

All students living on campus must purchase a 19, 14, or 12-meal per-week plan. Resident rooms and suites have internet access through campus Wi-Fi. Students living on campus must abide by the Student Code of Conduct as explained in the NMCC Student Handbook and the individual housing agreement. Violations may result in termination of the agreement.

Occasional Housing
For individuals needing only occasional or temporary campus housing, a limited number of rooms are available for a modest fee. Dining privileges are included.

Family Housing
A limited number of apartments are available for NMCC students and their families. Qualifying family members may include: a legal spouse/registered domestic partner, at least one child (including step) up to 18 years of age, and/or a grandchild up to 18 years of age for whom the student is legally responsible. Designated units cost $750/month. Each unfurnished, two-bedroom unit has one full bathroom and a kitchen. The included utilities are heat, internet, electricity, water/sewer and trash removal. Meal plans are not included with the family housing options.
For more information on campus housing, occasional housing, and family housing, contact the Director of Residential Life at (207)768-2795.

REED DINING COMMONS & COLLEGE STORE

Dining facilities are located in the newly remodeled Reed Dining Commons. Residential students purchase a meal plan along with a housing plan. Anyone else wishing to purchase a meal is welcome during mealtime service. An a la carte food service, in addition to take-out, beverages, snacks, etc., is available in the College Store (“*The Hangar*”) located in the Akeley Student Center. Meal swaps or equivalencies can be used for residential students at the College Store.

BOOKSTORE | LAPTOPS

The NMCC Bookstore is managed by Barnes & Noble. Each student is required to provide at his or her expense all necessary textbooks, equipment, and supplies. For more information go to: http://nmcc.bncollege.com/shop/northern-Maine/home. In addition to required books and classroom supplies, the college bookstore offers a wide variety of other collegiate items such as pens, pencils, notebooks, clothing, and mugs. Students may transfer financial aid funds to the bookstore to purchase a laptop from models offered by Barnes & Noble.

RODNEY SMITH WELLNESS CENTER

The Rodney Smith Wellness Center features an open, naturally-lit design and offers high-quality, user-friendly strength-training machines available to full-time students at no cost. The facility is designed to support your personal wellness as well as prepare you for the physical demands of your chosen field of work.

This 4,000 square-foot facility is fully staffed and equipped with LifeFitness equipment, including cardio units with individual LCD screens and interactive apps for use during workouts. The certified trainers can help you individualize and personalize your routines.

The Wellness Center offers a variety of group classes such as Zumba, circuits, spin classes, yoga and coordinated hiking trips (charges may apply). Visit the Center to learn more about the equipment, hours of operation and special classes or activities available.

MOTOR VEHICLES

Students and employees have the privilege of using a vehicle on campus. All vehicles must be registered through the Security Office. Vehicles that have no parking permit affixed or are parked inappropriately or in non-designated areas, will be ticketed and fines will be assessed. Any damage caused by vehicles to lawns, shrubbery, etc. will be assessed to the operator. Vehicles, like other personal property, are the sole responsibility of their owner. For the complete Parking Policy, please refer to the College’s portal.

ATVs and snowmobiles are permitted on campus but must also be registered. Recreational vehicles are not to be operated on any campus roadway, walkway, parking lot or other thoroughfare. Use is restricted to open fields and areas away from campus buildings.

Emergency, maintenance and campus security are the only vehicles permitted on any walkway. Failure to comply with vehicle use policies may result in the revocation of vehicle privileges.

STUDENT SENATE | ACTIVITIES

The Student Senate is the governing body for all student activities and serves as the official student voice on campus. The Senate includes at least one member from each academic area and functions under its own constitution and by-laws.

The Student Senate assists the student affairs staff in planning and promoting a wide variety of activities for the campus community. New clubs and groups are formed whenever the demand arises, and ideas for new organizations are always welcome. Swimming, skiing, movies, cookouts, hiking, biking and rafting trips are some of the activities sponsored by the student senate and staff coordinators. The school's gymnasium and wellness center are readily available for student use.

NMCC promotes leadership, physical health and wellness through intramural activities. Activities may include basketball, softball, volleyball, soccer and tennis. An esports team was formed in Fall 2019.

Other activities may be added at any time if enough interest is shown. All individuals are encouraged to participate.

STUDENT RIGHT-TO-KNOW

Student right-to-know information is available on the college website (Consumer Information link), upon request from the student affairs office or from the U.S. Department of Education's website.

ACCESSIBILITY

Facilities at NMCC are designed to be accessible to persons with disabilities. The College is committed to providing, whenever possible, equal opportunities to all students, including assessment of and modifications to facilities and programs to accommodate individual needs. Inquiries should be directed to the Director of Counseling.

***NOTE**: Students requesting specific accommodations have the responsibility, under the Americans with Disabilities Act or the ADAAA of 2009, of making sure that the college is aware of the need.*

Specifically, students should:

- Request the relevant adaptation in writing, and
- Provide documentation of that need to the satisfaction of the College.

Once these responsibilities are met by the student, the College will attempt to provide the accommodation. Documentation of need should accompany the request if possible. A minimum of 30 days of lead time is suggested.
For more information visit: www.nmcc.edu/academic/support/student-services/disabilities.

STUDENT GRIEVANCE PROCEDURE

Students who have a grievance or complaint regarding an abridgement of rights have recourse to a student grievance procedure. A copy of the entire procedure can be found in the student handbook and in the Student Affairs Office. In case of physical assault or sexual harassment (as defined by Maine law), the process for filing complaints is outlined in the student handbook. Students questioning their assigned grades can appeal that grade through the Academic Dean.

The affirmative action officer for NMCC is identified on the inside cover of this catalog, on the NMCC website, in the student handbook and at orientation activities. A student in doubt about the proper procedure for filing a complaint or grievance should seek direction from the affirmative action officer.

STUDENT HANDBOOK

The student handbook is updated annually and is available to all students. It contains information about policies, procedures and regulations, explains the Community College Student Code of Conduct, and delineates both students' and institutional rights and responsibilities, particularly with respect to issues of discrimination and sexual harassment.

IDENTIFICATION CARDS

Identification cards are issued to all students and employees. This card enables access to the library, residence halls, some classrooms and college facilities. Access to college events and discounts at other community events may be available with your NMCC ID card. Replacement fee is $25.

Academic Information

Programs of Study

The mission of Northern Maine Community College is to provide career and transfer programs that lead to associate degrees or certificates. Each credential provides the opportunity to acquire the knowledge, skills, and values that are essential for a career or transfer to a college or university.

NMCC offers 12 associate degrees in applied science, two associate degrees in science, and one associate in arts degree, as well as 24 certificates through five academic departments: Arts & Sciences, Business Technology, Emergency Medical Services, Nursing and Allied Health, and Trade and Technical Occupations.

- The Associate in Arts Degree (AA) is intended to provide a basic foundation for a Bachelor of Arts Degree program.
- The Associate in Applied Science Degree (AAS) is intended to provide the preparation necessary for potential employment in an occupational specialty.
- The Associate in Science Degree (AS) is intended to provide the preparation necessary for potential employment in an occupation specialty and/or a basic foundation for a Bachelor of Science Degree program.
- A certificate is awarded for studies that one can complete in a one-year program or less. Certificates can be the final goal or first step in developing, changing or upgrading your career.

Delivery of Academic Programs

Courses in academic programs at NMCC are taught in a variety of formats: traditional classrooms and laboratories; interactive web conferencing; media-enhanced classrooms; and individualized learning experiences such as independent study, internships/externships, practicums, field experience, and distance education.

Distance Learning

Northern Maine Community College's distance learning courses offer a complementary alternative to the traditional in-person learning environment. These course formats allow students to engage with and complete courses from any location. Currently, NMCC uses the learning management system D2L by Brightspace and the web-conference software ZOOM to conduct courses from a distance.

Distance learning courses require a computer, basic computer skills, and reliable internet access. They may also require supplemental hardware and software.

- Online: Courses are delivered online using the institution's Learning Management System (LMS). A computer or laptop is recommended for participating in and completing online coursework. Students interact with their instructor and classmates via online discussions, assignments, and group projects and adhere to deadlines set within the LMS and course syllabus. If the suffix number for a course is 20-25, the course is being offered online.
- Hybrid: Instruction is split between learning activities in the LMS online and the rest of the time learning in-person, in the classroom(s) or laboratory setting. If the suffix number for a course is 26-30, the course is being offered as a hybrid course.

NMCC offers a limited number of hybrid and online classes. A hybrid format means that only a portion of the class is conducted online. On-campus testing is usually required. The ultimate goal of these educational formats is to offer a wide array of individual courses and programs to students enrolled at NMCC who are interested in interactive learning. Online courses allow both traditional and non-traditional students the opportunity to pursue an education that may not have been available because of scheduling or traveling limitations.

Skills Assessment
Assessment of basic academic skills is required of all full-time students and may be required of part-time students. Performance on skills assessment testing may affect students' acceptance into a program at the College. Results will be used for appropriate placement in English and mathematics courses.

Course Registration
Each student will begin the semester with a class schedule for which they have previously registered. Adjustments to that schedule may continue throughout the add/drop period, which usually is the first week of the semester. It is important that you follow the Add/Drop Policy which can be found later in this section of the course catalog.

Courses in automotive, diesel hydraulics, and structural welding are taught sequentially throughout a semester. Students may register for those courses prior to the first class meeting.

Full-Time Student Status
At NMCC, 12 credit hours or more per semester is considered full-time. Most other agencies and programs, including financial aid, veteran's assistance, Social Security Commission and insurance benefits, also consider a full-time course load to be at least 12 credits per semester. To complete an associate degree in four semesters or fewer, most programs will require more than 12 credits to be completed each semester. (See the Curricula section for specific program requirements.)

Matriculation Policy
Matriculation is the formal registration of a student into a program leading to a certificate or associate degree. A matriculated student is one who has met prescribed admission requirements, has been officially admitted to a program of study, and has registered for a course in the curriculum.

Matriculated students maintain their status for ten calendar years from the first semester of course registration at the College. A student must successfully complete a minimum of three credit hours each academic semester or an application for re-admission must be filed with the Admissions Office. To maintain matriculation status under a given program, a student must request a leave of absence from the Dean of Students for any semester during which he or she is not enrolled in any courses.

Minimum Residency Requirement
All associate degree and certificate programs require that students satisfactorily complete a minimum of the program requirements directly from NMCC courses. All students must complete at least 25% of the program credit hours directly through the College.

Credits received for all prior learning, including challenge and standardized exams, portfolios, apprenticeship and work experience, articulation agreements and transfer credit, will not count towards meeting the academic residency requirement.

Non-Degree Student Status
Anyone interested in taking courses without enrolling in a degree program may do so by signing up for the course(s) during registration. Non-degree students do not need to apply for admission to the college in order to take a course(s). However, if they intend to register for more than 11 semester hours, they must obtain permission from the Dean of Students.

Non-degree students are not eligible for financial aid.

Academic Advising
Every full-time NMCC student enrolled in a program is assigned an academic advisor who assists in course selection and offers general information concerning the student's academic life.

Students may check at the Student Affairs Office early in their first semester to learn the name of their academic advisor. The academic advisor is usually the student's major instructor for their chosen program of study. This information is also available on the student portal.

Students are encouraged to see their advisor as often as necessary to make certain they are taking courses that are appropriate to their academic and career plans. The advisor should also be consulted before students add or drop courses or change a program of study. Each semester, during a designated registration period, students meet with their advisor and register for the next semester.

Students should monitor their own academic progress. Descriptions of specific courses are in this catalog. Program curriculum sheets, which list specific course requirements for each academic program, are available from several offices on campus or by accessing the College's website.

Attendance
Class attendance is the student's responsibility. Regular attendance and punctuality for all classes is expected. Attendance is recorded in the learning management system, every class period. To encourage students to accept their responsibility to attend class, the following policy is established: Class attendance is a matter between the instructor and the student.

Instructors are obligated to announce and interpret a specific attendance policy for their classes at the beginning of the semester by way of their course syllabus. Faculty are encouraged to be considerate of students with special circumstances.

Excessive absences may interfere with the successful completion of a course. Once a student violates the instructor's class attendance policy, the instructor may issue the student a grade of "AF" (Attendance Failure). This grade designation will be treated as an "F" in the calculation of the student's grade point average.

Students may appeal instructors' actions to the Academic Dean for review.

Add-Drop Policy

- *A student may add or drop a course during the first week of any semester without any academic or financial penalty.*
- *A student may drop any course through the 12th week of the semester and receive a grade of WP (Withdrew Passing) or WF (Withdrew Failing).*
- *After the 12th week, the grade earned is recorded and will affect the GPA.*
- *Withdrawing from a course could have adverse effects on financial aid as well as graduation requirements. Please talk with an advisor or counselor before dropping a course.*

NOTE: *Refunds of tuition and fees will be 100 percent for the first 6 business days of a semester, 50 percent between 7 and 10 business days with no refunds after that date. For abbreviated semesters, the above drop policy and any associated refunds will apply for the proportional equivalent in time.*

Withdrawal From NMCC
Any student withdrawing from NMCC is expected to complete an official withdrawal form which may be obtained from the office of the Dean of Students and complete an exit interview.

When circumstances prevent this, the student or parents should write to the Dean of Students concerning the reason requiring the students to leave.

The date of withdrawal will be the date the student signs the withdrawal form; a grade notation of AW (Administrative Withdrawal) will be indicated on a student's academic transcript for those students who have been involuntarily separated from the College (examples: disciplinary dismissal, non-payment of bills, lack of attendance, etc.).

Off-Campus Center
NMCC offers program courses at the Houlton Higher Education Center. Courses may be offered at other locations, depending upon student or community needs.

Credit courses are organized at various times and locations on the basis of need, interest and availability of suitable facilities. The offerings are selected to meet predetermined community needs and to offer expanding technical and career programs.

The course offerings are also designed to furnish an opportunity for intellectual pursuit and continuing education to those who may not wish to work toward a college degree or who may already have one. The courses follow the same academic standards that apply in the on-campus program.

Class size is determined on a class-by-class basis and takes into consideration the subject matter, need for the course, the location and the impact it will have on the institution, including resources and the students enrolled.

Attempts are made to offer courses at times which are convenient for most adult students with responsibilities of job and family.

Grading System

Northern Maine Community College bases its grade point average (GPA) on a 4.00 grading scale. Letter grades used at NMCC to evaluate academic achievement are as follows:

93-100	A	4.0
90-92	A-	3.67
87-89	B+	3.33
83-86	B	3.00
80-82	B-	2.67
77-79	C+	2.33
73-76	C	2.00
70-72	C-	1.67
67-69	D+	1.33
63-66	D	1.00
60-62	D-	0.67
Below 60	F	0.00

OTHER GRADE SYMBOLS	
AF	Attendance Failure (0.00)
AP	Advanced Placement
AU	Audit
AW	Administrative Withdrawal
CE	Challenge Exam
CL	CLEP Exam
CR	Credential Review
E	(Pass/Fail(Failed
I	Incomplete
ME	Military Experience
NA	Never Attended
NG	No Grade
P	(Pass/Fail) Passed
QT	Qualify via Articulation
R	Course Retaken - Most recent graded used in GPA Calculation
*	Course Retaken
T	Transfer Credit
W	Withdrew
WE	Work Experience
WF	Withdrew Failing
WIP	Work in Progress
WP	Withdrew Passing
X	Exempt/Waived

In order to graduate from any prescribed program of study (i.e., certificate or associate degree), a student must have a cumulative grade point average of at least 2.0.

Academic warnings may be issued at mid-semester to any students whose performance has fallen below NMCC's academic standards.

Course Grade Appeal
The sole responsibility of evaluating student performance and assigning course grades rests with the course instructor. Barring a grade change due to the miscalculation of a course grade or due to a successful appeal of a course grade by the student, all course grades are to be considered final. If a student believes that a final grade was unfairly derived (i.e., that the grade was determined utilizing criteria different from that for other students), the student may formally appeal that grade.

First, the student must submit to the instructor a written request for clarification of the grade. (Email correspondence is sufficient; however, the student must keep a copy of what was sent.) The appeal process cannot proceed without verification that this communication has occurred. After clarification, if the student still wants to appeal the grade, they should contact the department chair for the course for which the grade was submitted in order to be advised on the appeals procedure.

Incomplete Grade: An instructor may issue a grade of incomplete when, in the instructor's opinion, extenuating circumstances prevent a student from completing the semester's work. Please refer to the student portal forms and documents (requesting an incomplete) for information on requesting an incomplete.

Repeat Courses
If a course is repeated, the latest grade of the retaken course is used to calculate the grade point average.

Auditing Courses
Students may audit any course, provided space is available and they pay regular course costs. When a student audits a course, neither a grade nor course credit is given. A student may not change a course from credit to audit after the add/drop period. If you are interested in auditing a course, see the Registrar for the audit application form. The form is also available on the NMCC portal.

Academic Progress
A minimum grade point average of 2.0 is required to graduate with a certificate or degree from Northern Maine Community College. This implies that any course grade below a C may put a student's graduation in jeopardy and/or indicate that the student's academic progress is in question. Further, satisfactory progress requires that a student earn a minimum of a C grade (2.0 grade point) in each major course within their program of study.

Major courses are clearly identified in the curricula section of this catalog.

For associate degree programs, the faculty have carefully developed each program of study to provide students with the opportunity to maximize their knowledge and skills within four semesters. This achievement requires a substantial commitment to the learning process by the student.

There are many campus resources available to aid students in their efforts toward academic success. These include tutorial services in the Academic Success Center, developmental studies classes and study skills workshops, class attendance requirements, mid-term warnings, and faculty assistance.

Students are encouraged to contact their academic advisor, department chair, the Academic Dean, the Dean of Students or the Director of Counseling for assistance or to discuss their academic progress.

Probation & Dismissal Policy
Students who do not earn a minimum 2.0 cumulative grade point average may be placed on academic probation or dismissed from the college. The probation and dismissal policies are outlined below:

Academic Probation – Signifies that a student is in serious academic jeopardy. A student on probation must remove grade deficiencies during the subsequent semester or during summer session. Failure to do so may result in academic dismissal from the College. Students on academic probation are required to carry a reduced class load (fewer than 15 credit hours) and may be restricted from participation in extra-curricular activities outlined in the following chart:

STUDENT IN TWO-YEAR (4 SEMESTER) PROGRAM:		
Cumulative Credit Hours	Cumulative GPAs Ranges Results in:	
Attempted	Probation	Dismissal
12+	1.25 to 1.75	1.249 or lower
30+	1.50 to 1.75	1.499 or lower
45+	1.75 to 1.99	1.749 or lower

STUDENTS IN ONE-YEAR (2 SEMESTER) PROGRAM:		
Cumulative Credit Hours	Cumulative GPAs Ranges Results in:	
Attempted	Probation	Dismissal
12+	1.50 to 1.99	1.499 or lower

**Students are not assessed for probationary or dismissal status until they have accumulated 12 credit hours of graded study.*

A student on academic probation must achieve a cumulative grade point average sufficient to exceed the probationary standard or a semester grade point average of 2.0 during each probationary semester. Failure to achieve this standard may result in academic dismissal.

Academic Dismissal – Students who have been academically dismissed may appeal to the Academic Dean for reinstatement in a program for the following semester. They may request re-admission to the College by formally reapplying not earlier than one semester after the date of dismissal. At the time of re-application, the applicant must show positive evidence that he or she will achieve academic success if accepted into a program. Such evidence might include course completion with satisfactory grades, a positive employment experience, etc.

Academic Amnesty – Students who have received failing grades in the past may appeal in writing to the Academic Dean for academic amnesty. Amnesty is the forfeiture of prior coursework below a 2.0 level. This request may be granted if there is a high probability of academic success. If amnesty is granted for a course, the course and its grade will remain on the student's transcript. The grade for the course, however, will not be calculated in the student's GPA. Amnesty may only be granted to students who
are currently enrolled or have completed the most recent semester with a semester GPA of 2.0 or higher. Academic Amnesty may only be granted once during a student's academic tenure.

Advancement in the Major Program of Study
A minimum grade of 2.0 (C) / 2.33 (C+) is required for all courses designated as major courses within both nursing and community paramedicine programs of study. These courses are identified in the course catalog. Students failing to achieve this standard will be unable to advance to the next higher-level class (if any) for which the previous class grade is a prerequisite. The Registrar will notify a student in writing that they have failed to meet the academic standard required for any major course. A student will be given additional opportunities to retake the major course(s), provided there is space available and they are otherwise maintaining satisfactory academic progress.

Students majoring in nursing and trade and technical programs may be allowed only one opportunity to retake a major subject. A student may request a waiver of the prerequisite from the higher-level class instructor or the affected department chair, the department chair of the student's major and the academic dean. In the event a student is permitted to advance to the next level, he or she must repeat the course in which a grade of less than C (<2.0) was received in order to graduate.

Challenge Exam Policy
Selected NMCC courses may be challenged; however, challenge exams may not be available for all courses. When an appropriate standardized national exam exists (i.e., CLEP, DSST, PEP, Advanced Placement, etc.) this exam will be required. If no such national exam exists, the required exam shall be comparable to the comprehensive final examination taken by all students in the course.

- Only one challenge exam per course will be approved by the department chair and academic dean. The following criteria apply to challenge examinations.
- Only students who have been accepted in an NMCC program will be allowed to participate in the challenge exam process.
- The student requesting a challenge exam will show written evidence of prior knowledge or proficiency in the subject area to be challenged. The student must contact the department chair as to the availability of the exam and the procedure.

- Students intending to challenge courses must complete the request for prior learning assessment form (available on the NMCC portal) and have approval from the appropriate faculty member and department chair prior to taking the exam.
- The student will be charged $100 and the fee must be paid in advance.
- The student must take the challenge exam prior to the semester in which the course is offered.
- In order to receive credit, the student must score 73 (C) or above on the challenge exam. Students may not retake a challenge exam.

NOTE: *Many colleges will not accept a challenged course for transfer.*

Directed Study

A directed study is the offering of a catalog course on an individual basis by an appropriate faculty member to a qualifying student. Directed studies are available to students pursuing an associate degree only on a limited basis. A student who has completed a minimum of 30 credit hours with a cumulative average of 2.5 or above may be eligible for a maximum of 9 credit hours from an approved directed study(ies). A directed study may be approved for a program completion candidate when it is evident that the course will not be offered as a part of the regular semester curriculum, resulting in a postponement of a program which would ordinarily be completed in that term.

A non-refundable fee of $100, in addition to tuition and any other regular fees, will be charged to the student for each course taken as a directed study.

For more information, contact your academic advisor, your program department chair, the academic dean or the Student Affairs Office. The directed study application is available on the Portal under the students tab.

Independent Study

A student with a cumulative GPA of 2.5 or higher may be eligible for a maximum of three credit hours in an approved independent study. The student will conduct in-depth research on a topic(s) in his or her major occupational program and have the opportunity to develop abilities as an independent learner. An independent study project may carry 1, 2 or 3 credit hour values and will be completed during the semester or session of enrollment. Please see the college Registrar for information on the procedure to be followed.

A non-refundable fee of $100, in addition to tuition and any other regular fees, will be charged to the student for each course taken as an independent study.

For more information, contact your academic advisor, your program department chair, the academic dean or the Student Affairs Office.

Second NMCC Credential

When a student enters NMCC, they choose a program with the expectation of receiving a degree or certificate in that area. As a student progresses through the program, the instructional staff may encourage the student to broaden their background by taking electives in another program. These opportunities allow the student to broaden their area of expertise without compromising or changing career goals or their primary purpose for attending NMCC.

The following apply:

- If students want a second credential, they must complete at least 15 credits beyond the requirements of the first program as well as complete all requirements for the second credential.
- Students may be given permission to complete a second credential only if they are demonstrating satisfactory academic progress and if space is available. Opportunities for second credentials may be limited due to program demand.
- Students will not be considered for a second degree until they have completed a minimum of 30
- graded credit hours and are in good academic standing.

Students pursuing more than one major must have written approval from the Dean of Students as well as a reference from their current academic advisor.

Academic Honors

Dean's List – The Dean's List honors individual students who demonstrate outstanding scholarly achievement. Students achieving a GPA of 3.2 or above as a result of a semester's work will be recognized by inclusion on the Dean's List.

To be selected, students must be enrolled full-time, matriculated in a program of study and be maintaining satisfactory academic progress. Full-time is defined as carrying 12 or more graded credit hours in a given semester (not included are pass/fail, transfer, audit, qualifying or work experience course work.) A grade of incomplete for any course(s) in a semester will disqualify a student from inclusion on the Dean's List.

Part-time matriculated students who complete at least 6 credit hours during an academic year, achieve a minimum GPA of 3.2 and maintain satisfactory academic progress will be included on the Dean's List for Part-Time Students.

Phi Theta Kappa – Students achieving a 3.5 or greater cumulative grade point average while matriculated in an associate degree level program of study at NMCC may be invited to join Phi Theta Kappa, an international honor society for two-year college students. To maintain membership, the student member's cumulative grade point average may not fall below 3.25. Phi Theta Kappa emphasizes academic excellence, leadership and community service.

Mid-Term Warnings

In an effort to help students determine their academic success in a particular course, instructors issue a mid-term warning to students doing marginal or unsatisfactory work. Students may view their mid-term grades under the student tab on the portal (my.nmcc.edu). Students who have "U" (Unsatisfactory) or "M" (Marginal) grades are encouraged to contact their instructors immediately after receiving a mid-term warning so they can be advised on possible strategies for course success.

During the meeting, referrals may be made to other campus resources, including the Academic Success Center, Health Center, counselors and student advisors.

Student Records

Permanent Transcript – Each student's record is maintained in student affairs as a chronological list of coursework taken and grades received. A student may examine it at any time upon presenting proper identification to the registrar.

Academic Record Changes – Considerable care is taken to ensure that all course registration and grade information entered on a student's permanent record is accurate. The record is confirmed as being accurate if the student does not report a discrepancy to the Registrar's Office within one semester of the completion of the course.

Transcript – Students requesting that a transcript be sent to a business or another college must sign a transcript release form. These forms are available in the registrar's office as well as on the college website (www.nmcc.edu). NMCC has partnered with Parchment, Inc. to provide our students with a secure, online method for requesting transcripts. Parchment transcript request service is simple, secure and available 24/7. The cost of an official transcript through Parchment is $6.00.

Confidentiality of Student Records – NMCC believes that it is of paramount importance and in the best interest of all its members that confidentiality about personal information is maintained. NMCC is committed to safeguarding confidential information concerning its students from unauthorized disclosure.

The Family Educational Rights and Privacy Act of 1974, as amended, provides the following rights for students attending NMCC:

- The right of a student, with limitations, to inspect and review their educational records. The right, with exceptions, to prevent disclosure to third parties of information from their educational records.
- The right to withhold public disclosure of any or all items of so-called "Directory Information" by written notification to the Dean of Students within two weeks after publication of this notice.
- The term "Directory Information" includes a student's name, confirmation of enrollment, degree earned (if applicable), and major course of study.
- The right to file a complaint with the U.S. Department of Education concerning the alleged failure of NMCC to comply with requirements of the Act.

Graduation and Commencement Requirements

Candidates for graduation must submit a Request for Graduation form to the Registrar's Office no later than December 15th of the academic year they plan to complete their program requirements.

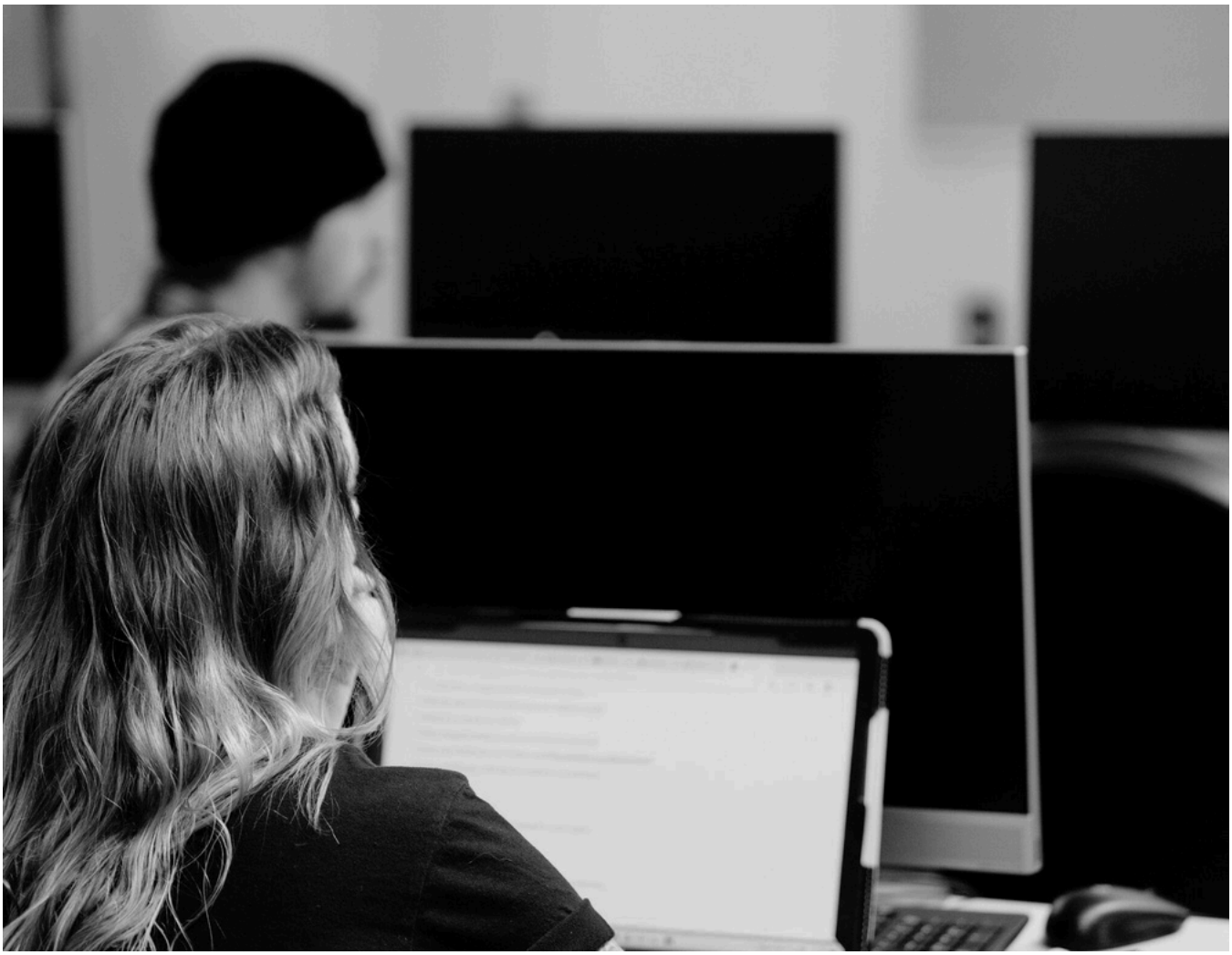
Students within six (6) credit hours of credential completion may participate in commencement activities but will not receive a signed diploma until the completion of the program requirements. Students graduating with a 3.5 or greater GPA are recognized in the commencement program and will wear a gold rope during the ceremony in honor of their achievement. Honors designation for commencement will be determined based upon prior completed semesters' cumulative grade point average.

NMCC conducts one official graduation ceremony each year. NMCC will grant degrees or certificates to those matriculated students whose degree audit has verified that they have:

1. Met all conditions of acceptance
2. Only applied courses numbered as 100 or 200 level towards graduation
3. Passed all prescribed courses and attained a minimum cumulative GPA of 2.0

Transfer
NMCC has several program-specific transfer agreements with senior colleges and universities. Students interested in transferring to an institution to pursue a baccalaureate degree should discuss their goals with their academic advisor to ensure appropriate planning of their academic coursework at NMCC and to maximize the amount of transfer credit.

For the transfer of courses not covered by a current transfer agreement, the college or university to which the student is transferring has the final decision on granting of transfer credit.



Academic Programs

ARTS & SCIENCES DEPARTMENT

The Arts and Sciences Department offers associate degrees in Liberal Studies and Early Childhood Education. The Liberal Studies Associate in Arts degree is a transfer degree program that replicates the first two years of a four-year program. The Associate in Applied Science degree in Early Childhood Education allows students to enter the workforce or transfer. Additionally, the department provides courses that support the general education core for degree programs in other departments. The general education core instills in students the knowledge, skills, and values that define an educated person.

Career Studies
The associate in applied science degree in career studies is designed to provide a highly individualized and flexible program of study for students whose educational and/or occupational goals cannot be met by the other programs of the College. Recognizing that many students come with significant work and/or learning experiences, this program provides for recognition of that experience by the awarding of academic credit (after a thorough portfolio review process) in an occupational track.

Early Childhood Education
The early childhood education program offers both a two-year associate degree and a one-year certificate-level option. The associate degree program is designed to educate childcare professionals in the skills and knowledge necessary for advanced positions in organizations and agencies that serve children. It provides courses and field experience in childcare, as well as a well-rounded supporting education. This degree provides transfer opportunities to four-year institutions.

The certificate program provides the training needed for entry-level positions and meets the more immediate needs of those who do not choose the additional courses required for the degree. The core courses of this program align with the educational requirements for the State of Maine Child Development Associate (CDA) credential. Graduates will find employment opportunities in childcare centers, summer and day camps, pre-school programs, public schools, recreational centers, one-on-one aide positions, and other agencies that serve children. Both the two-year associate degree and the one-year certificate provide the pathway for obtaining a State of Maine license as an owner/operator of a private childcare facility.

Liberal Studies
An associate in arts degree in Liberal Studies is a flexible degree program designed for students whose educational goal is to transfer to another college or university. The curriculum provides a strong foundation in the liberal arts (math, science, humanities, and social sciences) that prepares students for advanced academic study at a baccalaureate-granting institution. As part of an agreement between the Maine Community College System and the University of Maine System, Liberal Studies graduates can complete up to 35 hours of the general education requirements of any campus in the University of Maine System as part of the Associate in Arts program. Those who are unsure of their future educational plans can enroll in Liberal Studies and work with experienced

faculty to develop an educational plan that suits the student's needs. With small class size and experienced faculty who are committed to their craft of teaching, Liberal Studies is a starting point for those who are undecided about their educational and career goals. The flexibility of the associate in arts curriculum allows students to sample a wide variety of courses in both the liberal arts and career and technical programs.

To ensure maximum transferability, the College has entered into articulation agreements with regional colleges and universities such as the University of Maine at Presque Isle and the University of Maine at Fort Kent. The Arts and Science Department is also included in articulation agreements made by NMCC nursing, business and technical programs at other institutions of higher learning.

BUSINESS TECHNOLOGY DEPARTMENT

The Business Technology Department promotes occupational and technical competence, individual growth and social responsibility in students preparing for careers in accounting, business administration, network administration, cybersecurity and various certificate programs. In addition, the student's preparation allows for upward academic mobility when they wish to transfer credit to baccalaureate-granting colleges and universities.

Classroom learning experiences support the use of laptop computers and personal devices to create an active learning environment where students put into practice the principles, theories and technology that are fundamental to the understanding of their specialized field of study.

General education courses are an important part of the student's program of study. The faculty are committed to preparing students to function in the current job market and for transfer to baccalaureate-granting colleges and universities. Faculty maintain expertise in their specialized field through activities including involvement in professional organizations, attendance at workshops and seminars, and working in their respective field.

The department is nationally accredited by the Accreditation Council for Business Schools and Programs (ACBSP) for the offering of its accounting and business administration programs that culminate in the associate in applied science degree.

Accounting
Accounting combines the study and practice of accounting with the design, implementation and monitoring of information systems. Such systems use modern information resources, together with accounting controls and methods, to provide users the financial information necessary to manage their organizations. The purpose of accounting is to provide timely and accurate financial and statistical reports for internal management decision-making and for external parties such as creditors, investors, and regulatory and taxation authorities.

NMCC's two-year accounting program provides knowledge and skills to maneuver newly emerging systems that require a combination of technical and financial knowledge. Students will learn the latest in electronic commerce, direct business-to-business communication, and paperless work processes in the College's wireless multimedia smart classrooms.

Graduates of this program will be prepared for entry-level positions at accounting firms, small businesses, manufacturing firms, banks, hospitals, school systems, churches, and government agencies.

Besides providing training for employment, the program prepares students to continue their education at a four-year college or university. Transfer agreements with several colleges and universities ensure that graduates can transfer, as an advanced student, into a four-year program.

Business Administration
The Business Administration program is broad and diversified in its course offerings. Courses are designed to impart knowledge and to develop skills and abilities that will prove practical, useful and marketable. Through its course offerings, the program continually strives to maintain relevance and a high level of quality. Instructors, with their strong business and industry backgrounds, blend theory and practice in a unique and meaningful way.

Graduates will be qualified for employment as accounting clerks, loan officers, entry-level managers, state and federal government employees, and related positions. Besides providing training for employment, the program prepares students to continue their education at a four-year college or university. Transfer agreements with several colleges and universities ensure that graduates can transfer, as an advanced student, into a four-year program.

Entrepreneurship
The Entrepreneurship certificate program is designed to prepare prospective entrepreneurs to launch new ventures by educating them in the fundamentals of starting and operating their own business. For entrepreneurs who already have established a business, this program will help them strengthen their business and management skills.

Entrepreneurship is an employment strategy that leads to economic self-sufficiency. Self-employment provides you with the potential to create and manage businesses, in which you function as the employer or boss, rather than being an employee. Graduates who want to expand their business management skills may choose to complete the Business Administration associate degree program at NMCC. Thirty of the thirty-three credits earned in the Entrepreneurship program will apply toward an Associate in Applied Science in Business Administration.

Network Administration & Cybersecurity
Network Administration & Cybersecurity is a two-year program which prepares students to enter the workforce as an IT administrator, technician or to continue on to a four-year program. Students learn to build and optimize computers and servers, set up and administer a computer network, and maintain operating systems. The first year provides training in Windows 10, computer repair, Introduction to Windows Server 2016, Introduction to Linux, and networking hardware. Seniors receive advanced training in configuring servers, network administration, microelectronics, computer forensics, and cybersecurity. All courses have considerable hands-on labs to reinforce the theory.

Office Assistant
The Office Assistant certificate program is designed to provide basic, entry-level clerical skills. The program teaches, improves and reinforces math, accounting, office procedures, oral and written communication, filing, and word processing skills. Graduates are prepared for entry-level office positions. Students may also choose to continue their education.

EMERGENCY MEDICAL SERVICES DEPARTMENT

The Emergency Medical Services (EMS) Department prepares the pre-hospital provider to enter into professional practice and work in a variety of healthcare settings. The EMS department utilizes both an innovative educational delivery approach and state-of-the-art equipment, including a full simulation center and ambulance, to ensure graduates are well prepared for the rigors of the healthcare environment they will face. Students will apply didactic knowledge gained from their studies as well as psychomotor skills to complete various clinical rotations throughout the program

Community Paramedicine
The Community Paramedicine program is designed to educate practicing paramedics, who are primarily employed in the pre-hospital emergency environment, to become competent community paramedics. Community paramedics work collaboratively with public health, home care and primary care professionals in non-emergency settings, providing an invaluable service to an underserved population.

Community paramedics help patients meet critical health needs by establishing health systems that promote health and wellness, while serving as advocates, educators, facilitators, liaisons, and resource coordinators. The program is designed to allow paramedics to perform needs assessments and assist in the development of community paramedicine initiatives that meet very specific and individualized community needs. Paramedics having earned an academic credential (associate degree or higher in any field) may enroll directly into the advanced certificate level of the program; those candidates who have not yet earned an associate degree will be considered for the associate degree in science level of the program.

Community Paramedicine is a new and exciting career choice for experienced paramedics. In addition to serving communities in the traditional roles, community paramedics are employed by acute care hospitals, long-term care facilities, assisted living organizations, public health entities, and municipalities.

Emergency Medical Services
The EMS program is designed to prepare individuals to become national registered paramedics. The curriculum combines intense classroom and lab instruction with extensive clinical experiences to ensure that graduates are competent, confident practitioners. The program follows national education standards and graduates are eligible to take the National Registry Paramedic License examinations. In addition to the core content, students earn certifications in Advanced Cardiac Life Support (ACLS), Pre-hospital Trauma Life Support (PHTLS), Pediatric Advanced Life Support (PALS), Paramedic Interfacility Transport (PIFT), Advanced Medical Life Support (AMLS) and Emergency Pediatric Care (EPC). The program is authorized as a training center by the Board of Maine EMS. The Emergency Medical Services 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 Education Programs for Emergency Medical Services.

The multiple entry/multiple exit program permits students to exit after completion of specific course requirements and be eligible to take the national certification exams for EMT, Advanced EMT and Paramedic. Currently, licensed providers may be accepted into the higher levels of the program.

NURSING AND ALLIED HEALTH DEPARTMENT

The Nursing and Allied Health Department provides programs which prepare graduates to be employed in a variety of healthcare settings as competent healthcare providers.

The programs are supported by general education studies and several required courses supplement the occupational areas of study. Students are expected to combine theory and didactic classroom content with practical application in both lab and clinical settings. Occupational areas offer current instruction by faculty members who maintain theoretical and clinical expertise in specialized fields of knowledge. Faculty seek ongoing professional development to maintain their competencies in the rapid and ever-changing healthcare environment. To participate in any of these healthcare-related programs, students must attest to criminal history and pending criminal data. Convictions and pending charges of concern will be reviewed by clinical agencies to determine if students can work at these sites. Students who are not accepted at a clinical agency will not be able to meet program requirements, resulting in dismissal from the program. Students found to be untruthful or misleading on the application form and/or program attestation statements may be dismissed from the program.

Graduates can secure employment in a variety of clinical settings and/or transfer to baccalaureate levels of education in their areas of major.

Medical Assisting
NMCC offers a one-year certificate in Medical Assisting that prepares students to enter this rapidly expanding field. Medical assistants are multi-skilled allied health professionals who perform both administrative and clinical procedures in ambulatory medical settings. The medical assisting certificate provides basic skills to students. Some of the skills taught in the certificate program include obtaining vital signs, recording a medical history, administering oral and parenteral medications, preparing the patient for examination and assisting the healthcare provider with the physical examination. Administrative skills include scheduling patient appointments, performing bookkeeping procedures, as well as entry-level medical and diagnostic coding and completion of insurance claim forms. Students also learn to perform diagnostic tests such as 12-lead EKGs, CLIA-waived laboratory tests, and collection of blood samples.

The College's two-year associate degree Medical Assisting program provides additional clinical and administrative training. In the clinical component of the program, students will have the opportunity to understand the concept of professionalism and principles of therapeutic communication; teach patients about health and wellness; and gain a more extensive understanding of anatomy, physiology, and clinical applications of pathophysiology and pharmacology. In the administrative component of the program, students will learn about medical law and ethics and how to maintain electronic health records.

Graduates of the medical assisting program will be competent entry-level medical assistants who can secure employment in medical offices or ambulatory clinics. In the state of Maine, medical assistants work under the direction of healthcare providers. Upon graduation, students may elect to sit for the Certified Medical Assistant (CMA) and/or the Registered Medical Assistant (RMA) national certification exams.

The Medical Assisting Associate degree program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Medical Assisting Education Review Board.

Medical Coding
Medical Coding is a two-semester certificate program that prepares students for the rapidly expanding field of medical coding, focusing on developing an understanding of the language of medicine and the ability to apply it to professional coding standards. The curriculum concentrates on the areas of anatomy and physiology, medical terminology, pharmacology, and clinical classification systems. Coders are required to abstract medical documentation from a patient's chart and correlate the diagnosis and procedures performed into numerical code numbers. This type of work is done in all healthcare facilities. The student gains knowledge and practice in computer software programs, such as encoders and electronic medical records systems, allowing students to have real-world, hands-on application of coding practice.

Graduates are eligible for certifications as a Coding Associate (CCA) through the American Health Information Management Association (AHIMA). With some experience, they become eligible for additional national certification examinations through AHIMA or the American Academy of Professional Coders (AAPC).

Graduates are prepared to work in various healthcare settings, including hospitals, clinics, physicians' practices, long-term care facilities, and home health agencies. Employment opportunities can also be found in non-traditional healthcare areas such as insurance companies, government agencies, computer software companies or consulting firms.

Nursing
The associate in science degree Nursing program is designed to offer individuals the opportunity to enter the nursing profession as a registered nurse. The nursing curriculum focuses on basic human biopsychosocial needs throughout the lifespan. Students develop the knowledge and skills necessary to provide holistic nursing care to diverse clients, families and groups with multiple healthcare needs. Legal, ethical and role responsibilities of the nurse are addressed within each level. Guided learning opportunities in local healthcare facilities, the campus lab, and the state-of-the-art simulation center provide students with valuable hands-on experiences that complement the classroom curriculum.

Candidates who are graduates from approved practical nursing programs are provided an opportunity for advanced standing. Students with successful prior college courses may receive priority, providing all other minimum standards are met. Students may be given only one opportunity to reenter the program after having failed to complete it previously.

Upon completion of the associate degree nursing program, graduates are eligible to take the NCLEX- RN licensure examination, administered by the National Council of State Board of Nursing (NCSBN). Graduates will find employment opportunities as integral team members in a variety of healthcare settings.

Graduates may choose to continue their education toward a bachelor of science in nursing degree. NMCC's Nursing program has transfer agreements in place with four-year institutions for a

seamless transition from RN to BSN. By completing the first two years at NMCC, students are able to graduate with less debt and are prepared to take advantage of online programs.

Practical Nursing

The Practical Nursing program is designed to offer individuals the opportunity to enter the nursing profession as a practical nurse. The practical nursing curriculum focuses on basic human needs of individuals throughout their lifespan. Students develop the knowledge and skills necessary to provide nursing care to individuals with well-defined health problems. Legal, ethical, and role responsibilities of the practical nurse are addressed throughout both semesters. Guided learning opportunities in local healthcare facilities, the campus lab, and state-of-the-art simulation center provide students with valuable hands-on experiences that complement the classroom curriculum.

Students with successful prior college courses may receive priority, providing all other minimum standards are met.

Graduates will be eligible to take the NCLEX-PN examination, administered by the National Council of State Boards of Nursing (NCSBN), to qualify as a practical nurse. Practical nurses are integral members of healthcare teams and will function in a variety of healthcare settings under direct or indirect supervision of an experienced registered nurse.

For graduates interested in continuing their education by pursuing an associate degree in nursing, NMCC has a career pathway in place to assist you in achieving this goal. Candidates who are graduates from approved practical nursing programs may qualify for advanced standing after a one-year minimum of working as an LPN. By completing the RN degree at NMCC, students can graduate with less debt and are prepared to continue their education in a four-year degree program.

TRADE AND TECHNICAL OCCUPATIONS DEPARTMENT

NMCC's Trade and Technical Occupations Department offers a wide range of programs that provide classroom instruction and hands-on training in three major cluster areas. The transportation trades include training of technicians in automotive collision repair, automotive technology and diesel hydraulics technology. The construction trades include building construction technology, plumbing and heating, electrical construction and maintenance, and structural welding. The technical trades include computer numerical control, water treatment technology and wind power technology.

Each program requires a broad-based education centered on a core curriculum, including technical specialty and general education courses. Most programs offer both an associate degree and a certificate-level option. The certificate offerings focus primarily on technical coursework. The comprehensive nature of the associate degree curriculum provides graduates with added flexibility in their careers, enabling them to adapt readily to new tasks and work environments.

Automotive Collision Repair
NMCC's Automotive Collision Repair program offers a broad range of training from collision repair to custom painting, emphasizing the skill standards required for a technician to become Automotive Service Excellence (ASE) certified. The latest technology is used with computer matching capabilities in paints and in the measuring of the automobile after sustaining collision damage to aid in creating a written estimate.

Instruction is given in plastic and composite repair in preparation for the application of paint. The second year of the program reinforces the skills learned in the first year; however, more emphasis is placed on major collision appraisal and repair and the auto body refinishing process. Processes include acrylic urethanes, polyurethanes and base coat, clear coat in solvent-based and waterborne paint systems, and tri-coat paint systems. Emphasis is also placed on color matching, mixing and tinting colors with hands-on experience. To ensure accountability for time and materials, second-year students also utilize a work order system.

Graduates of the program will find job opportunities with auto collision repair paint shops, new and used car dealers, auto glass shops, and truck bodybuilders. With experience, advanced positions may be available in supervision, insurance adjusting, sales and service, auto product field representation with collision frame shops, and in self-employment.

The Automotive Collision Repair program is ASE accredited at the master level.

Automotive Technology
Automotive Technology is a program designed to provide broad fundamental training in all aspects of automotive service and repair, employing up-to-date methods and materials. The program emphasizes the ASE Education Foundation skills standards required for a technician to become Automotive Service Excellence (ASE) certified. In the first semester, students concentrate on the undercar chassis, including wheels/tires, tire pressure monitoring systems, wheel balancing techniques, brakes, ABS/traction control systems, steering suspension systems, and wheel alignment.

During the spring semester, first-year students concentrate on major engine repair, including diagnoses, disassembly, inspection, and reassembly. Automotive electricity, including batteries, starting and charging systems, restraint systems, lighting, and vehicle wiring are integral to the program. There is also a course in motor vehicle inspection and students may take the Maine Class A, E, D, and T inspection license exams. In the second year, students cover the areas of engine management diagnostics and repair including: computers and control systems, fuel delivery/air induction, ignition systems and emission control. In the final semester, the course covers areas of automatic/manual transmissions and final drive assemblies.

Incorporated into the program are technical courses that enhance learning on the maintenance of current automotive standards. These include basic automotive electricity, automotive electronics, automotive heating and air conditioning, advanced electronics, hybrid and electric vehicles, and light-duty diesel systems. The program meets the quality training of automotive-certified technicians as set by ASE. Students will be eligible for ASE professional certifications upon completion of the program. Graduates of the program will be qualified as entry-level technicians, finding employment with automobile dealerships, independent repair facilities, after-market specialty shops and other related businesses.

The Automotive Technology program is ASE accredited at the master level.

Building Construction Technology

The Building Construction Technology one-year certificate program provides up-to-date training in the tools of the construction trade including the proper methods of construction, the appropriate materials to use and the related knowledge necessary to enter the trade.

Students learn and practice the safe use of power and hand tools, the principles of building construction, including floor framing, wall framing, roof framing, wall partition framing, exterior finish, roofing, attic venting and insulating techniques.

Graduates will be qualified for entry-level positions with building contractors, building suppliers, governmental agencies, home specialty companies, manufacturing firms or other organizations. Building Construction Technology students gain knowledge on the total construction process in their education, which also provides good career advancement opportunities.

Computer-Aided Machining

The Computer-Aided Machining certificate program enables students to develop skills in programming, set-up, and operation of CNC machine tools to produce precision parts and develop the required skills for entry-level employment. Students will develop additional skills in process planning, print reading, CAD/CAM, measurement and inspection, and custom work-holding design, leading to NIMS (National Institute of Metalworking Skills) and/or other credentials.

The Computer-Aided Machining program at NMCC is located in the College's HAAS Technical Education Center. The College's collaborative relationship with HAAS Automation, Inc. affords students access to state-of-the-art machine tools to support training in both entry-level and advanced machining processes. Job opportunities for graduates include CNC mill operators, CNC lathe operators, and quality control inspectors. *The Computer-Aided Machining certificate program is accredited by the National Institute of Metalworking Skills (NIMS).*

Diesel Hydraulics Technology
The Diesel Hydraulics Technology program emphasizes the skill standards required for students to become entry-level technicians in diesel diagnostic and repair for trucks and heavy equipment. Fundamental training in all aspects of medium/heavy truck technician training is employed through lectures and hands-on training.

In the first semester, students concentrate on preventive maintenance inspections and repair and basic principles of diesel engine operation with emphasis on engine tune-up and troubleshooting techniques (i.e., engine timing and fuel systems operational components). The next semester follows with an emphasis on heavy equipment electrical/electronic troubleshooting and repair, air brake systems, and fundamentals of suspension and steering component service and diagnostics.

In the second year, students concentrate on the principles of hydraulics, hydraulic troubleshooting and diagnosis, followed by diesel engine rebuilding. The last semester's concentration is truck drive train systems, including transmission and differential rebuilding or replacement, followed by the theory, operation and repair of automatic and manual drive trains, axles, and bogie systems and diagnosis.

The Diesel Hydraulics program meets the quality training of diesel-hydraulic technicians as set by ASE and is master-level accredited. Students will be eligible for ASE student certifications upon completion of the program. Graduates can find employment with construction companies, forestry companies, agricultural machinery/ heavy equipment dealers, and truck dealerships. Capable graduates may advance into management positions such as team leader, shift foreman, shop supervisor, service manager, parts manager, or sales associate. *The Diesel Hydraulics Technology program is ASE accredited at the master level.*

Electrical Construction and Maintenance
The Electrical Construction and Maintenance program provides broad fundamental training in the principles used to install electrical equipment and the mathematics necessary to plan electrical systems. National electric code and theory are taught throughout the program.

The first year provides theory and practice in electrical and electronic basics. Studies include the use of diagnostic test equipment and troubleshooting techniques while performing hands-on laboratory exercises.

The second year begins with an in-depth study of residential and commercial wiring systems and lighting design. Hands-on exercises include residential wiring, conduit bending and installation, and lighting and control system installation.

Following a thorough study of rotating machinery and power systems analysis, industrial wiring and motor controls are studied. Hands-on exercises include the planning, wiring and testing of motor control circuitry, as well as programmable logic controllers (PLCs). Graduates of the program will find employment opportunities as beginning electricians with electrical contractors, service shops, power companies, electrical industry equipment suppliers and industrial maintenance operations. After necessary experience and licenses have been obtained, positions may be available as managers, inspectors, supervisors, field representatives or as operators of individual businesses. Presently, two of the four years required for a Journeyman Electrician's License are awarded to graduates upon completing this program at NMCC.

Plumbing and Heating

Students in the Plumbing and Heating program may choose to pursue an associate degree or a certificate in plumbing, in heating, or in both. Classroom and lab projects provide students with the skills necessary for today's fast-paced and ever-evolving world of plumbing and heating. Students can enroll in the Plumbing and Heating associate's degree program, the one-year Plumbing certificate, or the one-year Heating certificate. Admission to the Heating certificate only requires the instructor's permission.

The first year is spent in the plumbing classroom and lab learning to work with many types of piping systems, including copper, steel and plastics. The student will also learn to properly install and service domestic water pumps, water treatment equipment, plumbing fixtures, drainage and vent lines, and potable water lines. The student will work directly with the sizing of domestic water, drainage and venting systems. The Maine State Plumbing Code will be discussed in detail. The student will be eligible for the Maine Plumbers' Journeyman Exam upon successful completion of the first year. Individuals who pass the state exam may be issued a Journeyman-In-Training License.

The second year consists of class time in heating and refrigeration, along with participating in the lab, and learning to work with many different heating and refrigeration systems and components. The student will learn the major concepts of heat flow, warm air and hydroponic heating systems, piping systems and layouts, electrical component wiring, and Maine laws pertaining to oil heating appliances and refrigerant systems. After completion of the heating courses, the student will be eligible to sit for the Maine Journeyman's Exam for #1 and #2 oils up to 15 G.P.M. In addition, students will receive training in propane and natural gas and heat pump installation. Students will have the opportunity to take national certification exams in propane and natural gas, allowing students the ability to sit for the professional license of "Propane and Natural Gas Technician" license and EPA 608 Certificate for Refrigeration Handling. Graduates will be qualified for many employment opportunities in the plumbing, heating and refrigeration field, including service technician, installer, and equipment sales, and eventually self-employment.

Trade and Technical Occupations

This program recognizes proficiency at the associate degree level for various trades and technical occupations in which an individual has completed a formal registered apprenticeship program (i.e., journeyman status). The program is open to individuals who have completed a registered apprenticeship program and to apprentices who wish to complete the trade and technical occupations program simultaneously with dual enrollment in the apprenticeship program. Participation is available to apprentices in a registered or college-approved program that is at least three years in duration. Students may be enrolled in the program after they have earned 27 credits in their technical (apprenticeship) specialty area. The student is responsible for providing the necessary documentation to verify his or her successful completion of the technical specialty portion of the apprenticeship program, certification documents, a schedule of training required by the employer and other supporting credentials. A registered apprenticeship program is approved by the Maine State Apprenticeship and Training Council or the U.S. Department of Labor, Bureau of Apprenticeship and Training. The degree will not be awarded until the student has completed the requirements of the apprenticeship program.

Structural Welding
In the Structural Welding certificate program, students will be presented with information on the materials being used, hand and power tools for the job, safety in the workplace, and the correct procedures for the assigned tasks. Students will have the opportunity to develop skills in the shielded metal arc welding process in preparation for the exam. The curriculum for this program is designed to prepare students for the American Welding Society structural welding qualification test numbers D1-SM-F4-P-A-L, a national certification.

Graduates of the program may find employment opportunities with industrial contractors, shipyards, machine shops, fabrication shops, and manufacturing facilities.

Water Treatment Technology
The Water Treatment Technology program prepares students for a career in the environmentally conscious field of municipal and industrial water and wastewater treatment. The program provides students with a fundamental understanding of the scientific principles used to treat drinking water and sanitize wastewater before it is discharged back into the environment.

Students will learn industry theory and gain better understanding of the information across the spectrum, from the basics to an in-depth study of Water and Wastewater Treatment degrees and certificates. Students may choose the associate's degree option that covers both water and wastewater treatment or a certificate option in either.

Graduates will be eligible for the Maine DHHS Class I and II Water Treatment Plant Operator, Class I and II Water Distribution Systems Operator, Maine DEP Class I and II Wastewater Treatment Plant Operator and NEWA Grade 1 and 2 Collection Systems exams.

Students may find career opportunities with municipal and industrial water and wastewater treatment facilities, state agencies, testing laboratories, and related equipment suppliers.

Wind Power Technology
The Wind Power Technology certificate program prepares students to enter into a rapidly emerging alternative energy industry as technicians. The program offers training in the fundamental skills required to work safely and effectively with utility-sized wind power systems.

The first semester of the program offers an introduction to the power industry, electrical and electronics basics, related mathematics concepts, industrial safety practices, fluid applications, and mechanical drive systems.

The second semester provides fundamentals of industrial control system applications including automation concepts, related electronics, communication networks, software applications, and power production and distribution. Each semester's curriculum provides a focus on developing a working knowledge of industry standards and skills required to complete operation, maintenance and troubleshooting tasks.

Graduates of the certificate program will find career opportunities with wind farm operators, turbine manufacturers, and contractors providing construction, maintenance and turbine operational support. Opportunities may include local employers, as well as the global energy industry.

Curriculum

General Education Core

All associate degree candidates must complete the following minimum general education core requirements.

CORE REQUIREMENTS	DESCRIPTION OF THE DISCIPLINE	LEARNING OUTCOMES	COURSES (SEE PROGRAM REQUIREMENTS)
Writing & Communications **6 Hours**	Communications focuses on developing skills to make meaning of symbols: words, images, documents, advertising and even technology to promote human interaction in a broad range of careers, disciplines and organizations and agencies in society. Persuasion and critical thinking are essential to the study of communications that overlaps a variety of secondary disciplines that can range from healthcare to mass communications to politics and organizations.	Students will be able to communicate effectively, both orally and in writing. Students will be able to search for, access, evaluate information from a variety of sources and use that information ethically and legally for research and personal purposes.	ENG 111 English Composition COM 111 Speech COM 212 Business Communications I COM 221 Technical Communications
Quantitative Literacy **3 Hours**	Mathematics is the study of number, quantity, shape, and space and their interrelationships using numbers and symbols and logical thinking. Arithmetic, algebra, geometry, and calculus are branches of mathematics.	Students will understand and be able to apply mathematical concepts to solve quantitative problems.	MAT 115 Business Math MAT 116 Quantitative Reasoning MAT 121 Technical Math MAT 125 College Algebra MAT 210 Statistics
Natural Science **4 Hours w/Lab**	Science is the systematic study of the structure and behavior of the physical and natural world through observation experiment, measurement, and critical analyses.	Students will demonstrate the ability to be consumers of biological and other scientific information to better inform their daily lives.	BIO 114 Human Biology BIO 115 General Biology BIO 201 Anatomy & Physiology I BIO 211 Anatomy & Physiology II BIO 218 Microbiology PHY 150 Physics
Social Science **3 Hours**	Social Sciences are the study of human behavior, societies and the social processes that influence both. The social sciences include sociology, psychology, anthropology, economics, and political science.	Students will be able to analyze or explain causal forces which shape social structures, institutions, or behavior through time.	ECO 213 Macroeconomics HIS 123 U.S. History, 1600-1865 HIS 125 U.S. History, 1865 to Present HIS 206 American Sports History HIS 207 Maine History POL 101 American Government PSY 101 General Psychology PSY 207 Developmental Psychology PSY 209 Abnormal Psychology SOC 111 Sociology SOC 215 Social Issues & Problems
Humanities **3 Hours**	Humanities are those disciplines that help us understand what it means to be human. Study in the humanities help us to make meaning, find purpose, and choose values that enhance our understanding of ourselves and govern our relationships with others. The humanities include literature, fine art, philosophy, and history.	Students will be able to read, analyze, and interpret significant texts in order to make meaning, find purpose, and choose values that enhance our understanding of ourselves and govern our relationships with others.	ART 201 Introduction to Film ENG 226 Introduction to Literature ENG 228 Topics in Literature ENG 239 Intro. to Creative Writing HIS 123 U.S. History, 1600-1865 HIS 125 U.S. History, 1865 to Present HIS 206 American Sports History HIS 207 Maine History PHI 111 Everyday Ethics PHI 121 Introduction to Philosophy PHI 201 Ethics PHI 206 World Religions
General Education Elective **1-3 Hours**			COL 103 College Success SPA 101 Spanish I SPA 102 Spanish II

Accounting

ACCOUNTING
Associate in Applied Science Degree Program

First Semester			C	L	CR
ACC 114	(ACCT 114)	Principles of Accounting I	3	0	3
BUS 117	(BUSN 117)	Business Law I	3	0	3
CIS 104	(COMP 104)	Introduction to Computer Concepts	1	0	1
CIS 113	(COMP 113)	Introduction to Microcomputer Applications	3		3
	(ENGL 101)	English Composition	3	0	3
MAT 115	(MATH 114)	Business Mathematics	3	0	3
		(OR MAT 116 Quantitative Reasoning)	**16**	**0**	**16**

Second Semester			C	L	CR
ACC 120	**(ACCT 120)**	**Principles of Accounting II**	**3**	**0**	**3**
CIS 108	(COMP 241)	Spreadsheet Applications	3	0	3
COM 212	(COMM 212)	Business Communications I	3	0	3
ECO 213	(ECON 201)	Macroeconomics	3	0	3
MAT 125	(MATH 140)	College Algebra	3	0	3
			15	0	15

Third Semester			C	L	CR
> **ACC 210**	**(ACCT 210)**	**Intermediate Accounting I**	**3**	**0**	**3**
> **ACC 214**	**(ACCT 214)**	**Federal Taxation I**	**3**	**0**	**3**
> **ACC 223**	**(ACCT 223)**	**Accounting for Non-profit Organizations**	**3**	**0**	**3**
> **ACC 234**	**(ACCT 234)**	**Accounting Information Systems I**	**3**	**0**	**3**
CIS 129	(COMP 229)	Database Applications	3	0	3
COM 111	(COMM 107)	Speech	3	0	3
			18	**0**	**18**

Fourth Semester			C	L	CR
> **ACC 220**	**(ACCT 220)**	**Intermediate Accounting II**	**3**	**0**	**3**
> **ACC 225**	**(ACCT 225)**	**Federal Taxation II**	**3**	**0**	**3**
BUS 106	(BUSN 106)	Effective Customer Services	3	0	3
		Business Elective	3	0	3
		Humanities Elective	3	0	3
			15	**0**	**15**

Total Required 64

> Major courses; a minimum grade of "C" or 2.0 is required

Key: C=Class hours; L=Laboratory; CR=Credit hours

PROGRAM OUTCOMES

- Comply with Generally Accepted Accounting Principles.
- Perform the steps of the accounting cycle.
- Journalize and post adjusting entries.
- Prepare financial statements.
- Perform financial statement analysis.
- Utilize accounting information for decision making.
- Prepare a federal income tax return.
- Proficiently use technology.

The Accounting Program is accredited by the Accreditation Council for Business Schools and Programs (ACBSP). The accreditation represents the achievement of meeting the international standards established for associate degree-granting business programs.

Automotive Collision Repair

Automotive Collision Repair
2024-2025
Associate in Applied Science Degree Program

First Semester				C	L	CR
>	**ACR 111**	**(AUTC 111)**	**Nonstructural Repairs**	**3**	**9**	**6**
	ENG 111	(ENGL 101)	English Composition	3	0	3
	SAE 121	(OSHA 121)	Industrial Safety	3	0	3
	WEI 113	(WELD 113)	Thin Metals Welding	2	2	3
			Gen Ed Elective	3	0	3
				14	**11**	**18**

Second Semester				C	L	CR
>	**ACR 121**	**(AUTC 121)**	**Structural Analysis/Plastics**	**3**	**9**	**6**
>	**AUT 115**	**(AUTO 115)**	**Automotive Electricity**	**2**	**2**	**3**
	MAT 122	(MATH 130)	Technical Mathematics	2	2	3
	WEI 135	(WELD 135)	I-CAR Welding	2	2	3
			Social Science Elective	3	0	3
				12	**15**	**18**

Third Semester				C	L	CR
>	**ACR 209**	**(AUTC 209)**	**Auto Collision Blueprint & Estimating**	**3**	**0**	**3**
>	**ACR 211**	**(AUTC 211)**	**Painting & Refinishing**	**3**	**9**	**6**
>	**AUT 125**	**(AUTO 125)**	**Automotive Electronics**	**2**	**2**	**3**
	PHY 150	(PHYS 110)	Physics	3	2	4
			Humanities Elective	3	0	3
				14	**13**	**19**

Fourth Semester				C	L	CR
	ACR 214	(AUTC 214)	Airbrushing Techniques	2	2	3
>	**ACR 223**	**(AUTC 223)**	**Structural Repairs**	**3**	**9**	**6**
	AUT 216	(AUTO 216)	Motor Vehicle Inspection	2	0	2
>	**AUT 229**	**(AUTO 229)**	**Automotive Heating & Air Conditioning**	**2**	**2**	**3**
	COM 221	(COMM 201)	Technical Communications	3	0	3
				12	**13**	**17**

Total Required 72

> ***Major courses; a minimum grade of "C" or 2.0 is required***

Key: C=Class hours; L=Laboratory; CR=Credit hours

The Automotive Collision Repair Program has achieved Master Level certification by the National Institute for Automotive Excellence (ASE) after a thorough evaluation.

Automotive Collision Repair
Certificate Program

First Semester				C	L	CR
>	**ACR 111**	**(AUTC 111)**	**Nonstructural Repairs**	**3**	**9**	**6**
	ENG 111	(ENGL 101)	English Composition	3	0	3
	SAE 121	(OSHA 121)	Industrial Safety	3	0	3
	WEI 113	(WELD 113)	Thin Metals Welding	2	2	3
				11	**11**	**15**

Second Semester				C	L	CR
>	**ACR 121**	**(AUTC 121)**	**Structural Analysis/Plastics**	**3**	**9**	**6**
>	**AUT 115**	**(AUTO 115)**	**Automotive Electricity**	**2**	**2**	**3**
	MAT 122	(MATH 130)	Technical Mathematics	2	2	3
	WEI 135	(WELD 135)	I-CAR Welding	2	2	3
				9	**15**	**15**

Total Required 30

Must have completed the Auto Collision Repair Certificate Program or have permission from the Instructor to enroll

Major Collision Repair & Refinishing
Certificate Program

First Semester				C	L	CR
>	**ACR 209**	**(AUTC 209)**	**Auto Collision Blueprint & Estimating**	**3**	**0**	**3**
>	**ACR 211**	**(AUTC 211)**	**Painting & Refinishing**	**3**	**9**	**6**
>	**AUT 125**	**(AUTO 125)**	**Automotive Electronics**	**2**	**2**	**3**
	ENG 111	(ENGL 101)	English Composition	3	0	3
				11	**11**	**15**

Second Semester				C	L	CR
>	**ACR 223**	**(AUTC 223)**	**Structural Repairs**	**3**	**9**	**6**
	AUT 216	(AUTO 216)	Motor Vehicle Inspection	2	0	2
>	**AUT 229**	**(AUTO 229)**	**Automotive Heating & Air Conditioning**	**2**	**2**	**3**
	MAT 122	(MATH 130)	Technical Mathematics	2	2	3
				9	**13**	**14**

Total Required 29

Automotive Collision Repair cont.

PROGRAM OUTCOMES

- Demonstrate a safe working environment and safe use of tools and equipment in the Automotive Collision Repair Industry.
- Demonstrate how to properly repair a vehicle including estimating, repair planning, repairing, and refinishing the vehicle.
- Perform entry-level skills in metalwork, plastic repairs, refinishing and all aspects of the Auto Collision Repair process.
- Understand proper technical terms, and descriptions and how to communicate them with others.
- Understand the basic principles of automotive electronic components.
- Demonstrate basic skills for oxyacetylene, MIG, silicon bronze and aluminum welding.
- Be eligible for Maine State Motor Vehicle Inspection License, ASE Certifications in B2, B3, B4, B5, B6, Section 609 Certification of Federal Clean Air Act, I-Car Thin Metals Welding Certification.
- Be able to work efficiently on the repair orders, estimates and body repairs.

Automotive Technology

Automotive Technology
2024-2025
Associate in Applied Science Degree Program

First Semester			C	L	CR
> **AUT 109**	**(AUTO 109)**	**Introduction to Automotive Technology**	**0.5**	**1.5**	**1**
> **AUT 114**	**(AUTO 114)**	**Suspension & Steering**	**1.5**	**4.5**	**3**
> **AUT 115**	**(AUTO 115)**	**Automotive Electricity**	**2**	**2**	**3**
> **AUT 116**	**(AUTO 116)**	**Brakes**	**1.5**	**4.5**	**3**
ENG 111	(ENGL 101)	English Composition	3	0	3
WEI 103	(WELD 103)	Welding for Automotive Technicians	2	2	3
			10.5	**14.5**	**16**

Second Semester			C	L	CR
> **AUT 124**	**(AUTO 124)**	**Engine Repair**	**3**	**9**	**6**
> **AUT 125**	**(AUTO 125)**	**Automotive Electronics**	**2**	**2**	**3**
AUT 216	(AUTO 216)	Motor Vehicle Inspection	2	0	2
MAT 122	(MATH 130)	Technical Mathematics	2	2	3
		Humanities Elective	3	0	3
			12	**13**	**17**

Third Semester			C	L	CR
> **AUT 214**	**(AUTO 214)**	**Engine Performance**	**3**	**9**	**6**
> **AUT 229**	**(AUTO 229)**	**Automotive Heating & Air Conditioning**	**2**	**2**	**3**
> **AUT 231**	**(AUTO 231)**	**Innovative Automotive Technologies**	**2**	**2**	**3**
> **AUT 233**	**(AUTO 233)**	**Light Vehicle Diesel Systems**	**2**	**2**	**3**
PHY 150	(PHYS 110)	Physics	3	2	4
			12	**17**	**19**

Fourth Semester			C	L	CR
> **AUT 223**	**(AUTO 223)**	**Manual Drive Train & Axels**	**1.5**	**4.5**	**3**
> **AUT 225**	**(AUTO 225)**	**Automatic Transmissions**	**1.5**	**4.5**	**3**
> **AUT 228**	**(AUTO 228)**	**Alternative Propulsion Systems**	**2**	**2**	**3**
COM 221	(COMM 201)	Technical Communications	3	0	3
		Gen Ed Elective	3	0	3
		Social Science Elective	3	0	3
			14	**11**	**18**

Total Required 70

Automotive Technology
2024-2025
Certificate Program

First Semester			C	L	CR
> **AUT 109**	**(AUTO 109)**	**Introduction to Automotive Technology**	**0.5**	**1.5**	**1**
> **AUT 114**	**(AUTO 114)**	**Suspension & Steering**	**1.5**	**4.5**	**3**
> **AUT 115**	**(AUTO 115)**	**Automotive Electricity**	**2**	**2**	**3**
> **AUT 116**	**(AUTO 116)**	**Brakes**	**1.5**	**4.5**	**3**
ENG 111	(ENGL 101)	English Composition	3	0	3
WEI 103	(WELD 103)	Welding for Automotive Technicians	2	2	3
			10.5	**14.5**	**16**

Second Semester			C	L	CR
> **AUT 124**	**(AUTO 124)**	**Engine Repair**	**3**	**9**	**6**
> **AUT 125**	**(AUTO 125)**	**Automotive Electronics**	**2**	**2**	**3**
AUT 216	(AUTO 216)	Motor Vehicle Inspection	2	0	2
MAT 122	(MATH 130)	Technical Mathematics	2	2	3
			9	**13**	**14**

Total Required 30

The Automotive Technology Program has achieved Master Level certification by the National Institute for Automotive Excellence (ASE) after a thorough evaluation.

*** Note: AUT courses within a semester are scheduled sequentially, not concurrently**

> ***Major courses; a minimum grade of "C" or 2.0 is required***

Key: C=Class hours; L=Laboratory; CR=Credit hours

Automotive Technology cont.

PROGRAM OUTCOMES

- Demonstrate work area safety and the correct and safe use of tools and equipment used in the automotive repair industry.
- Understand principles of operation, and demonstrate ability to diagnose and repair suspension and steering systems, including two- and four-wheel drive alignments.
- Know the principles of operation, diagnosis and repair of base and anti-lock braking systems.
- Perform diagnostics and repair of automotive powertrains: including engines, automatic and manual transmission, transfer cases and differentials.
- Identify the principles of engine performance including fuel delivery and emission systems and demonstrate the ability to diagnose and repair these systems using proper scan tools.
- Understand the principles of automotive electrical and electronic systems and diagnoses and proper repair of these systems.
- Be eligible for ASE certification through A1 through A9 as well as G1, L3, Maine State Motor Vehicle Inspection License and Section 609 Certification of Federal Clean Air Act.
- Comprehend the principles of hybrid/electric vehicle technology and safety requirements, advanced automotive technologies as well as diagnoses and repair.

Building Construction Technology

Building Construction Technology
2024-2025
Certificate Program

First Semester			C	L	CR
> **BCT 111**	**(CONS 111)**	**Framing Systems**	**3**	**9**	**6**
DRR 117	(DRFT 117)	Blueprint Reading for Construction Trades	2	2	3
ENG 111	(ENGL 101)	English Composition	3	0	3
SAE 117	(OSHA 117)	Occupational Safety	1	0	1
TEC 112	(CONS 112)	Building Science I	1.5	3	3
			10.5	**14**	**16**

Second Semester			C	L	CR
> **BCT 121**	**(CONS 121)**	**Interior Materials & Methods**	**3**	**9**	**6**
> **BCT 125**	**(CONS 125)**	**Woodworking**	**1.5**	**4.5**	**3**
MAT 122	(MATH 130)	Technical Mathematics	2	2	3
TEC 123	(CONS 123)	Building Science II	1.5	3	3
			8	**18.5**	**15**

Total Required	**31**

> ***Major courses; a minimum grade of "C" or 2.0 is required***

Key: C=Class hours; L=Laboratory; CR=Credit hours

PROGRAM OUTCOMES

- Demonstrate the safe practice and use of construction tools and know the safety precautions required on the job site.
- Construct floor, wall and roof framing systems.
- Demonstrate the ability to install windows, doors, and various trim materials.
- Understand heat loss, attic venting, and moisture control measures needed in energy and efficient structures.
- Estimate construction costs using material lists prepared by the student.
- Apply good sanding, painting, staining, and clear-coating procedures on all trim and molding.
- Describe typical construction materials and methods as they relate to residential and light commercial buildings.
- Read and understand plans for residential light and commercial buildings.

Business Administration

Business Administration
Associate in Applied Science Degree Program

First Semester				**C**	**L**	**CR**
	ACC 114	(ACCT 114)	Principles of Accounting I	3	0	3
>	**BUS 101**	**(BUSN 101)**	**Introduction to Business**	**3**	**0**	**3**
	CIS 104	(COMP 104)	Introduction to Computer Concepts	1	0	1
	CIS 113	(COMP 113)	Introduction to Microcomputer Applications	3	0	3
	ENG 111	(ENGL 101)	English Composition	3	0	3
	MAT 115	(MATH 114)	Business Mathematics	3	0	3
			(OR MAT 116 Quantitative Reasoning)			
				16	**0**	**16**
Second Semester				**C**	**L**	**CR**
	ACC 120	(ACCT 120)	Principles of Accounting II	3	0	3
>	**BUS 109**	**(BUSN 109)**	**Entrepreneurship**	**3**	**0**	**3**
	CIS 108	(COMP 241)	Spreadsheet Applications	3	0	3
	COM 212	(COMM 212)	Business Communications I	3	0	3
	MAT 125	(MATH 140)	College Algebra	3	0	3
				15	**0**	**15**
Third Semester				**C**	**L**	**CR**
	BUS 117	(BUSN 117)	Business Law I	3	0	3
>	**BUS 217**	**(BUSN 217)**	**E-Commerce**	**3**	**0**	**3**
>	**BUS 229**	**(BUSN 229)**	**Principles of Management**	**3**	**0**	**3**
	COM 111	(COMM 107)	Speech	3	0	3
	ECO 213	(ECON 201)	Macroeconomics	3	0	3
			Business Elective	3	0	3
				18	**0**	**18**
Fourth Semester				**C**	**L**	**CR**
	BUS 106	(BUSN 106)	Effective Customer Service	3	0	3
>	**BUS 214**	**(BUSN 214)**	**Project Management**	**3**	**0**	**3**
>	**BUS 239**	**(BUSN 239)**	**Human Resource Management**	**3**	**0**	**3**
>	**BUS 241**	**(BUSN 241)**	**Principles of Marketing**	**3**	**0**	**3**
			Humanities Elective	3	0	3
				15	**0**	**15**
					Total Required	**64**

> **Major courses; a minimum grade of "C" or 2.0 is required**

Key: C=Class hours; L=Laboratory; CR=Credit hours

PROGRAM OUTCOMES

- Demonstrate knowledge of the four managerial functions: planning, organizing, leading and controlling.
- Demonstrate knowledge of and skills in the field of human resource management.
- Demonstrate knowledge of marketing research and skills necessary to create a marketing plan.
- Demonstrate knowledge and skills in the field on entrepreneurship.
- Proficiently use technology.

The Business Administration Program is accredited by the Accreditation Council for Business Schools and Programs (ACBSP).

The accreditation represents the achievement of meeting the international standards established for associate degree-granting business programs.

Career Studies

Career Studies - Concentration in Allied Health
Associate in Applied Science Degree Program

First Semester		C	L	CR
ALH 115 (HLTH 115)	Introduction to Healthcare Professions	3	0	3
BIO 201 (BIOL 215)	Anatomy & Physiology with Lab I	3	2	4
COL 103 (CLGE 103)	College Success	1	0	1
ENG 111 (ENGL 101)	English Composition	3	0	3
	Elective (NUT 101, COM 111 or HIS 123)	3	0	3
		13	**2**	**14**

Second Semester		C	L	CR
ALH 220 (HLTH 220)	Medical Terminology	3	0	3
BIO 211 (BIOL 230)	Anatomy & Physiology with Lab II	3	2	4
ENG 226 (ENGL 226)	Introduction to Literature	3	0	3
MAT 116 (MATH 112)	Quantitative Reasoning	3	0	3
	Elective (ENG 227, PSY 101, SPA 101 or HIS 125)	3	0	3
		15	**2**	**16**

Third Semester		C	L	CR
	Career/Technical Courses	12	0	12
	Elective	3	0	3
		15	**0**	**15**

Fourth Semester		C	L	CR
	Career/Technical Courses	12	0	12
	Elective	3	0	3
		15	**0**	**15**
	Total Required			**60**

> ***Major courses; a minimum grade of "C" or 2.0 is required***

Key: C=Class hours; L=Laboratory; CR=Credit hours

Career Studies
Allied Health Studies Certificate Program

First Semester		C	L	CR
ALH 115 (HLTH 115)	Introduction to Healthcare Professions	3	0	3
BIO 201 (BIOL 215)	Anatomy & Physiology with Lab I	3	2	4
COL 103 (CLGE 103)	College Success	1	0	1
ENG 111 (ENGL 101)	English Composition	3	0	3
	Elective (NUT 101, PSY 101, COM 111 or HIS 123)	3	0	3
		13	**2**	**14**

Second Semester		C	L	CR
ALH 220 (HLTH 220)	Medical Terminology	3	0	3
BIO 211 (BIOL 230)	Anatomy & Physiology with Lab II	3	2	4
ENG 226 (ENGL 226)	Introduction to Literature	3	0	3
MAT 116 (MATH 112)	Quantitative Reasoning	3	0	3
	Elective (ENG 227, SPA 101 or HIS 125)	3	0	3
		15	**2**	**16**
	Total Required			**30**

Career Studies cont.

CAREER STUDIES - BUSINESS

Students pursuing the associate in applied science degree in career studies - business are required to complete a minimum of 60 credit hours. The course selections in designing the curriculum must be reviewed and approved by the department chair of business technology. These credits fall into three categories:

Professional Component (Technical/Related) - 15: A student must have a minimum of 15 credit hours for the professional component, including four courses from the selected area from within the business department curriculum to meet the total of 60 credit hour requirement. See Note 1.

Business Major (Career) - 24: A total of 24 credits must be completed in the career track. Up to 20 credit hours may be awarded toward this requirement for related experiential knowledge within an occupational track at the College. (Students applying for experiential credits must provide a detailed portfolio to the college's academic dean for review and possible awarding of credit; students applying for portfolio credits must notify the admissions office at the time of application). See Note 2.

General Education - 20: A student must have a minimum of 15 credit hours in communications, social sciences, humanities, and fine arts plus a minimum of 6 credit hours in math/science.

Note 1: Professional Component (Technical/Related)

At least 25% of the business curriculum must consist of a professional component (PC) including four of the following:

- Accounting
- Computer information applications
- Quantitative methods of analysis
- Principles of economics
- Business in society - the international environment, legal/political environment, and ethical business behavior
- Marketing
- Entrepreneurship/free enterprise
- Finance
- Management

Note 2: Business Major (Career)

At least 25% of the associate degree or associate of applied science degree must be devoted to courses appropriate to the student's business major beyond the professional component.

Programs that lead to an associate degree must be able demonstrate that the programs include appropriate courses to prepare students for transfer or employment.

Computer-Aided Machining

Computer-Aided Machining
2024-2025
Certificate Program

First Semester		C	L	CR
MAT 122 (MATH 130)	Technical Math	2	2	3
> PMT 100 (MACH 100)	**Introduction to Programming**	**1**	**2**	**2**
> PMT 122 (MACH 122)	**CNC Mill & Lathe Setup & Operation I**	**1**	**9**	**4**
PMT 110 (MACH 110)	3D Solid Modeling	1	2	2
PMT 113 (MACH 113)	Print Reading for Machinists	2	0	2
		7	**15**	**13**

Second Semester		C	L	CR
ENG 111 (ENGL 101)	English Composition	3	0	3
> PMT 112 (MACH 112)	**CNC Mill Programming**	**2**	**0**	**2**
> PMT 114 (MACH 114)	**CNC Lathe Programming**	**2**	**0**	**2**
PMT 119 (MACH 119)	Inspection	1	3	2
> PMT 222 (MACH 222)	**CNC Mill & Lathe Setup & Operation II**	**1**	**9**	**4**
		9	**12**	**13**

Total Required 26

> ***Major courses; a minimum grade of "C" or 2.0 is required***
Key: C= Class hours; L=Laboratory; CR=Credit hours

The Computer-Aided Machining Program is accredited by the National Institute of Metalworking Skills (NIMS).

PROGRAM OUTCOMES

- Eligible for NIMS CNC Lathe Operator Certification
- Eligible for NIMS CNC Mill Operator Certification
- Eligible for Sandvik Metal Cutting Technology (MCT) Certification
- Demonstrate proficiency in reading, understanding and following detailed instructions and component drawings.
- Communicate effectively, both in written and verbal form, in workplace scenarios using appropriate technical information.
- Recognize safety hazards and potential safety issues and apply safe work practices and procedures in accordance with OSHA standards in the manufacturing workplace.

Diesel Hydraulics Technology

Diesel Hydraulics Technology
2024-2025
Associate in Applied Science Degree Program

First Semester			C	L	CR
> AUT 115	**(AUTO 115)**	**Automotive Electricity**	**2**	**2**	**3**
> DIM 112	**(DTHE 112)**	**Introduction to Diesel Hydraulics**	**3**	**9**	**3**
> DIM 116	**(DTHE 116)**	**Engine Rebuilding**	**3**	**9**	**3**
ENG 111	(ENGL 101)	English Composition	3	0	3
WEI 101	(WELD 101)	Introduction to Welding	2	2	3
			13	**22**	**15**

Second Semester			C	L	CR
> AUT 125	**(AUTO 125)**	**Automotive Electronics**	**2**	**2**	**3**
> DIM 122	**(DTHE 122)**	**Heavy Equipment/Electrical Systems**	**3**	**9**	**3**
> DIM 124	**(DTHE 124)**	**Brake Systems**	**3**	**9**	**3**
MAT 122	(MATH 130)	Technical Mathematics	2	2	3
SAE 121	(OSHA 121)	Industrial Safety	3	0	3
WEI 133	(WELD 133)	Electric Welding	2	2	3
			15	**24**	**18**

Third Semester			C	L	CR
> AUT 229	**(AUTO 229)**	**Automotive Heating & Air Conditioning**	**2**	**2**	**3**
> DIM 211	**(DTHE 211)**	**Hydraulics Technology**	**3**	**9**	**3**
> DIM 212	**(DTHE 212)**	**Engine Diagnosis**	**3**	**9**	**3**
PHY 150	(PHYS 110)	Physics	3	2	4
		Gen Ed Elective	3	0	3
		Social Science Elective	3	0	3
			17	**22**	**19**

Fourth Semester			C	L	CR
AUT 216	(AUTO 216)	Motor Vehicle Inspection	2	0	2
COM 221	(COMM 201)	Technical Communications	3	0	3
> DIM 221	**(DTHE 221)**	**Drive Train Systems**	**3**	**9**	**3**
> DIM 224	**(DTHE 224)**	**Steering & Suspension Systems**	**3**	**9**	**3**
		Elective	3	0	3
		Humanities Elective	3	0	3
			17	**18**	**17**

Total Required 69

> Major courses; a minimum grade of "C" or 2.0 is required

Key: C=Class hours; L=Laboratory; CR=Credit hours

Diesel Hydraulics Technology
2024-2025
Certificate Program

First Semester			C	L	CR
> AUT 115	**(AUTO 115)**	**Automotive Electricity**	**2**	**2**	**3**
> DIM 112	**(DTHE 112)**	**Introduction to Diesel Hydraulics**	**3**	**9**	**3**
> DIM 116	**(DTHE 116)**	**Engine Rebuilding**	**3**	**9**	**3**
ENG 111	(ENGL 101)	English Composition	3	0	3
WEI 101	(WELD 101)	Introduction to Welding	2	2	3
			13	**22**	**15**

Second Semester			C	L	CR
> AUT 125	**(AUTO 125)**	**Automotive Electronics**	**2**	**2**	**3**
> DIM 122	**(DTHE 122)**	**Heavy Equipment/Electrical Systems**	**3**	**9**	**3**
> DIM 124	**(DTHE 124)**	**Brake Systems**	**3**	**9**	**3**
MAT 122	(MATH 130)	Technical Mathematics	2	2	3
SAE 121	(OSHA 121)	Industrial Safety	3	0	3
WEI 133	(WELD 133)	Electric Welding	2	2	3
			15	**24**	**18**

Total Required 33

The Diesel Hydraulics Technology Program has achieved Master Level certification by the National Institute for Automotive Excellence (ASE) after a thorough evaluation.

*Note: DIM courses within a semester are scheduled sequentially, not concurrently

Diesel Hydraulics cont.

PROGRAM OUTCOMES

- Demonstrate safety in the workplace using tools and equipment used in the repair facility.
- Identify truck/equipment routine maintenance standards such as lube, visual check-over, and out-of-service procedures.
- Understand the principle of air brake systems and how to diagnose and repair systems including ABS.
- Perform engine valve/injector adjustments (engine tune-up).
- Understand the principles of how engine management and exhaust after-treatment work and how to diagnose and repair.
- Identify different hydraulic pumps and how to adjust relief pressures.
- Troubleshoot and repair electrical systems and engine controls.
- Be eligible for ASE T2-T8 certifications, Maine State Commercial Inspection Licensure and 609 Certification of Federal Clean Air Act.

Early Childhood Education

Early Childhood Education
2024-2025
Associate in Applied Science Degree Program

First Semester			C	L	CR
> **ECE 101**	**(ECED 101)**	**Healthy Learning Environments**	**3**	**0**	**3**
> **ECE 105**	**(ECED 105)**	**Advanced Intellectual & Social Development**	**3**	**0**	**3**
> **ECE 192**	**(ECED 192)**	**Field Experience in Early Childhood Education I**	**0**	**9**	**3**
PSY 101	(PSYC 100)	General Psychology	3	0	3
		Math Elective	3	0	3
			12	**9**	**15**

Second Semester			C	L	CR
> **ECE 120**	**(ECED 120)**	**Programmatic & Professional Development**	**3**	**0**	**3**
> **ECE 196**	**(ECED 196)**	**Field Experience in Early Childhood Education II**	**1**	**9**	**4**
> **ECE 200**	**(ECED 200)**	**Child Growth & Development**	**3**	**0**	**3**
> **ECE 205**	**(ECED 205)**	**Children's Literature**	**3**	**0**	**3**
ENG 111	(ENGL 101)	English Composition	3	0	3
			13	**9**	**16**

Third Semester			C	L	CR
BIO 115	(BIOL 124)	General Biology	3	2	4
CIS 113	(COMP 113)	Introduction to Microcomputer Applications	3	0	3
COM 111	(COMM 107)	Speech	3	0	3
> **ECE 210**	**(ECED 210)**	**Child Guidance & Discipline**	**3**	**0**	**3**
> **ECE 230**	**(ECED 230)**	**Curriculum in Early Childhood Education (Birth-3)**	**3**	**0**	**3**
			15	**2**	**16**

Fourth Semester			C	L	CR
> **ECE 197**	**(ECED 197)**	**Field Experience in Early Childhood Education III**	**1**	**12**	**5**
> **ECE 220**	**(ECED 220)**	**Education of Young Children with Special Needs**	**3**	**0**	**3**
> **ECE 235**	**(ECED 235)**	**Curriculum in Early Childhood Education (Ages 3-8)**	**3**	**0**	**3**
ENG 226	(ENGL 226)	Introduction to Literature	3	0	3
SOC 111	(SOCI 100)	Sociology	3	0	3
			13	**12**	**17**
		Total Required			**64**

> Major courses; a minimum grade of "C" or 2.0 is required

Key: C=Class hours; L=Laboratory; CR=Credit hours

Early Childhood Education
2024-2025
Certificate Program

First Semester			C	L	CR
> **ECE 101**	**(ECED 101)**	**Healthy Learning Environments**	**3**	**0**	**3**
> **ECE 105**	**(ECED 105)**	**Advanced Intellectual & Social Development**	**3**	**0**	**3**
> **ECE 192**	**(ECED 192)**	**Field Experience in Early Childhood Education I**	**0**	**9**	**3**
PSY 101	(PSYC 100)	General Psychology	3	0	3
		Math Elective	3	0	3
			12	**9**	**15**

Second Semester			C	L	CR
CIS 113	(COMP 113)	Introduction to Microcomputer Applications	3	0	3
> **ECE 120**	**(ECED 120)**	**Programmatic & Professional Development**	**3**	**0**	**3**
> **ECE 196**	**(ECED 196)**	**Field Experience in Early Childhood Education II**	**1**	**9**	**4**
ENG 111	(ENGL 101)	English Composition	3	0	3
			10	**9**	**13**

Third Semester			C	L	CR
> **ECE 197**	**(ECED 197)**	**Field Experience in Early Childhood Education III**	**1**	**12**	**5**

Total Required 33

Early Childhood Education cont.

PROGRAM OUTCOMES

- Use their understanding of young children's characteristics and needs and the multiple interacting influences on children's development and learning to create environments that are healthy, respectful supportive, and challenging for all children.
- Know about, understand, and value the importance and complex characteristics of children's families and communities; use this understanding to create respectful, reciprocal relationships that support and empower families and to involve all families in their children's development and learning.
- Know about and understand the goals, benefits and uses of assessment and understand and use systematic observations, documentation, and other effective assessment strategies in a responsible way, in partnership with families and other professionals, to positively influence children's development.
- Know, understand, and use positive relationships and supportive interactions as the foundations for their work with young children.
- Identify and conduct themselves as members of the early childhood profession; they will know and use ethical guidelines and other professional standards related to early childhood practices; they will be continuous, collaborative learners who demonstrate knowledgeable, reflective and critical perspectives on their work, make informed decisions that integrate knowledge from a variety of sources; and they will be informed advocates for sound educational practices and policies.
- Know, understand, and use a wide array of effective approaches, strategies, and tools to positively influence children's development and learning.
- Understand the importance of each content area in young children's learning; know the essential concepts, inquiry tools, and structure of content areas, including academic subjects, and be able to identify resources to deepen their understanding.
- Use their own knowledge and other resources to design, implement, and evaluate meaningful, challenging curriculum that promotes comprehensive developmental and learning outcomes for all young children.
- Integrate their understanding of and relationship with children and families; their understanding of developmentally effective approaches to teaching and learning; and their knowledge of academic disciplines to design, implement, and evaluate experiences that promote positive development and learning for all young children.

Electrical Construction & Maintenance

Electrical Construction & Maintenance Technology
2024-2025
Associate in Applied Science Degree Program

First Semester			C	L	CR
> **ELE 112**	**(ELEC 112)**	**Basic Residential Wiring**	**2**	**2**	**3**
> **ELS 115**	**(ELEC 115)**	**Basic Electricity/Electronics**	**3**	**0**	**3**
> **ELS 116**	**(ELEC 116)**	**Basic Electricity/Electronics Lab**	**0**	**6**	**2**
ENG 111	(ENGL 101)	English Composition	3	0	3
MAT 122	(MATH 130)	Technical Mathematics	2	2	3
			10	**10**	**14**

Second Semester			C	L	CR
DIB 113	(ELEC 113)	Introduction to Digital Systems	2	2	3
DRR 117	(DRFT 117)	Blueprint Reading for Construction Trades	2	2	3
> **ELS 124**	**(ELEC 124)**	**Industrial Electronics**	**2**	**3**	**3**
> **ELS 125**	**(ELEC 125)**	**Motors & Controls**	**2**	**3**	**3**
		Social Science Elective	3	0	3
			11	**10**	**15**

Third Semester			C	L	CR
EET 221	(ELEC 221)	Control Systems & PLCs	2	3	3
> **ELC 110**	**(ELEC 110)**	**National Electrical Code**	**3**	**0**	**3**
> **ELE 210**	**(ELEC 210)**	**Electrical Construction & Maintenance I**	**3**	**0**	**3**
> **ELE 212**	**(ELEC 212)**	**Electrical Construction & Maintenance Lab I**	**0**	**9**	**3**
PHY 150	(PHYS 110)	Physics	3	2	4
			11	**14**	**16**

Fourth Semester			C	L	CR
COM 221	(COMM 201)	Technical Communications	3	0	3
> **ELC 116**	**(ELEC 118)**	**National Electric Code for Industry**	**3**	**0**	**3**
> **ELE 222**	**(ELEC 222)**	**Electrical Construction & Maintenance II**	**3**	**0**	**3**
> **ELE 223**	**(ELEC 223)**	**Electrical Construction & Maintenance Lab II**	**0**	**9**	**3**
		Gen Ed Elective	3	0	3
		Humanities Elective	3	0	3
			15	**9**	**18**

Total Required 63

> **Major courses; a minimum grade of "C" or 2.0 is required**

Key: C=Class hours; L=Laboratory; CR=Credit hours

Electrical Construction & Maintenance Technology
2024-2025
Certificate Program

First Semester			C	L	CR
> **ELC 110**	**(ELEC 110)**	**National Electrical Code**	**3**	**0**	**3**
> **ELE 112**	**(ELEC 112)**	**Basic Residential Wiring**	**2**	**2**	**3**
> **ELS 115**	**(ELEC 115)**	**Basic Electricity/Electronics**	**3**	**0**	**3**
> **ELS 116**	**(ELEC 116)**	**Basic Electricity/Electronics Lab**	**0**	**6**	**2**
MAT 122	(MATH 130)	Technical Mathematics	2	2	3
			10	**10**	**14**

Second Semester			C	L	CR
DRR 117	(DRFT 117)	Blueprint Reading for Construction Trades	2	2	3
> **ELC 116**	**(ELEC 118)**	**National Electric Code for Industy**	**3**	**0**	**3**
> **ELS 124**	**(ELEC 124)**	**Industrial Electronics**	**2**	**3**	**3**
> **ELS 125**	**(ELEC 125)**	**Motors & Controls**	**2**	**3**	**3**
ENG 111	(ENGL 101)	English Composition	3	0	3
			12	**8**	**15**

Total Required 29

PROGRAM OUTCOMES

- Understand behavior and principles that govern AC and DC electrical circuits.
- Exhibit safety practices and procedures.
- Interpret National Electrical Code as it applies to the electrical industry.
- Troubleshoot electrical circuits and equipment using available information.
- Calculate electrical quantities.
- Interpret blueprints related to building, mechanical, and electrical systems.
- Demonstrate an understanding of theory and skills associated with electrical industry.
- Be eligible to take State of Maine journeyman's electrician examination and enter employment under a master electrician.
- Qualify for employment opportunities with electrical contractors, electrical equipment suppliers, utilities and industrial maintenance companies.

Emergency Medical Services

Emergency Medical Services
2024-2025
Associate in Applied Science Degree Program

Pre-requisite: EMT Basic Certificate

First Semester			C	L	F	CL	CR
>	**BIO 201 (BIOL 215)**	**Anatomy & Physiology I with Lab**	**3**	**2**	**0**	**0**	**4**
>>	**EMS 112 (EMSA 112)**	**Respiratory Emergencies**	**1.5**	**1.5**	**0**	**0**	**2**
>>	**EMS 113 (EMSA 113)**	**Cardiology I**	**2**		**0**	**0**	**2**
>>	**EMS 114 (EMSA 114)**	**AEMT Lab**	**0**	**3**	**0**	**0**	**1**
>>	**EMS 115 (EMSA 115)**	**Fundamentals of EMS Systems**	**2.5**	**1.5**	**0**	**0**	**3**
	ENG 111 (ENGL 101)	English Composition	3	0	0	0	3
			12	**8**	**0**	**0**	**15**

Pre-requisite: EMT Basic Certificate/License

Second Semester			C	L	F	CL	CR
>	**ALH 124 (HLTH 124)**	**Health & Safety Compliance***	**1**	**0**	**0**	**0**	**1**
>	**BIO 211 (BIOL 230)**	**Anatomy & Physiology I with Lab**	**3**	**2**	**0**	**0**	**4**
>>	**EMS 122 (EMSA 122)**	**AEMT Clinical Externship I**	**0**	**0**	**0**	**6**	**2**
>>	**EMS 126 (EMSA 126)**	**AEMT Clinical Externship II**	**0**	**0**	**6**	**0**	**2**
>>	**EMS 130 (EMSA 130)**	**AEMT - Skills Seminar**	**0**	**3**	**0**	**0**	**1**
	MAT 116 (MATH 112)	Quantitative Reasoning (or MAT 125)	3	0	0	0	3
			7	**5**	**6**	**6**	**13**

Third Semester (Summer)			C	L	F	CL	CR
>>	**EMS 213 (EMSP 213)**	**Advanced Emergency Cardio Care (ACLS)**	**3**	**3**	**0**	**0**	**4**
>>	**EMS 214 (EMSP 214)**	**Emergency Pharmacology**	**2.5**	**0.5**	**0**	**0**	**3**
	PSY 101 (PSYC 100)	General Psychology	3	0	0	0	3
		Communication Elective	3	0	0	0	3
			11.5	**3.5**	**0**	**0**	**13**

Pre-requisite: EMT Basic Certificate/License

Fourth Semester			C	L	F	CL	CR
>>	**EMS 205 (EMSP 205)**	**Medical Emergencies (AMLS)**	**3**	**0**	**0**	**0**	**3**
>>	**EMS 216 (EMSP 216)**	**Paramedic Clinical Externship I**	**0**	**0**	**0**	**15**	**5**
>>	**EMS 220 (EMSP 220)**	**Pediatric Emergencies (PALS/EPC)**	**1.5**	**1.5**	**0**	**0**	**2**
>>	**EMS 222 (EMSP 222)**	**Trauma Management (PHTLS)**	**1.5**	**2.5**	**0**	**0**	**3**
>>	**EMS 236 (EMSP 236)**	**Paramedic Assessment Management**	**0**	**3**	**0**	**0**	**1**
			6	**7**	**0**	**15**	**14**

Fifth Semester			C	L	F	CL	CR
>>	**EMS 226 (EMSP 226)**	**Paramedic Clinical Externship II**	**0**	**0**	**12**	**0**	**4**
>>	**EMS 229 (EMSP 229)**	**EMT-Paramedic Skills**	**0**	**3**	**0**	**0**	**1**
>>	**EMS 231 (EMSP 231)**	**Special Populations**	**1**	**0**	**0**	**0**	**1**
>>	**EMS 232 (EMSP 232)**	**Paramedic Clinical Capstone**	**0**	**0**	**0**	**45**	**1**
>>	**EMS 234 (EMSP 234)**	**EMS Operations**	**2**	**0**	**0**	**0**	**2**
		Humanities Elective	3	0	0	0	3
			6	**3**	**12**	**45**	**12**
		Total Required					**67**

- To be eligible for national AEMT and/or Paramedic Certification, a cumulative average grade of 80 (B-) in all major EMS courses is required.
- Not all courses are offered every semester
- Clinical externships are faculty directed courses; students work with an assigned preceptor in various clinical rotations in both the hospital and pre-hospital setting.
- Students are responsible for the additional cost of Advanced Cardiac Life Support, Emergency Pedicatric Care, Pediatric Advanced Life Support, and Pre-hospital Trauma Life Support. These courses are required to attain Paramedic Certification.
- Students wishing to use their financial aid for summer semester course must indicate such on their financial aid application.

The EMS Programs are accredited by CAAHEP.

Commission on Accreditation of Allied Health Programs
25400 US Highway 19 North
Suite 158
Clearwater, FL 33763
P:727-210-2350
8301 Lakeview Parkway
Suite 111-312 Rowlett, TX 75088
P: 214-703-8445
F: 214-703-8992

> ***Major courses; a minimum grade of "C" or 2.0 is required***

>> ***Major courses; a minimum grade of "C+" or a minimum grade of 77 is required***

Key: C=Class hours; L=Laboratory; F=Field; CL=Clinical Hours; CR=Credit hours

Emergency Medical Services cont.

PROGRAM OUTCOMES

- Integrate knowledge and skills in providing high quality, safe, emergency care to individuals and groups throughout the lifespan experiencing complex health needs.
- Demonstrate critical thinking and decision-making skills through the organization of safe, competent care for individuals experiencing life-threatening emergencies.
- Utilize effective written, verbal and nonverbal communication skills in caring for patients and families in a variety of healthcare situations and settings.
- Assume professional and legal responsibility and accountability within defined competency roles in implementing care to individuals in the pre-hospital setting.
- Provide culturally competent care for patient and groups of various ethnic, socioeconomic, and cultural backgrounds.

Emergency Medical Services cont.

Advanced Emergency Medical Technician
2024-2025
Certificate Program

First Semester			C	L	F	CL	CR
> ALH 124	(HLTH 124)	Health & Safety Compliance*	1	0	0	0	1
> > EMS 112	(EMSA 112)	Respiratory Emergencies	1.5	1.5	0	0	2
> > EMS 113	(EMSA 113)	Cardiology I	2	0	0	0	2
> > EMS 114	(EMSA 114)	AEMT Lab	0	3	0	0	1
> > EMS 115	(EMSA 115)	Fundamentals of EMS Systems	2.5	1.5	0	0	3
ENG 111	(ENGL 101)	English Composition	3	0	0	0	3
			10	6	0	0	12

Pre-requisite: Active EMT Certificate or equivalent licensure

Second Semester			C	L	F	CL	CR
> > EMS 122	(EMSA 122)	AEMT Clinical Externship I	0	0	0	6	2
> > EMS 126	(EMSA 126)	AEMT Clinical Externship II	0	0	6	0	2
> > EMS 130	(EMSA 130)	AEMT - Skills Seminar	0	3	0	0	1
MAT 116	(MATH 112)	Quantitative Reasoning (or MAT 125)	3	0	0	0	3
			3	3	6	6	8
					Total Required		20

***Candidates for admission into the AEMT Certificate program must present at least one of the following:**

- An active EMT license
- Proof of equivalent licensure from another state
- NREMT registration at the EMT level

***Candidates for admission into the Paramedicine Certificate program must present at least one of the following:**

- An active AEMT license
- A Primary Care Paramedic license (CANADA)
- NREMT registration at the AEMT level

**ALH 124 required for students who completed EMT-Basic outside of NMCC.*

Paramedicine
2024-2025
Certificate Program

First Semester (Summer)			C	L	F	CL	CR
> BIO 201	(BIOL 215)	Anatomy & Physiology I with Lab	3	2	0	0	4
> > EMS 213	(EMSP 213)	Advanced Emergency Cardio Care (ACLS)	3	3	0	0	4
> > EMS 214	(EMSP 214)	Emergency Pharmacology	2.5	0.5	0	0	3
			8.5	5.5	0	0	11

Second Semester			C	L	F	CL	CR
> BIO 211	(BIOL 230)	Anatomy & Physiology II with Lab	3	2	0	0	4
> > EMS 205	(EMSP 205)	Medical Emergencies (AMLS)	3	0	0	0	3
> > EMS 216	(EMSP 216)	Paramedic Clinical Externship I	0	0	0	15	5
> > EMS 220	(EMSP 220)	Pediatric Emergencies (PALS/EPC)	1.5	1.5	0	0	2
> > EMS 222	(EMSP 222)	Trauma Management (PHTLS)	1.5	2.5	0	0	3
> > EMS 236	(EMSP 236)	Paramedic Assessment Management	0	3	0	0	1
			9	9	0	15	18

Third Semester			C	L	F	CL	CR
> > EMS 226	(EMSP 226)	Paramedic Clinical Externship II	0	0	12	0	4
> > EMS 229	(EMSP 229)	EMT-Paramedic Skills	0	3	0	0	1
> > EMS 231	(EMSP 231)	Special Populations	1	0	0	0	1
> > EMS 232	(EMSP 232)	Paramedic Clinical Capstone	0	0	0	45	1
> > EMS 234	(EMSP 234)	EMS Operations	2	0	0	0	2
			3	3	12	45	9
						Total Required	38

> ***Major courses; a minimum grade of "C" or 2.0 is required***

> ***Major courses; a minimum grade of "C+" or a minimum***
> ***grade of 77 is required***

Key: C=Class hours; L=Laboratory; F=Field; CL=Clinical Hours; CR=Credit hours

Emergency Medical Services cont.

Community Paramedicine
2024-2025
Associate in Science Degree Program

First Semester			C	L	F	CL	CR
> **BIO 201**	**(BIOL 215)**	**Anatomy & Physiology I with Lab**	**3**	**2**	**0**	**0**	**4**
>> **EMS 140**	**(EMSP 140)**	**Intro to Community Paramedicine (5 weeks)**	**1**	**0**	**0**	**0**	**1**
>> **EMS 141**	**(EMSP 241)**	**Community Paramedicine I (10 weeks)**	**1**	**0**	**0**	**0**	**1**
>> **EMS 142**	**(EMSP 242)**	**Community Paramedicine I Lab (10 weeks)**	**0**	**3**	**0**	**0**	**1**
>> **EMS 246**	**(EMSP 246)**	**Leadership in EMS**	**2**	**0**	**0**	**0**	**2**
ENG 111	(ENGL 101)	English Composition	3	0	0	0	3
MAT 116	(MATH 112)	Quantitative Reasoning (or MAT 125)	3	0	0	0	3
			13	**5**	**0**	**0**	**15**

Second Semester			C	L	F	CL	CR
> **BIO 211**	**(BIOL 230)**	**Anatomy & Physiology II with Lab**	**3**	**2**	**0**	**0**	**4**
>> **EMS 247**	**(EMSP 247)**	**Community Paramedicine Seminar**	**1**	**0**	**0**	**0**	**1**
>> **EMS 245**	**(EMSP 245)**	**Community Paramedicine II Clinical**	**0**	**0**	**0**	**9**	**3**
>> **EMS 248**	**(EMSP 248)**	**Community Paramedicine II**	**3**	**3**	**0**	**0**	**4**
>> **EMS 249**	**(EMSP 249)**	**Diagnostics for CP**	**2**	**0**	**0**	**0**	**2**
>> **EMS 250**	**(EMSP 250)**	**Pharmacology for CP**	**2**	**0**	**0**	**0**	**2**
			11	**5**	**0**	**9**	**16**

Third Semester			C	L	F	CL	CR
>> **EMS 251**	**(EMSP 251)**	**Research in Health Science**	**3**	**0**	**0**	**0**	**3**
PSY 101	(PSYC 100)	General Psychology	3	0	0	0	3
		Communication Elective	3	0	0	0	3
		Electives	6	0	0	0	6
			15	**0**	**0**	**0**	**15**

Fourth Semester			C	L	F	CL	CR
		Ethics Elective	3	0	0	0	3
		Diversity Elective	3	0	0	0	3
		Electives	6	0	0	0	6
		Humanities Elective	3	0	0	0	3
			15	**0**	**0**	**0**	**15**

Total Required **61**

> ***Major courses; a minimum grade of "C" or 2.0 is required***

>> ***Major courses; a minimum grade of "C+" or a minimum grade of 77 is required***

Key: C=Class hours; L=Laboratory; F=Field; CL=Clinical Hours; CR=Credit hours

Community Paramedicine
2024-2025
Certificate Program

First Semester			C	L	F	CL	CR
> **BIO 201**	**(BIOL 215)**	**Anatomy & Physiology I with Lab**	**3**	**2**	**0**	**0**	**4**
>> **EMS 140**	**(EMSP 140)**	**Intro to Community Paramedicine (5 weeks)**	**1**	**0**	**0**	**0**	**1**
>> **EMS 141**	**(EMSP 241)**	**Community Paramedicine I (10 weeks)**	**1**	**0**	**0**	**0**	**1**
>> **EMS 142**	**(EMSP 242)**	**Community Paramedicine I Lab (10 weeks)**	**0**	**3**	**0**	**0**	**1**
>> **EMS 246**	**(EMSP 246)**	**Leadership in EMS**	**2**	**0**	**0**	**0**	**2**
ENG 111	(ENGL 101)	English Composition	3	0	0	0	3
MAT 116	(MATH 112)	Quantitative Reasoning (or MAT 125)	3	0	0	0	3
			13	**5**	**0**	**0**	**15**

Second Semester			C	L	F	CL	CR
> **BIO 211**	**(BIOL 230)**	**Anatomy & Physiology II with Lab**	**3**	**2**	**0**	**0**	**4**
>> **EMS 247**	**(EMSP 247)**	**Community Paramedicine Seminar**	**1**	**0**	**0**	**0**	**1**
>> **EMS 245**	**(EMSP 245)**	**Community Paramedicine II Clinical**	**0**	**0**	**0**	**9**	**3**
>> **EMS 248**	**(EMSP 248)**	**Community Paramedicine II**	**3**	**3**	**0**	**0**	**4**
>> **EMS 249**	**(EMSP 249)**	**Diagnostics for CP**	**2**	**0**	**0**	**0**	**2**
>> **EMS 250**	**(EMSP 250)**	**Pharmacology for CP**	**2**	**0**	**0**	**0**	**2**
			11	**5**	**0**	**9**	**16**

Total Required **31**

Emergency Medical Services cont.

PLEASE NOTE:

- Candidates for admission must present at least one of the following: an active paramedic license or Advanced Care Paramedic license (Canada), proof of equivalent licensure from another state, or NREMT registration at the Paramedic level.
- EMS 245 is a faculty directed courses; students work with an assigned preceptor in various clinical rotations in both the hospital and community settings.
- Students must satisfactorily complete the Clinical Compliance Checklist, including immunizations prior to entering any clinical experience. Clinical facilities may prohibit students from their facilities, based on positive criminal background check.
- A list of suggested courses to complete elective requirements will be provided to students.
- EMS 246 is provided entirely online.
- The clinical coordinator for EMS 245 will make every attempt to have clinical agreements within reasonable proximity of the student's home location.

PROGRAM OUTCOMES

- Describe the role of the community paramedic within the healthcare system.
- Prioritize healthcare needs based on disparate populations within the community.
- Promote positive health behaviors in high-risk populations.
- Collaborate with healthcare team members to assist in the management of chronic disease through the reduction of social, behavioral, environmental and economic risk factors.
- Provide comprehensive, culturally competent care to individuals and groups.
- Integrate health literacy and evidenced based research applications when caring for clients.
- Provide safe and effective care to diverse populations.
- Exhibit the understanding of the leadership role the community paramedic will assume in the EMS system.

Entrepreneurship

Entrepreneurship
2024-2025
Certificate Program

	First Semester			C	L	CR
	ACC 110	(ACCT 110)	College Accounting (OR ACC 114)	3	0	3
>	**BUS 101**	**(BUSN 101)**	**Introduction to Business**	**3**	**0**	**3**
	CIS 104	(COMP 104)	Introduction to Computer Concepts	1	0	1
>	**CIS 113**	**(COMP 113)**	**Introduction to Microcomputer Applications**	**3**	**0**	**3**
	ENG 111	(ENGL 101)	English Composition	3	0	3
	MAT 115	(MATH 114)	Business Mathematics (or MAT 116 Quantitative Reasoning)	3	0	3
				16	**0**	**16**

	Second Semester			C	L	CR
>	**ACC 112**	**(ACCT 112)**	**Computerized Accounting**	**3**	**0**	**3**
	ACC 113	(ACCT 113)	Payroll Accounting	3	0	3
>	**BUS 109**	**(BUSN 109)**	**Entrepreneurship**	**3**	**0**	**3**
>	**BUS 241**	**(BUSN 241)**	**Principles of Marketing**	**3**	**0**	**3**
	CIS 108	(COMP 241)	Spreadsheet Applications	3	0	3
				15	**0**	**15**

Total Required 31

> ***Major courses; a minimum grade of "C" or 2.0 is required***

Key: C=Class hours; L=Laboratory; CR=Credit hours

PROGRAM OUTCOMES

- Perform financial statement analysis.
- Utilize accounting information for decision making.
- Demonstrate knowledge of marketing research and skills necessary to create a marketing plan.
- Demonstrate knowledge and skills in the field of entrepreneurship.
- Proficiently use technology.

Liberal Studies

Liberal Studies
2024-2025
Certificate Program

				C	L	CR
First Semester						
	COL 103	(CLGE 103)	College Success	1	0	1
>	**ENG 111**	**(ENGL 101)**	**English Composition**	**3**	**0**	**3**
>	**MAT 116**	**(MATH 112)**	**Quantitative Reasoning (or higher level math)**	**3**	**0**	**3**
>			**Diversity Elective (PHI 206 or HIS 206)**	**3**	**0**	**3**
>			**Humanities Elective**	**3**	**0**	**3**
>			**Social Science Elective**	**3**	**0**	**3**
				16	**0**	**15-16**
Second Semester				**C**	**L**	**CR**
>	**ENG 226**	**(ENGL 226)**	**Introduction to Literature**	**3**	**0**	**3**
>			**Creative Arts Elective (ART 201 or ENG 239)**	**3**	**0**	**3**
>			**Science Elective**	**3**	**2**	**4**
>			**Writing Elective (ENG 227 Recommended)**	**3**	**0**	**3**
			Elective	3	0	3
				15	**2**	**16**
Third Semester				**C**	**L**	**CR**
>			**Social Science Elective**	**3**	**0**	**3**
			Electives	12	0	12
				15	**0**	**15**
Fourth Semester				**C**	**L**	**CR**
			Electives (PHI 201 recommended)	11-12	0	11-12
>			**Ethical Reasoning Elective**	**3**	**0**	**3**
				14-15	**0**	**14-15**
			Minimum Required			**60**

> ***Major courses; a minimum grade of "C" or 2.0 is required***

Key: C=Class hours; L=Laboratory; CR=Credit hours

Liberal Studies
2024-2025
Certificate Program

				C	L	CR
First Semester						
	COL 103	(CLGE 103)	College Success	1	0	1
>	**ENG 111**	**(ENGL 101)**	**English Composition**	**3**	**0**	**3**
>	**MAT 116**	**(MATH 112)**	**Quantitative Reasoning (or higher level math)**	**3**	**0**	**3**
>			**Diversity Elective (PHI 206 or HIS 206)**	**3**	**0**	**3**
>			**Humanities Elective**	**3**	**0**	**3**
>			**Social Science Elective**	**3**	**0**	**3**
				16	**0**	**15-16**
Second Semester				**C**	**L**	**CR**
>	**ENG 226**	**(ENGL 226)**	**Introduction to Literature**	**3**	**0**	**3**
>			**Creative Arts Elective (ART 201 or ENG 239)**	**3**	**0**	**3**
>			**Science Elective**	**3**	**2**	**4**
>			**Writing Elective (ENG 227 Recommended)**	**3**	**0**	**3**
			Elective	3	0	3
				15	**2**	**16**
			Minimum Required			**31**

Students are advised to select courses that provide a depth of knowledge when fulfilling the various program requirements. Pre-requisites must be considered in order to assure access to appropriate upper- level courses.

Students wishing to continue their education in a baccalaureate program should work with their academic advisor to select courses that ensure optimum transfer of credits. A minimum of 21 credits must be completed at the 200 level.

Liberal Studies cont.

PROGRAM OUTCOMES

- Be able to communicate effectively, both orally and in writing.
- Be able to search for, access, and evaluate information from a variety of sources and use that information ethically and legally for research and personal purposes.
- Understand mathematical concepts and be able to perform mathematical operations to solve practical problems.
- Demonstrate the ability to be consumers of biological and other scientific information to better inform their daily lives.
- Be able to analyze or explain causal forces which shape social structures, institutions or behavior through time.
- Be able to read, analyze and interpret significant texts in order to make meaning, find purpose, and choose values that enhance our understanding of ourselves and govern our relationships with others.
- Develop knowledge and appreciation of the aesthetic dimensions of humankind.
- Demonstrate cultural differences.
- Develop an understanding of ethical theories and develop a logical system of values and morality and be able to apply those values and principles to moral problems.
- Develop the basic academic skills and traits necessary to complete a college degree.

Medical Assisting

Medical Assisting
2024-2025
Associate in Applied Science Degree Program

First Semester			C	L	CR
> **ALH 220**	**(HLTH 220)**	**Medical Terminology**	**3**	**0**	**3**
> **BIO 201**	**(BIOL 215)**	**Anatomy & Physiology with Lab I**	**3**	**2**	**4**
> **MDA 110**	**(MDAS 110)**	**Medical Assisting Office Procedures**	**3**	**0**	**3**
> **MDA 112**	**(MDAS 112)**	**Medical Assisting Procedures with Lab I**	**3**	**2**	**4**
			12	**4**	**14**

Second Semester			C	L	CR
> **BIO 211**	**(BIOL 230)**	**Anatomy & Physiology with Lab II**	**3**	**2**	**4**
ENG 111	(ENGL 101)	English Composition	3	0	3
MAT 116	(MATH 112)	Quantitative Reasoning (OR MAT 125)	3	0	3
> **MDA 125**	**(MDAS 125)**	**Medical Insurance & Coding**	**3**	**0**	**3**
> **MDA 213**	**(MDAS 212)**	**Medical Assisting Procedures with Lab II**	**3**	**2**	**4**
			15	**4**	**17**

Summer Semester			C	L	CR
> **MDA 223**	**(MDAS 223)**	**Medical Assisting Externship**	**1**	**12**	**5**

Third Semester			C	L	CR
COM 212	(COMM 212)	Business Communications	3	0	3
> **MDA 224**	**(MDAS 224)**	**Electronic Health Records**	**3**	**0**	**3**
PSY 101	(PSYC 100)	General Psychology	3	0	3
		Humanities Elective	3	0	3
			12	**0**	**12**

Fourth Semester			C	L	CR
> **HIT 111**	**(MDAS 112)**	**Medical Law & Ethics**	**3**	**0**	**3**
> **HIT 115**	**(MEDO 115)**	**Clinical Applications Pathophysiology & Pharmacology**	**3**	**0**	**3**
PSY 207	(PSYC 220)	Developmental Psychology	3	0	3
		Elective	3	0	3
			12	**0**	**12**

Total Required 60

> Major courses; a minimum grade of "C" or 2.0 is required

Key: C=Class hours; L=Laboratory; CR=Credit hours

Medical Assisting
2024-2025
Certificate Program

First Semester			C	L	CR
> **ALH 220**	**(HLTH 220)**	**Medical Terminology**	**3**	**0**	**3**
> **BIO 201**	**(BIOL 215)**	**Anatomy & Physiology with Lab I**	**3**	**2**	**4**
> **MDA 110**	**(MDAS 110)**	**Medical Assisting Office Procedures**	**3**	**0**	**3**
> **MDA 112**	**(MDAS 112)**	**Medical Assisting Procedures with Lab I**	**3**	**2**	**4**
			12	**4**	**14**

Second Semester			C	L	CR
> **BIO 211**	**(BIOL 230)**	**Anatomy & Physiology with Lab II**	**3**	**2**	**4**
ENG 111	(ENGL 101)	English Composition	3	0	3
MAT 116	(MATH 112)	Quantitative Reasoning (OR MAT 125)	3	0	3
> **MDA 125**	**(MDAS 125)**	**Medical Insurance & Coding**	**3**	**0**	**3**
> **MDA 213**	**(MDAS 212)**	**Medical Assisting Procedures with Lab II**	**3**	**2**	**4**
			15	**4**	**17**

Summer Semester			C	L	CR
> **MDA 223**	**(MDAS 223)**	**Medical Assisting Externship**	**1**	**12**	**5**

Total Required 36

The Medical Assisting Certificate Program is accredited by the Commission on Accreditation of Allied Health Education Programs www.caahep.org upon the recommendation of the Medical Assisting Education Review Board.

Medical Assisting cont.

PROGRAM OUTCOMES

- Demonstrate an understanding of anatomical structure and normal physiological functions in the human body and of medical terms describing body systems.
- Demonstrate a basic understanding of the concepts and applications of pharmacology to include safe medication administration.
- Demonstrate effective communication with patients, their families, and other members of the healthcare team.
- Integrate principles of safety, sterilization and disinfecting in all aspects of patient/office procedures.
- Demonstrate administrative competency to include, but not limited to, scheduling, bookkeeping procedures, record management, coding and insurance processing.
- Demonstrate clinical competency to include, but not limited to: specimen collection processing and analysis, obtaining vital signs, preparing patient exams or treatments, assisting in procedures, and patient education.
- Demonstrate professional behavior that reflects an internalization of ethical, legal and self-management concepts.
- Demonstrate critical thinking skills through organization of safe, competent care provided for individuals.

Medical Coding

Medical Coding
2024-2025
Certificate Program

Prerequisites	C	L	CR
> ALH 220 (HLTH 220) Medical Terminology	3	0	3
> BIO 114 (BIOL 105) Human Biology with Lab	3	2	4
> HIT 100 (MEDO 100) Introduction to Medical Coding	1	0	1
	7	2	8

First Semester	C	L	CR
ENG 111 (ENGL 101) English Composition	3	0	3
> HIT 112 (MEDO 112) Medical Law, Reimbursement & Delivery Systems	3	0	3
> HIT 114 (MEDO 114) Clinical Classification Systems with Lab I	2	2	3
> HIT 116 (MEDO 116) Clinical Classification Systems with Lab II	2	2	3
	10	4	12

Second Semester	C	L	CR
> HIT 115 (MEDO 115) Clinical Applications of Pathophysiology & Pharmacology	3	0	3
> HIT 214 (MEDO 214) ICD-10-CM/PCS Coding Part II	3	0	3
> HIT 216 (MEDO 216) CPT Coding Part II	3	0	3
MAT 116 (MATH 112) Quantitative Reasoning (or MAT 125)	3	0	3
	12	0	12

Third Semester	C	L	CR
> HIT 219 (MEDO 219) Medical Coding Internship/Professional Practical Experience	0	60	2

Total Required **34**

> ***Major courses; a minimum grade of "C" or 2.0 is required***

Key: C=Class hours; L=Laboratory; CR=Credit hours

The Medical Coding Certificate Program at NMCC has earned approval from the AHIMA Professional Certificate Approval Program (PCAP). This designation recognizes that our program has undergone a rigorous peer review process and meets the national standards required for entry-level coding professionals.

PROGRAM OUTCOMES

- Demonstrate ability to translate information from medical records into standardized numerical codes accurately and in an efficient manner.
- Demonstrate professional behavior in the workplace including patient confidentiality and professional ethics.
- Recognize factors that affect third party reimbursement and demonstrate entry level skills in coding with ICD-10-CM/PCS and CPT.
- Describe the relationship between coding and reimbursement in healthcare and
- Demonstrate clear and effective communication skills, critical thinking, and problem solving within the scope of practice.
- Demonstrate theory, technology, and interpersonal skills applicable to a variety of employment settings.
- Describe the principles and mechanics of the electronic health record (EHR).
- Transfer to an advanced degree in such areas as Health Information Management, if desired.

Network Administration & Cybersecurity

Network Administration & Cybersecurity
2024-2025
Associate in Applied Science Degree Program

First Semester			C	L	CR
> **COE 113 (CMIT 113)**		**Operating Systems**	**2**	**2**	**3**
> **COE 116 (CMIT 116)**		**A+ Certification Prep**	**3**	**0**	**3**
> **COE 118 (CMIT 118)**		**A+ Certification Prep Lab**	**0**	**9**	**3**
COL 103	(CLGE 103)	College Success	1	0	1
ENG 111	(ENGL 101)	English Composition	3	0	3
MAT 115	(MATH 114)	Business Math (or MAT 116 Quantitative Reasoning)	3	0	3
			12	**11**	**16**

Second Semester			C	L	CR
> **COE 125 (CMIT 125)**		**Computer Network Hardware**	**2**	**2**	**3**
> **COE 128 (CMIT 128)**		**Advanced Operating Systems**	**2**	**2**	**3**
> **COE 217 (CMIT 127)**		**Installing & Configuring Servers**	**2**	**4**	**4**
COM 212	(COMM 212)	Business Communications I	3	0	3
MAT 125	(MATH 140)	College Algebra	3	0	3
			12	**8**	**16**

Third Semester			C	L	CR
COE 112	(CMIT 112)	Introduction to Linux	2	2	3
> **COE 218 (CMIT 218)**		**Network Administration**	**2**	**4**	**4**
> **COE 219 (CMIT 219)**		**Electronics for Computer Technicians**	**2**	**3**	**3**
> **COE 228 (CMIT 228)**		**Security+ Certification**	**2**	**2**	**3**
ECO 213	(ECON 201)	Macroeconomics	3	0	3
			11	**11**	**16**

Fourth Semester			C	L	CR
> **COE 220 (CMIT 220)**		**Introduction to Computer Forensics**	**2**	**2**	**3**
> **COE 227 (CMIT 227)**		**Configuring Advanced Windows Server**	**2**	**4**	**4**
> **COE 229 (CMIT 229)**		**Ethical Hacking**	**2**	**2**	**3**
		General Ed Elective	3	0	3
		Humanities Elective	3	0	3
			12	**8**	**16**
				Total Required	**64**

Network Administration & Cybersecurity
2024-2025
Certificate Program

First Semester			C	L	CR
> **COE 113 (CMIT 113)**		**Operating Systems**	**2**	**2**	**3**
> **COE 116 (CMIT 116)**		**A+ Certification Prep**	**3**	**0**	**3**
> **COE 118 (CMIT 118)**		**A+ Certification Prep Lab**	**0**	**9**	**3**
ENG 111	(ENGL 101)	English Composition	3	0	3
MAT 115	(MATH 114)	Business Math (or MAT 116 Quantitative Reasoning)	3	0	3
			11	**11**	**15**

Second Semester			C	L	CR
COE 112	(CMIT 112)	Introductin to Linux	2	2	3
> **COE 125 (CMIT 125)**		**Computer Network Hardware**	**2**	**2**	**3**
> **COE 128 (CMIT 128)**		**Advanced Operating Systems**	**2**	**2**	**3**
> **COE 217 (CMIT 127)**		**Installing & Configuring Servers**	**2**	**4**	**4**
COM 212	(COMM 212)	Business Communications I (or MAT 125 College Algebra)	3	0	3
			11	**10**	**16**
				Total Required	**31**

PROGRAM OUTCOMES

- Demonstrate the skills required to gain and maintain entry-level employment in the information technology industry.
- Explore different areas of expertise and analyze career opportunities.
- Install, troubleshoot, and monitor a secure network to maintain integrity, confidentiality and availability of data and service.
- Understand the computer forensics profession and investigations.
- Explain digital forensics analysis and validation.
- Describe the role of an ethical hacker.
- Identify desktop and server operating systems vulnerabilities and explain ways to fix them.

Nursing

Nursing
Associate in Science Degree Program

Prerequisites			C	L	CR
> BIO 201	**(BIOL 215)**	**Anatomy & Physiology I with Lab**	**3**	**2**	**4**
ENG 111	(ENGL 101)	English Composition	3	0	3
MAT 116	(MATH 112)	Quantitative Reasoning	3	0	3
			9	2	10

First Semester			C	L	CR
> ALH 124	**(HLTH 124)**	**Health & Safety Compliance***	**1**	**0**	**1**
> BIO 211	**(BIOL 230)**	**Anatomy & Physiology II with Lab**	**3**	**2**	**4**
NUR 100	(NURS 100)	Nursing Program Success	1	0	1
>> NUR 117	**(NURS 117)**	**Nutrition****	**3**	**0**	**3**
>> NUR 128	**(NURS 128)**	**Foundations of Nursing**	**4**	**0**	**4**
>> NUR 129	**(NURS 129)**	**Clinical Practicum I Geriatric Population**	**0**	**9**	**3**
			12	**11**	**16**

Second Semester			C	L	CR
>> NUR 115	**(NURS 115)**	**Pharmacology for Nurses *** **	**3**	**0**	**3**
>> NUR 130	**(NURS 130)**	**Nursing Across the Lifespan I**	**4**	**0**	**4**
>> NUR 131	**(NURS 131)**	**Clinical Practicum II Across the Lifespan**	**0**	**9**	**3**
PSY 101	(PSYC 100)	General Psychology	3	0	3
			10	**9**	**13**

Winter Session			C	L	CR
NUR 124	(NURS 124)	Role Transition	1	0	1
		(Only required for LPNs entering second semester)			

Third Semester			C	L	CR
> BIO 218	**(BIOL 250)**	**Microbiology Lecture with Lab**	**3**	**2**	**4**
>> NUR 225	**(NURS 225)**	**Nursing Across the Lifespan II**	**5**	**0**	**5**
>> NUR 228	**(NURS 228)**	**Clinical Practicum III Across the Lifespan**	**0**	**12**	**4**
PSY 207	(PSYC 207)	Developmental Psychology	3	0	3
			11	**14**	**16**

Fourth Semester			C	L	CR
COM 111	(COMM 107)	Speech	3	0	3
>> NUR 230	**(NURS 230)**	**Nursing Acorss the Lifespan III**	**5**	**0**	**5**
>> NUR 231	**(NURS 231)**	**Clinical Practicum IV Across the Lifespan**	**0**	**12**	**4**
		Humanities Elective	3	0	3
			11	**12**	**15**

Total Required **60/ 61**

***Prerequisites for admission to the two-year Nursing program. Credit applied toward degree requirements.

The following must be successfully completed prior to entering the program (or concurrently for students admitted directly from high school).

BIO 201 Anatomy & Physiology I w/ Lab
ENG 111 English Composition MAT 116 Quantitative Reasoning (or MAT 125 College Algebra)

**ALH 124 must be passed within 12 months of enrollment into NUR 128 and NUR 129*

***NUR 115 and NUR 128 and NUR 129 are co-requisites to NUR 130 and NUR 131*

The Associate in Science Nursing Program is accredited by the Accreditation Commission for Education in Nursing (ACEN), located at 3390 Peachtree Road NE, Suite 1400, Atlanta, GA 30326, and approved by the Maine State Board of Nursing.

The ACEN Board of Commissioners recently granted Continuing Accreditation status to the Associate Nursing Program. Please note that the Maine State Board of Nursing reserves the right to deny licensure based on criminal history record information related to convictions as defined in Title V Chapter 341 Section 5301 Subsection.

>	***Major courses; a minimum grade of "C" or 2.0 is required***
>>	***Major courses; a minimum grade of "C+" or a minimum grade of 77 is required***
	Key: C=Class hours; L=Laboratory; CR=Credit hours

Nursing Cont.

PROGRAM OUTCOMES

- Evaluate holistic nursing care provided to diverse clients, families, and groups across the lifespan from a variety of settings to ensure that it is compassionate, age- and culturally appropriate.
- Collaborate with the interprofessional healthcare team to manage and coordinate the provision of safe, quality care for clients, families and groups.
- Demonstrate effective use of strategies and client care technology to mitigate errors and reduce the risk of harm to clients, self, and others in a variety of settings.
- Incorporate integrity and accountability while providing client-centered, standard-based nursing care consistent with established regulatory, legal and ethical principles.
- Utilize leadership, management, and priority setting in the provision of safe, high-quality client-centered care in a financially responsible manner.
- Demonstrate the use of best current evidence, clinical expertise, and quality improvement practices when making clinical decisions in the provision of client-centered care.

The following must be successfully completed prior to entering the program (or concurrently for students admitted directly from high school).

BIO 201 Anatomy & Physiology I w/ Lab
ENG 111 English Composition
MAT 116 Quantitative Reasoning (or MAT 125 College Algebra)

Nursing cont.

Practical Nursing
2024-2025
Certificate Program

Pre-requisites	C	L	CR
> ALH 124 (HLTH 124) Health & Safety Compliance	1	0	1
First Semester	**C**	**L**	**CR**
> BIO 201 (BIOL 215) Anatomy & Physiology I with Lab	3	2	4
ENG 111 (ENGL 101) English Composition	3	0	3
>> NUR 101 (NURS 101) Fundamentals of Practical Nursing	8	0	8
>> NUR 106 (NURS 106) Clinical Practicum I Adult/Geriatric	0	9	3
	14	11	18
Second Semester	**C**	**L**	**CR**
> BIO 211 (BIOL 230) Anatomy & Physiology II with Lab	3	2	4
>> NUR 105 (NURS 105) Pharmacology for Practical Nursing	3	0	3
>> NUR 107 (NURS 107) Practical Nursing Across the Lifespan	8	0	8
>> NUR 109 (NURS 109) Clinical Practicum II Special Populations	0	9	3
	14	11	18
Total Required			**36**

> *Major courses; a minimum grade of "C" or 2.0 is required*
>> *Major courses; a minimum grade of "C+" or a minimum grade of 77 is required*

Key: C=Class hours; L=Laboratory; CR=Credit hours

*ALH 124 must be passed within 12 months or immediately prior to enrollment into NUR 106: Clinical Practicum I

Anatomy & Physiology and English Composition courses are offered every semester at NMCC and may be taken prior to beginning the Practical Nursing courses when the schedule allows.

The Practical Nursing Program is accredited by the Accreditation Commission for Education in Nursing (ACEN), located at 3390 Peachtree Road NE, Suite 1400, Atlanta, GA 30326, and approved by the Maine State Board of Nursing. The most recent accreditation decision made by the ACEN Board of Commissioners for the Practical Nursing Program is initial accreditation. Please note that the Maine State Board of Nursing reserves the right to deny licensure based on criminal history record information related to convictions as defined in Title V Chapter 341 Section 5301 Subsection.

Nursing cont.

PROGRAM OUTCOMES

- Demonstrate therapeutic, culturally competent nursing care to clients throughout the lifespan.
- Integrate the nursing process, critical thinking skills, and best-practice standards to provide safe and effective nursing care.
- Assume legal and ethical responsibility and accountability consistent with the role of the practical nurse in the Maine State Nurse Practice Act.
- Utilize therapeutic and professional communication within the role of the practical nurse.
- Deliver high-quality client care within the changing healthcare system.
- Demonstrate efficiency in prioritization and delegation when collaborating with members of the interdisciplinary, interprofessional healthcare teams.

Office Assistant

Office Assistant
2024-2025
Certificate Program

First Semester				**C**	**L**	**CR**
	ACC 110	(ACCT 110)	College Accounting (OR ACC 114)	3	0	3
>	**BUS 101**	**(BUSN 101)**	**Introduction to Business**	**3**	**0**	**3**
	CIS 104	(COMP 104)	Introduction to Computer Concepts	1	0	1
>	**CIS 113**	**(COMP 113)**	**Introduction to Microcomputer Applications**	**3**	**0**	**3**
	ENG 111	(ENGL 101)	English Composition	3	0	3
	MAT 115	(MATH 114)	Business Mathematics (or MAT 116 Quantitative Reasoning)	3	0	3
				16	**0**	**16**
Second Semester				**C**	**L**	**CR**
>	**ACC 112**	**(ACCT 112)**	**Computerized Accounting**	**3**	**0**	**3**
	ACC 113	(ACCT 113)	Payroll Accounting	3	0	3
	CIS 108	(COMP 241)	Spreadsheet Applications	3	0	3
>	**SES 129**	**(BUSN 129)**	**Office Procedures**	**3**	**0**	**3**
			Elective	3	0	3
				15	**0**	**15**
Total Required						**31**

> ***Major courses; a minimum grade of "C" or 2.0 is required***

Key: C=Class hours; L=Laboratory; CR=Credit hours

PROGRAM OUTCOMES

- Perform the steps of the accounting cycle.
- Demonstrate the ability to use computerized accounting software.
- Prepare professional formatted documents to current business and discipline preferences.
- Demonstrate knowledge and skills in the field of business.
- Proficiently use technology.

Plumbing & Heating Technology

Plumbing & Heating
2024-2025
Associate in Applied Science Degree Program

				C	L	CR
First Semester						
	ENG 111	(ENGL 101)	English Composition	3	0	3
>	**PLH 101**	**(PLUM 101)**	**Plumbing Technology**	**3**	**0**	**3**
>	**PLH 109**	**(PLUM 109)**	**Plumbing Lab I**	**0**	**9**	**3**
>	**PLH 113**	**(PLUM 113)**	**Pipefitting Calculations**	**3**	**0**	**3**
	SAE 117	(OSHA 117)	Occupational Safety	1	0	1
			Gen Ed Elective	3	0	3
				13	**9**	**16**
Second Semester				**C**	**L**	**CR**
	DRR 117	(DRFT 117)	Blueprint Reading for Construction Trades	2	2	3
	MAT 122	(MATH 130)	Technical Mathematics	2	2	3
>	**PLH 122**	**(PLUM 122)**	**Plumbing Code Review**	**3**	**0**	**3**
>	**PLH 123**	**(PLUM 123)**	**Plumbing Lab II**	**0**	**9**	**3**
>	**PLH 126**	**(PLUM 126)**	**Water Pumps & Treatment**	**1**	**2**	**2**
				8	**15**	**14**
Third Semester				**C**	**L**	**CR**
	PHY 150	(PHYS 110)	Physics	3	2	4
>	**PLH 209**	**(HVAC 209)**	**HVAC Controls**	**1**	**2**	**2**
>	**PLH 214**	**(HVAC 214)**	**Heating Technology I**	**3**	**0**	**3**
>	**PLH 216**	**(HVAC 216)**	**Propane & Natural Gas I**	**2**	**2**	**3**
>	**PLH 218**	**(HVAC 218)**	**Heating Lab I**	**0**	**9**	**3**
			Humanities Elective	3	0	3
				12	**15**	**18**
Fourth Semester				**C**	**L**	**CR**
	COM 221	(COMM 201)	Technical Communications	3	0	3
>	**PLH 219**	**(HVAC 219)**	**Propane & Natural Gas II**	**2**	**2**	**3**
>	**PLH 223**	**(HVAC 223)**	**Heating Lab II**	**0**	**9**	**3**
>	**PLH 226**	**(HVAC 226)**	**Refrigeration & Air Conditioning**	**1**	**2**	**2**
>	**PLH 227**	**(HVAC 227)**	**Maine Oil/Solid Fuel Code I**	**3**	**0**	**3**
			Social Science Elective	3	0	3
				12	**13**	**17**
			Total Required			**65**

> Major courses; a minimum grade of "C" or 2.0 is required

Key: C=Class hours; L=Laboratory; CR=Credit hours

Plumbing
2024-2025
Certificate Program

				C	L	CR
First Semester						
	ENG 111	(ENGL 101)	English Composition	3	0	3
>	**PLH 101**	**(PLUM 101)**	**Plumbing Technology**	**3**	**0**	**3**
>	**PLH 109**	**(PLUM 109)**	**Plumbing Lab I**	**0**	**9**	**3**
>	**PLH 113**	**(PLUM 113)**	**Pipefitting Calculations**	**3**	**0**	**3**
	SAE 117	(OSHA 117)	Occupational Safety	1	0	1
				10	**9**	**13**
Second Semester				**C**	**L**	**CR**
	DRR 117	(DRFT 117)	Blueprint Reading for Construction Trades	2	2	3
	MAT 122	(MATH 130)	Technical Mathematics	2	2	3
>	**PLH 122**	**(PLUM 122)**	**Plumbing Code Review**	**3**	**0**	**3**
>	**PLH 123**	**(PLUM 123)**	**Plumbing Lab II**	**0**	**9**	**3**
>	**PLH 126**	**(PLUM 126)**	**Water Pumps & Treatment**	**1**	**2**	**2**
				8	**15**	**14**
			Total Required			**27**

Must have completed the Plumbing Certificate Program or have permission from the instructor to enroll in this certificate program

Heating
2024-2025
Certificate Program

				C	L	CR
First Semester						
	ENG 111	(ENGL 101)	English Composition	3	0	3
>	**PLH 209**	**(HVAC 209)**	**HVAC Controls**	**1**	**2**	**2**
>	**PLH 214**	**(HVAC 214)**	**Heating Technology I**	**3**	**0**	**3**
>	**PLH 216**	**(HVAC 216)**	**Propane & Natural Gas I**	**2**	**2**	**3**
>	**PLH 218**	**(HVAC 218)**	**Heating Lab I**	**0**	**9**	**3**
				9	**13**	**14**
Second Semester				**C**	**L**	**CR**
	MAT 122	(MATH 130)	Technical Mathematics	2	2	3
>	**PLH 219**	**(HVAC 219)**	**Propane & Natural Gas II**	**2**	**2**	**3**
>	**PLH 223**	**(HVAC 223)**	**Heating Lab II**	**0**	**9**	**3**
>	**PLH 226**	**(HVAC 226)**	**Refrigeration & Air Conditioning**	**1**	**2**	**2**
>	**PLH 227**	**(HVAC 227)**	**Maine Oil/Solid Fuel Code I**	**3**	**0**	**3**
				8	**15**	**14**
			Total Required			**28**

Plumbing & Heating Technology cont.

PROGRAM OUTCOMES

- Install Oil, Gas, Water Distribution, Hydronic Distribution and Drainage Waste & Vent piping and fitting using threading, soldering, grooving, compression, expansion and solvent welding systems.
- Correctly size and design distribution systems associated with the Plumbing and Heating trade for water distribution, gas distribution and DWV systems.
- Demonstrate correct and safe installation, service and troubleshooting methods of plumbing, hydronic, and refrigeration and air conditioning systems.
- Demonstrate correct and safe installation and troubleshooting methods for the Wiring and Controls needed for the Plumbing, Heating, Refrigeration and AC industries as well as be able to read and understand basic ladder and schematic diagrams.
- Understand State and Federal Codes governing the installation and service requirements needed for the Plumbing & Heating trades as well as be able to read and interpret trade blueprints.
- Be eligible for the following licenses and certifications:
    - Maine State Journeyman Heating License
    - Maine State Journeyman in Training Plumbing License
    - Maine State Propane & Natural Gas Technician License
    - Certified Employees Training Program (CETP) Certificates for Basic Principles and Practices, 4.2, 4.3, 4.4, 4.5, and 4.6 Books.
    - EPA 608 Universal Refrigeration Certification

Structural Welding

Structural Welding
2024-2025
Certificate Program

First Semester			C	L	CR
DRR 109	(DRFT 109)	Print Reading for Welders	2	2	3
MAT 122	(MATH 130)	Technical Mathematics	2	2	3
> WEI 101	**(WELD 101)**	**Introduction to Welding (*4 weeks)**	**2**	**2**	**3**
> WEI 133	**(WELD 133)**	**Electric Welding (*4 weeks)**	**2**	**2**	**3**
> WEI 137	**(WELD 137)**	**Structural Welding I (*7 weeks)**	**1.5**	**4.5**	**3**
			9.5	**12.5**	**15**

Second Semester			C	L	CR
ENG 111	(ENGL 101)	English Composition	3	0	3
SAE 121	(OSHA 121)	Industrial Safety	3	0	3
> WEI 138	**(WELD 138)**	**Structural Welding II (*7.5 weeks)**	**1.5**	**4.5**	**3**
> WEI 139	**(WELD 139)**	**Open Root Welding (*7.5 weeks)**	**1.5**	**4.5**	**3**
WEI 140	(WELD 140)	Plasma Table Operations	1	2	2
> WEI 141	**(WELD 141)**	**Fluxcore Arc Welding**	**2**	**2**	**3**
			12	**13**	**17**

	Total Required	**32**

> ***Major courses; a minimum grade of "C" or 2.0 is required***

Key: C=Class hours; L=Laboratory; CR=Credit hours

**Note: WEI courses within a semester are scheduled sequentially not concurrently.

PROGRAM OUTCOMES

- Demonstrate safe and proper use of hand and power tools used by the welder.
- Identify the metals being used and the filler wire needed to weld them.
- Demonstrate the ability to fit and tack a v-groove weld correctly.
- Demonstrate the ability to properly weld a 3/8 v-groove in 4 positions.
- Demonstrate the ability to destructively test a 3/8 v-groove weld and meet AWS test specifications.
- Read and interpret welding symbols used on fabrication, manufacturing and construction prints.
- Demonstrate the ability to weld in all positions with all welding equipment.
- Be eligible for the American Welding Society (AWS) structural certification.

Water Treatment Technology

Water Treatment Technology
2024-2025
Associate in Applied Science Degree Program

First Semester			C	L	CR
DRR 117	(DRFT 117)	Blueprint Reading for Construction Trades	2	2	3
ENG 111	(ENGL 101)	English Composition	3	0	3
> **WTT 103**	**(WTTC 103)**	**Introduction to Water Treatment Technology**	**3**	**0**	**3**
> **WTT 111**	**(WTTC 111)**	**Water Treatment I**	**2**	**2**	**3**
> **WTT 113**	**(WTTC 113)**	**Water Plant Operation**	**3**	**0**	**3**
			13	**4**	**15**

Second Semester			C	L	CR
> **CHM 201**	**(CHEM 201)**	**Applied Sciences**	**2**	**2**	**3**
MAT 122	(MATH 130)	Technical Mathematics	2	2	3
> **WTT 120**	**(WTTC 120)**	**Treatment Plant Safety**	**3**	**0**	**3**
> **WTT 202**	**(WTTC 202)**	**Water Distribution Systems**	**3**	**0**	**3**
> **WTT 211**	**(WTTC 211)**	**Water Treatment II**	**3**	**2**	**4**
			13	**6**	**16**

Third Semester			C	L	CR
BIO 115	(BIOL 124)	General Biology	3	2	4
> **ELS 119**	**(ELEC 119)**	**Introduction to Electronic Systems**	**1**	**2**	**2**
> **WTT 121**	**(WTTC 121)**	**Wastewater Treatment I**	**2**	**2**	**3**
> **WTT 206**	**(WTTC 206)**	**Wastewater Collection Systems**	**3**	**0**	**3**
		Social Sciences Elective	3	0	3
			12	**6**	**15**

Fourth Semester			C	L	CR
COM 221	(COMM 201)	Technical Communications	3	0	3
> **INS 110**	**(WTTC 110)**	**Instrumentation & Process Controls**	**2**	**2**	**3**
> **WTT 124**	**(WTTC 124)**	**Wastewater Plant Operation**	**3**	**0**	**3**
> **WTT 221**	**(WTTC 221)**	**Wastwater Treatment II**	**3**	**2**	**4**
		Humanities Elective	3	0	3
			14	**4**	**16**
		Total Required			**62**

> *Major courses; a minimum grade of "C" or 2.0 is required*

Key: C=Class hours; L=Laboratory; CR=Credit hours

Drinking Water
2024-2025
Certificate Program

First Semester			C	L	CR
DRR 117	(DRFT 117)	Blueprint Reading for Construction Trades	2	2	3
ENG 111	(ENGL 101)	English Composition	3	0	3
> **WTT 103**	**(WTTC 103)**	**Introduction to Water Treatment Technology**	**3**	**0**	**3**
> **WTT 111**	**(WTTC 111)**	**Water Treatment I**	**2**	**2**	**3**
> **WTT 113**	**(WTTC 113)**	**Water Plant Operation**	**3**	**0**	**3**
			13	**4**	**15**

Second Semester			C	L	CR
MAT 122	(MATH 130)	Technical Mathematics	2	2	3
> **WTT 120**	**(WTTC 120)**	**Treatment Plant Safety**	**3**	**0**	**3**
> **WTT 202**	**(WTTC 202)**	**Water Distribution Systems**	**3**	**0**	**3**
> **WTT 211**	**(WTTC 211)**	**Water Treatment II**	**3**	**2**	**4**
			11	**4**	**13**
		Total Required			**28**

Wastewater
2024-2025
Certificate Program

First Semester			C	L	CR
> **ELS 119**	**(ELEC 119)**	**Introduction to Electronic Systems**	**1**	**2**	**2**
ENG 111	(ENGL 101)	English Composition	3	0	3
> **WTT 103**	**(WTTC 103)**	**Introduction to Water Treatment Technology**	**3**	**0**	**3**
> **WTT 121**	**(WTTC 121)**	**Wastewater Treatment I**	**2**	**2**	**3**
> **WTT 206**	**(WTTC 206)**	**Wastewater Collection Systems**	**3**	**0**	**3**
			12	**4**	**14**

Second Semester			C	L	CR
> **INS 110**	**(WTTC 110)**	**Instrumentation & Process Controls**	**2**	**2**	**3**
MAT 122	(MATH 130)	Technical Mathematics	2	2	3
> **WTT 120**	**(WTTC 120)**	**Treatment Plant Safety**	**3**	**0**	**3**
> **WTT 124**	**(WTTC 124)**	**Wastewater Plant Operation**	**3**	**0**	**3**
> **WTT 221**	**(WTTC 221)**	**Wastwater Treatment II**	**3**	**2**	**4**
			13	**6**	**16**
		Total Required			**30**

Water Treatment Technology cont.

PROGRAM OUTCOMES

- Describe the various processes used within the water treatment and wastewater treatment industry.
- Perform wastewater collection system and water distribution systems inspections.
- Utilize and maintain process documentation in the operation of water and wastewater systems.
- Understand the water treatment unit processes including coagulation and flocculation, sedimentation, filtration, and disinfection.
- Understand the wastewater treatment unit processes including preliminary, primary, secondary and tertiary treatment.
- Gain fundamental knowledge of various pumps, valves, flow meters and process analyzers used in the water and wastewater industry.
- Perform various laboratory analyses in the water and wastewater facilities.
- Become eligible for the water treatment, water distribution, wastewater treatment, and collection systems operator certification exams.

Wind Power Technology

Wind Power Technology
2024-2025
Certificate Program

First Semester			C	L	CR
> **ELS 115**	**(ELEC 115)**	**Basic Electricity/Electronics**	**3**	**0**	**3**
> **ELS 116**	**(ELEC 116)**	**Basic Electricity/Electronics Lab**	**0**	**6**	**2**
MAT 122	(MATH 130)	Technical Mathematics	2	2	3
> **WPT 110**	**(WPTC 110)**	**Safety Fundamentals for Wind Technicians**	**2**	**3**	**3**
> **WPT 114**	**(WPTC 114)**	**Introduction to Wind Power Industry**	**2**	**3**	**3**
> **WPT 119**	**(WPTC 119)**	**Wind Turbine Drive Systems**	**2**	**3**	**3**
			11	**17**	**17**

Second Semester			C	L	CR
> **ELS 124**	**(ELEC 124)**	**Industrial Electronics**	**2**	**3**	**3**
> **ELS 125**	**(ELEC 125)**	**Motors & Controls**	**2**	**3**	**3**
ENG 111	(ENGL 101)	English Composition	3	0	3
> **WPT 213**	**(WPTC 213)**	**Wind Power Control Systems**	**2**	**3**	**3**
> **WPT 214**	**(WPTC 214)**	**Wind Power Delivery Systems**	**2**	**3**	**3**
> **WPT 215**	**(WPTC 215)**	**Troubleshooting Automated Systems**	**2**	**3**	**3**
			13	**15**	**18**

Total Required	**35**

> ***Major courses; a minimum grade of "C" or 2.0 is required***

Key: C=Class hours; L=Laboratory; CR=Credit hours

PROGRAM OUTCOMES

- Function successfully as technicians on wind farms and/or in other power production settings.
- Demonstrate a basic understanding of wind energy systems and terminology used within the power industry.
- Demonstrate an understanding of how power generation equipment functions.
- Demonstrate an understanding of troubleshooting techniques utilizing resources available with technical materials and site system information.
- Demonstrate the skills necessary to troubleshoot and repair equipment utilized on a wind farm or other industrial setting.
- Demonstrate skills necessary to use manual and power tools utilized in an industrial setting.
- Demonstrate skills necessary to select and safely use diagnostic test equipment.
- Demonstrate safety concepts used with electrical generation systems, high angle work areas, and rescue with respect to federal regulations and national standards.

Course Descriptions

ACC 110 **College Accounting**
3 credits / 3 class hrs

Designed to meet the needs of students who are not accounting majors. Emphasis is placed on manually applying the process of the accounting cycle. Students are required to journalize, post, adjust and close for an accounting cycle; prepare payroll and payroll tax records; and prepare financial statements. Service sole-ownership businesses are presented. Students are introduced to computerized accounting procedures after they become proficient with the manual process. This course cannot be used for credit by accounting and business administration majors.

ACC 112 **Computerized Accounting**
3 credits / 3 class hrs

This online course covers small business accounting using the computerized accounting software, QuickBooks Online. Topics include creating a chart of accounts, recording customer and vendor transactions, processing payroll, and printing reports. In addition,, setting up a new company is covered, as well as advanced topics such as exporting to spreadsheet software and using the audit trail of the computerized accounting software. Practical application is accomplished through the use of a tutorial-based text, a computerized homework system, and the completion of a comprehensive problem. Prerequisite: ACC 110, ACC 114 or permission of the instructor.

ACC 113 **Payroll Accounting**
3 credits / 3 class hrs

This online course studies federal and state employment laws and their effects on personnel and payroll records with a full explanation of the subject matter using a building block approach to guide the student from the basic principles through the complex applications of payroll. This course is intended to give students a practical working knowledge of the current payroll laws and actual experience in applying regulations. Students are also exposed to computerized payroll procedures. Practical application will be implemented using a computerized homework system and a comprehensive problem. Prerequisite: ACC 110, ACC 114 or permission of instructor.

ACC 114 **Principles of Accounting I**
3 credits / 3 class hrs

This introductory course covers the fundamental principles of accounting as related to a service and/or merchandising sole proprietorship. Emphasis is on developing technical procedures of the accounting cycle including journalizing, posting, adjusting entries, closing books and preparing financial statements. This course exposes the student to specific areas of deferrals and accruals, inventories, payrolls, receivables, payables, and accounting systems. Practical application will be implemented using a computerized homework system and a comprehensive problem.

ACC 120 **Principles of Accounting II**
3 credits / 3 class hrs

The first part of the course continues to address topics in financial accounting that began in ACC 114, including the use of GAAP (Generally Accepted Accounting Principles). The remaining emphasis is on the corporate form of ownership. Topics include accounting for bonds, investments in stocks and bonds, business combinations and the statement of cash flows. Practical application will be implemented using a computerized homework system and a comprehensive problem. Prerequisite: ACC 114

ACC 124 **Managerial Accounting**
3 credits / 3 class hrs

This course introduces a business-management approach to the development and use of accounting information to support managerial decision-making in both manufacturing and service organizations. Major topics include cost behavior, cost analysis, pricing, profit planning, control measures and the statement of cash flows. Cost-volume-profit relationships will be analyzed to make management decisions. Students will make use of standard costs to measure operating performance and profitability. Responsibility accounting, capital budgeting decisions and ethical challenges in managerial accounting are also covered. Practical application will be implemented using a computerized homework system. Prerequisite: ACC 114

ACC 210 **Intermediate Accounting I**
3 credits / 3 class hrs

This is the first semester of a two-semester course designed to give the student an in-depth overview of Generally Accepted Accounting Principles and financial reporting. Topics include preparation of the balance sheet, income statement, and statement of cash flows; inventory costing; accounts and notes receivables; the allowance method of accounting for bad debts; plant and equipment; investments; and other issues. Practical application will be implemented using a computerized homework system and case studies. Prerequisite: ACC 120

ACC 214 **Federal Taxation I**
3 credits / 3 class hrs

A study of the basic theory of the federal income tax law as it affects individuals and business. Among the topics examined are the computation of gross income, exclusions, capital gains and losses, property transactions, and various business and personal deductions.

ACC 220 **Intermediate Accounting II**
3 credits / 3 class hrs

Continuation of ACC 210. This is the second semester of a two-semester course designed to give the student an in-depth overview of Generally Accepted Accounting Principles and financial reporting of corporate structured businesses. Emphasis is placed on special problems which may include debt and equity financing, leases, investments, capitalizing interest, and employee compensation. Other dimensions of financial reporting, such as earnings per share, accounting changes and error corrections, are also covered. Practical application will be implemented using a computerized homework system and case studies. Prerequisite: ACC 210

ACC 223 **Accounting for Nonprofit Organizations**
3 credits / 3 class hrs

This course consists of the study of fund accounting and the financial statements of state and local governments, hospitals, universities, and other nonprofit entities. General financial principles and fund accounting principles are compared. Specific topics covered include budgets for operations, capital improvements, general funds, revenue funds, debt service funds, trust and agency funds, and proprietary funds. Prerequisite: ACC 120

ACC 225 **Federal Taxation II**
3 credits / 3 class hrs

A study of the current tax code as it relates to corporations, partnerships, estates and trusts, along with other selected topics related to the taxation of the business entity. Also covered are estate and gift transfer taxes, with time devoted to family tax planning.
Prerequisite: ACC 214

ACC 234 **Accounting Information Systems I**
3 credits / 3 class hrs

This course covers the conceptual framework to emphasize the professional and legal responsibility of accountants, auditors, and management for the design, operation, and control of AIS
(Accounting Information System) applications. It covers the functions of an accounting information system within an organization and examines topics in internal controls and system documentation.
The course includes a commercial software package and a text that leads students through the various components of the AIS structure using the software integrated with accounting projects. Practical application will be implemented using a computerized homework system. Prerequisite: ACC 114

ACR 111 **Nonstructural Repairs**
6 credits / 3 class hrs / 9 lab hrs

Covers shop safety and regulations as they pertain to the collision repair industry. Theory and hands-on experience with the removal, replacement and service of complete interior, glass (moveable and stationary), exterior trim and components are applied. Proper metalworking, straightening techniques, plastic and composite repair and pre-paint preparation are also covered.

ACR 121 **Structural Analysis / Plastics**
6 credits / 3 class hrs / 9 lab hrs

Covers intermediate body repairs with measuring systems used. Hydraulic equipment is introduced with hands-on training in structural alignment of the vehicle body. Frame measurement and repair on uni-body and full-frame vehicles are covered along with proper sectioning techniques. Prerequisite: ACR 111

ACR 209 **Auto Collision Blueprinting & Estimating**
3 credits / 3 class hrs

Provides instruction and hands-on training in the blueprinting and estimating of collision damage. Course will also cover topics such as insurance coverage, and working with appraisers and customers.
Prerequisite: ACR 121

ACR 211 **Painting / Refinishing**
6 credits / 3 class hrs / 9 lab hrs

Covers all aspects of the refinishing industry, from safety to the final detailing of the vehicle. Students will also learn color-matching procedures using the latest technology and hands-on techniques. Emphasis is placed on base coat/clear coat, tri-coat and waterborne paint products. Prerequisite: ACR 121

ACR 214 **Airbrushing Techniques & Graphic Design**
3 credits / 2 class hrs / 2 lab hrs

Course focuses on fundamental techniques of using the airbrush for purposes such as custom painting graphics and murals. Hand lettering and pin striping techniques are demonstrated with students gaining hands-on experience. Prerequisite: ACR 211 or instructor's permission

ACR 223 **Structural & Mechanical Repairs**
6 credits / 3 class hrs / 9 lab hrs

Covers the repair of major collision damage, including straightening frames, uni-body construction, replacing major body sections, aligning, reshaping and finishing of major-damaged areas. Front end alignment theory, suspension and steering, power train, electrical, and restraint systems are also covered. Prerequisite: ACR 211

ALH 115 **Introduction to the Healthcare Professions**
3 credits / 3 class hrs

Introduces students to the various roles of the healthcare provider and their professions. In addition to providing an overview of healthcare career choices, this class will present topics that will assist all students in being successful. It introduces common topics encountered by healthcare professionals including medical legal issues, medical asepsis, communication, knowledge of healthcare across the lifespan and professional behavior.

ALH 124 **Health & Safety Compliance for Healthcare Professions**
1 credit / 1 class hr

In the past several years, regulatory agencies have significantly increased the life and environmental safety requirements for healthcare agencies. Emphasis on the increases in healthcare provider injuries, the spread of communicable diseases, and the protection of patient health information have resulted in the need for extensive orientation programs for staff and students employed or completing clinical experiences in these settings. This course is designed to meet these regulatory requirements.

ALH 220 **Medical Terminology**
3 credits / 3 class hrs

This study introduces students to essential medical terminology analysis through knowledge of prefixes, suffixes, and root words. The study also includes vocabulary that cannot be analyzed, verbal pronunciation, medical abbreviations, spelling and medical vignettes.

ART 201 **Introduction to Film**
3 credits / 3 class hrs

This course is an introduction to the study and analysis of film as an art form. Students will view, discuss, and interpret movies from a variety of historical and cultural contexts.

AUT 109 **Introduction to Automotive Technology**
1 credit / .5 class hrs / 1.5 lab hrs

This is an entry level class designed to introduce students to the automotive field and the advances in technology. Students will start with the history of the automobile, then learn about the employment opportunities in the automotive field and what it takes to become an ASE master technician. Students will have the opportunity to learn about shop safety and the types of tools they will be using and how to use them before going into the shop to start the basic repairs of an automobile such as changing oil, rotating tires and inspecting the vehicle for safe driving. This course meets for 3 weeks.

AUT 114 **Suspension & Steering**
3 credits / 1.5 class hrs / 4.5 lab hrs

Exposes students to the underside of cars and light trucks. Suspension systems will be discussed in detail: theory and operation of tires, tire pressure monitoring systems, tire changing, wheel balancing, and suspension systems (conventional and McPherson strut). Diagnosis and repair of these systems will also be covered. Steering systems (theory and operation of conventional and rack and pinion steering systems) will be covered, along with how to properly diagnose and repair these systems. Wheel alignment, theory of front-end geometry including the purpose of caster, camber, steering axis inclination, scrub radius, turning radius and toe-in, toe-out will be discussed in detail. Techniques of performing thrust angles and four-wheel alignments and actual alignments will be done on operational vehicles. Prerequisite: AUT 109 or instructor's permission

AUT 115 **Automotive Electricity**
3 credits / 2 class hrs / 2 lab hrs

This course provides students with information on vehicle electricity which will develop an understanding of vehicle electrical systems. Throughout the course, students will learn the basic concepts of electricity as they apply to vehicle service and repair using a series of training activities. The theory of electricity covered will include volts, ohms, amps, and the proper use of a digital multi-meter and other electrical diagnostic tools and equipment. Students will also learn to understand the flow of electricity in multiple types of electrical circuits. Students will apply the information covered and show their understanding by completing job sheets/worksheets, on-trainer activities, on-trainer troubleshooting techniques and vehicle application which will reinforce vehicle electrical theory. The understanding of voltage drops in circuits will be discussed, and the voltage drop test will be performed with activities, along with electrical schematic reading and techniques for troubleshooting electrical circuit faults.

AUT 116 **Brakes**
3 credits / 1.5 class hrs / 4.5 lab hrs

Exposes students to the automotive brake system and covers in detail the theory, operation, diagnosis, and repair of these systems. Students will have the opportunity to learn about drum brakes, disc brakes, and combinations of the two, along with parking brake systems and power assist. Principles of hydraulics will be discussed as it pertains to the brake system. The various switches, valves and electronic components related to the standard brake system and anti-lock brake system will be discussed and diagnosed. Prerequisite: AUT 114 or instructor's permission

AUT 124 **Engine Repair**
6 credits / 3 class hrs / 9 lab hrs

Theory and operation of the four-stroke engine will be discussed along with diagnosis of engine problems: disassembly and care of reusable parts, cleaning and storage of engine parts, measurements of wear, replacement of parts and adjustments of parts, lubrication and lubricating clearances, temperature effects and cooling systems, cylinder heads, valves, replacing and/or reconditioning cylinders, pistons, rings, cam shafts and hydraulic lifters. Live work is done when available. Prerequisite: AUT 116 or instructor's permission

AUT 125 **Automotive Electronics**
3 credits / 2 class hrs / 2 lab hrs

A continuation of AUT 115, this course covers electrical/electronic systems. Electronics theory is covered, giving students an understanding of electronic solid-state components and systems, and will include charging systems, starting systems, ignition systems, anti-lock brakes, supplemental restraint systems and computer controls. Activities completed in this course allow students to learn and understand the concepts of electronics as they apply to vehicle electronic systems and proper diagnosing and repairing of these systems. These activities will include an introduction to electronics covering diodes, transistors, capacitors and how these semi-conductor components are used in electronic systems. Electronic system diagnostics will include the importance of using a digital multi-meter and logic probe to prevent meter loading in electronic circuits. Laptop/tablet-based scan tools, graphing meters, oscilloscopes and other electronic diagnostic equipment will be used to understand and diagnose electronic systems during lab activities. Prerequisite: AUT 115 or instructor's permission

AUT 214 **Engine Performance**
6 credits / 3 class hrs / 9 lab hrs

Covers the theory and operation of OBD II (On-Board Diagnostics Generation Two) and CAN (Controller Area Network) systems. The complete fuel and emission systems are covered in detail from fuel tank cap to combustion chamber of the engine. Emphasis is placed on fuel injection, ignition and emission control as it pertains to the techniques of diagnostics and distinguishing and interpreting trouble codes by the use of scan tools. Prerequisite: AUT 124 or instructor's permission

AUT 216 **Motor Vehicle Inspection Regulations**
2 credits / 2 class hrs

This course prepares students for the Maine State Vehicle Inspection exams. State laws, regulations and proper vehicle inspection procedures are discussed and studied. Emphasized are safety related components for all classes of vehicle inspection classifications A, B, C, D, E and T. Specific tools, equipment and required materials to perform inspections are also discussed. The course develops diagnostic skills in checking vehicles for safety inspection under Maine motor vehicle safety inspection requirements. Students will be eligible to take the state motor vehicle inspection exams and achieve certification.

AUT 223 **Manual Drive Train & Axles**
3 credits / 1.5 class hrs / 4.5 lab hrs

Consists of theory and operation of the manual transmission along with diagnosis, removal, repair and replacement of the clutch, manual shift transmissions (conventional and trans axle), drive line and final drive assembly. Transfer cases, four-wheel drive and all-wheel drive systems will be diagnosed and repaired along with drive shafts and related parts. This is a 7.5 week course. Prerequisite: AUT 214 or instructor's permission.

AUT 225 **Automatic Transmissions**
3 credits / 1.5 class hrs / 4.5 lab hrs

The history of the automatic transmission along with construction, theory and operation of the torque converter, planetary gears, clutches, bands and their applications will be discussed. Emphasis on diagnosing and repair along with adjustments of the automatic transmission will be performed. Students will have the chance to diagnose and repair concerns on and off the vehicle. Corequisite: AUT 223 or instructor's permission. This is a 7.5 week course.

AUT 228 **Alternative Propulsion Systems**
3 credits / 2 class hrs / 2 lab hrs

Alternative Propulsion Systems is an advanced-level course to enhance students' knowledge and troubleshooting skills in both current and future hybrid HEV, electric EV, fuel cell, and other alternative propulsion technologies. Students will use and heighten their troubleshooting skills developed from previous courses to verify, understand and analyze system faults using schematics, laptop-based scan tools, vehicle diagnostic and repair information, technical service bulletins and special service information to pinpoint causes of hybrid and electric vehicle drivability concerns. This course will also emphasize high-voltage safety while working with hybrid/electric vehicles. Students will understand hybrid vehicle safety features and different procedures and components involved with hybrids today, whether full, medium, or mild hybrids. Students will learn proper techniques and procedures on powering down a hybrid prior to performing any service work and using appropriate tools and personal protective equipment. After successful completion of this course, students will have a greater knowledge of how alternative propulsion technologies operate and the safety procedures involved with these systems. Prerequisite: AUT 125 or instructor's permission

AUT 229 **Automotive Heating & Air Conditioning**
3 credits / 2 class hrs / 2 lab hrs

This course provides students with refrigeration theory, heating, air conditioning, and ventilation system operations and methods used to diagnose, adjust and repair these systems. Information studied from previous courses will help students when troubleshooting HVAC electrical/electronic circuit faults. Students will become familiar with laws of the Federal Clean Air Act related to motor vehicle air conditioning service and repair. Upon successful completion, students will be eligible and be certified as required under Section 609 of the Federal Clean Air Act in the proper use of MVAC refrigerant, recovery and recycling equipment. Prerequisite: AUT 125 or instructor's permission

AUT 231 **Innovative Automotive Technologies**
3 credits / 2 class hrs / 2 lab hrs

This course is an advanced level course and continues with information learned from automotive electronics by increasing students' knowledge of modern electronic automotive systems. Topics covered in this course will include vehicle safety systems (vehicle-to-vehicle communications, vehicle-to-infrastructure communications, automatic brake control systems, and pedestrian detection systems). Other innovative systems discussed are semi and fully autonomous driving, telematics, night vision systems, blind-spot visibility, self-park systems, advanced lighting systems and vehicle cybersecurity. Vehicle computer communications and networks will be discussed, and testing procedures will be performed during lab activities using advanced-level equipment. Students will also use their troubleshooting skills developed from previous courses to verify, understand and analyze system faults using appropriate service information. This course will also emphasize safety while working with innovative electronic systems. After successful completion of this course, students will have a greater knowledge of innovative technologies found on vehicles today and future concepts. Prerequisite: AUT 125 or instructor's permission

AUT 233 **Light Vehicle Diesel Systems**
3 credits / 2 class hrs / 2 lab hrs

The Light Vehicle Diesel Systems course is based on developing changes in light vehicle diesel engines, diesel emissions and diesel OBD II electronic computer control systems. This course will cover diesel engine operational theory, engine fault diagnosing, engine inspection and repair. Other topics covered will be diesel fuels, air induction fuel systems, and turbo chargers. Advanced level topics in this course will include diesel electrical/electronic systems, diesel drivability and diagnostics. The students will use their troubleshooting skills developed from previous courses to verify, understand and analyze faults using schematics, laptop- based scan tools, digital storage oscilloscopes (Pico Scope), vehicle repair information, technical service bulletins and special service information in pinpointing system concerns. The student will at times use original equipment manufacturer (OEM) information to diagnose and repair vehicles when other sources of information are not available. The course will also emphasize the safety of working on diesel engines and related systems. The student will learn and understand the proper techniques on safely depressurizing fuel systems and powering down related systems prior to performing any service work and using proper tools and personal protective equipment. After successful completion of this course, students will have a greater knowledge of light duty diesel technologies found on vehicles today and future makes and models. Prerequisites: AUT 124 and AUT 125 or instructor's permission

BCT 111 **Framing Systems**
6 credits / 3 class hrs / 9 lab hrs

The focus of the course is on the safe practice and use of hand and power tools needed during building construction. Students will learn floor, wall and roof framing skills. There is an emphasis on various on-center layouts and the mathematics and use of the framing square. There is also an introduction to finishing techniques with pine. Students will compute material lists from sketches, floor plans and scaled drawings.

BCT 121 **Interior Materials & Methods**
6 credits / 3 class hrs / 9 lab hrs

This course continues the practice and use of hand and power tools needed during building construction. Students will expand the study and practice of floor, wall and roof framing techniques with an introduction to roof venting. Students may work with electrical and plumbing personnel while building and insulating exterior and interior walls, floors and roof structures. Students will install various rigid and fiberglass insulation with the understanding of air quality and moisture effects. Students will install gypsum board and practice dry wall finishing procedures. Student will install asphalt shingles and clad eave and rake fascias with aluminum coil stock. Prerequisite: BCT 111

BCT 125 **Woodworking**
3 credits / 1.5 class hrs / 4.5 lab hrs

Students will learn woodworking skills through lecture, demonstration and practical application. A series of projects of increasing complexity and detail will be completed. The techniques required to curt and process panels and solid stock, produce accurate joinery, assemble finished projects, and the skills required to do so in an efficient and cost-effective manner will be covered. Projects will be on an individual team basis. Prerequisite: BCT111 or instructor's permission

BIO 114 **Human Biology with Lab**
4 credits / 3 class hrs / 2 lab hrs

Introduces the anatomy and physiology of the human body. All systems of the body are covered, and each system also has a chemistry component relating to its function. Detailed scientific data and terminology are not used so that a concept approach can be used to learn about the human body. Recommended for students in early childhood education or liberal studies, as well as for those preparing for a medical career but lacking a biology and/or chemistry background.

BIO 115 **General Biology**
4 credits / 3 lecture/ 2 lab hrs

This course explores the core concepts of biological science including cellular structure and function, energy production, genetics, evolution, nutrition, and ecology. We will also explore key concepts of the physical sciences (physics and chemistry) and how they impact biological processes. The laboratory portion of the course is tied closely to the lecture and will use analytical techniques to explore questions from the perspective of biologists.

BIO 201 **Anatomy & Physiology I with Lab**
4 credits / 3 class hrs / 2 lab hrs

This course is designed for first-year students preparing for a career in the medical field. The sequence of topics in the first semester will be as follows: Introduction, Structure Levels, and Anatomical Positions and Cavities. This will be followed in a topical manner by the skeletal, muscular, and nervous systems. The intent of this approach is to allow the student to develop a concise understanding of how each system of the body functions and interacts. Labs are designed to supplement the lecture portion of Anatomy and Physiology. The concepts covered in the lecture course are explored in greater detail using a variety of aids.

BIO 211 **Anatomy & Physiology II with Lab**
4 credits / 3 class hrs / 2 lab hrs

This course is designed for first-year students preparing for a career in the medical field. The sequence of topics in the second semester will be as follows: Sensory, Circulatory, Urinary, Lymphatic, Digestive, Endocrine, and Reproductive Systems, and Fluids, Electrolytes and acid-base control. The intent of this approach is to allow the student to develop a concise understanding of how each system of the body functions and interacts. Labs are designed to supplement the lecture course. They will be performed online using simulation software. The general format of the course will follow the lecture. Prerequisite: BIO 201

BIO 218 **Microbiology Lecture with Lab**
4 credits/ 3 class hrs / 2 lab hrs

This course is a basic introduction to the science of microbiology. The student should develop a broad understanding of both theoretical and laboratory aspects of the science. Specific topics to be covered include general characteristics of bacteria, viruses, protozoa, and fungi; disease transmission; immunology; epidemiology; and microbial control. The student will have the opportunity to practice techniques for specimen collection, culturing, staining, and microscopic observation of representative species. Prerequisite: BIO 211

BTE 251 **Business Internship**
1 credit

Provides the student with on-the-job training at an approved worksite in an occupational field directly related to the student's major. At least 45 hours must be completed for 1 credit. To qualify for an internship, a student in an associate degree program must have completed 30 credits of course work, have attained a 2.5 GPA, and be recommended by the department chair and course instructor. Before registering for this course, students must meet with the course instructor to determine the internship site and to process paperwork.

BTE 252 **Business Internship**
2 credits

Provides the student with on-the-job training at an approved worksite in an occupational field directly related to the student's major. At least 90 clock hours must be completed for 2 credits. To qualify for an internship, a student in an associate degree program must have completed 30 credits of course work, have attained a 2.5 GPA, and be recommended by the department chair and course instructor. Before registering for this course, students must meet with the course instructor to determine the internship site and to process paperwork.

BTE 253 **Business Internship**
3 credits

Provides the student with on-the-job training at an approved worksite in an occupational field directly related to the student's major. At least 135 clock hours must be completed for 3 credits. To qualify for an internship, a student in an associate degree program must have completed 30 credits of course work, have attained a 2.5 GPA, and be recommended by the department chair and course instructor. Before registering for this course, students must meet with the course instructor to determine internship site and to process paperwork.

BUS 101 **Introduction to Business**
3 credits / 3 class hrs

Introduces students to the environment in which business is transacted by presenting an overview of functional areas of business and the basic concepts of the business world.

BUS 106 **Effective Customer Service**
3 credits / 3 class hrs

A loyal customer base is one of an organization's most important assets. This course covers the concepts and skills needed for success in business careers. Emphasis is given to dealing with customer service problems and how to handle conflicts and stress.

BUS 109 **Entrepreneurship**
3 credits / 3 class hrs

Covers the essentials of how to start and operate a small business. Students create customized business plan content while examining entrepreneurial opportunities, financing, marketing, selling, customer service, cash flow, managing employees, and growing a business. Recommended for all students who aspire to business ownership and management.

BUS 113 **Sales Fundamentals**
3 credits / 3 class hrs

Assists students in analyzing the importance of personal preparation for selling effectively by understanding of self, the product or service, and the customer.

BUS 114 **Personal Finance**
3 credits / 3 class hrs

Designed to help individuals analyze and direct their own financial affairs. Students will practice and apply skills to begin a lifelong journey of personal financial planning. This course will provide strategies for managing personal financial resources, buying decisions, insurance, investing, and retirement planning. Open to all students.

BUS 117 **Business Law I**
3 credits / 3 class hrs

Provides a background in the sources of American law and the global legal environment. Provides a basic knowledge of courts and procedures, ethics, torts and crimes, contracts, property and its protection, and debtor-creditor relationship.

BUS 119 **Legal Environment of Business**
3 credits / 3 class hrs

A survey of the law applicable to business and its environment. The course will help students gain a greater understanding of the standards and methods of reasoning that are used to answer questions about the legal environment in which businesses function. It also covers the legal issues that commonly confront businesses and the way in which our legal system is organized and operates.

BUS 150 **Special Topics in Business Technology**
3 credits / 3 class hrs

This survey course is intended to provide the opportunity to offer courses of variable content on emerging issues or technology of special interest to the college community that would not normally be part of the NMCC curriculum. Topics and content will vary from semester to semester. This course will increase the awareness of current issues and technology surrounding the student.

BUS 201 **Leadership**
3 credits / 3 class hrs

Designed to expose senior-level students to areas of competence and knowledge that are fundamental to the practice of leadership in a variety of business and life settings. Students will examine the prominent leadership theories, acquire skills common to successful leaders, and listen to the opinions of leaders of our own community from business, government, and social service organizations. Course requires significant written and oral communication, project management and critical thinking skills.

BUS 210 **Principles of Insurance**
3 credits / 3 class hrs

Covers basic ideas, problems and principles found in all types of modern insurance and other methods of handling risk. Personal and business risk management will be included.

BUS 214 **Project Management**
3 credits / 3 class hrs

Topics include project management life cycle and process; identifying and selecting projects; developing a project proposal; techniques for planning, scheduling, resource assignment, budgeting and controlling project performance; project risks; project manager responsibilities and skills; project team development and effectiveness; project communication and documentation; and project management organizational structures. The concepts in the course support the project management knowledge areas of the Project Management Institutes *A Guide to the Project Management Body of Knowledge* (PMBOK(R)Guide.)

BUS 215 **Business Ethics**
3 credits / 3 class hrs

Introduces contemporary and controversial ethical issues that face the business community. Case studies are utilized to study the competing values and interests involved in ethical situations. Upon completion, students should be able to demonstrate an understanding of their moral responsibilities and obligations as members of the workforce and society.

BUS 217 **E-Commerce**
3 credits / 3 class hrs

This course explores the opportunities and challenges associated with electronic commerce and the internet. Students will learn the key business strategies and technological elements of electronic commerce essential to succeeding in today's internet-based economy.

BUS 229 **Principles of Management**
3 credits / 3 class hrs

Enlivens management principles through its emphasis of real-world management practices. The experiences of people and businesses used in class illustrate the relevance of each theoretical management concept and how those concepts apply to actual business situations. Due to constantly changing management practices, leadership and change management concepts are integrated in the issues and applications throughout the course.

BUS 233 **Supervisory Management**
3 credits / 3 class hrs

Designed to provide theoretical and practical knowledge of the management process in a variety of organizational settings. Covers basics of management relationships, individual motivation and behavior in business, and development of skills for daily supervision. This course involves a high level of teamwork and interaction among students.

BUS 239 **Human Resource Management**
3 credits / 3 class hrs

An organization's human resource management function focuses on its people. It includes practices that help the organization deal most effectively with all people in the pre-selection, selection and post-selection phases of the employment cycle. This course covers human resource management trends and changes, equal employment opportunity/affirmative action, job analysis, recruiting, testing, selection, training, performance appraisal, compensation/ benefits, labor relations, discipline, workplace health and safety, ethical dilemmas, and cultural diversity.

BUS 241 **Principles of Marketing**
3 credits / 3 class hrs

Designed for the student planning to take only one marketing course. Provides an overview of the marketing skills and techniques used in product planning and promotion. Explores the strategy behind and implementation of a marketing plan, while covering consumer behavior, product life cycle, marketing communications, and pricing tactics.

BUS 242 **Small Business Management**
3 credits / 3 class hrs

Covers the concepts of starting and operating a small business. The application of marketing, accounting, human resource management and general management courses is essential for the completion of the required business plan.

BUS 250 **Advanced Seminar in Business Technology**
3 credits / 3 class hrs

This in-depth course is intended to provide the opportunity to offer courses of variable content on emerging issues or technology of special interest to the college community that would not normally be part of the NMCC curriculum. As such, the topics and content will vary from semester to semester. This course will increase the awareness of the most current issues and technology surrounding the student. Prerequisite: permission from the instructor.

CHM 201 **Applied Sciences**
3 credits / 2 class hrs / 2 lab hrs

This course is intended to serve as a broad introduction to a variety of chemistry concepts for students who have never taken a chemistry course before or have limited knowledge of the study of chemistry. While it has heavy emphasis on application of these concepts with respect to water and water treatment, students who complete this course will find it useful in any science field, healthcare field, or related skills/trade subject. Topics include: scientific measurement, the structure of matter, chemical nomenclature, chemical formulas, chemical equations, mole and stoichiometry, the gas laws, chemical energy, periodicity and the periodic table, solutions, acids and bases, chemical equilibrium, oxidation and reduction, and a brief overview of nuclear and organic chemistry. This course will develop students' ability to reason scientifically using the scientific method and to apply that knowledge in their daily lives.

CIS 105 **Introduction to PC Operating Systems**
1 credit / 1 class hr

This course provides students with a working knowledge of various technology concepts. The course focuses on different elements of technology devices and the fundamentals around how these devices operate. Each student will also develop file management techniques to be successful in everyday situations. Students will develop basic computer application skills, problem-solving abilities, and critical thinking skills which are essential to the business environment.

CIS 108 **Spreadsheet Applications for Business**
3 credits/ 3 class hrs

Provides a comprehensive coverage of electronic spreadsheets using Microsoft Excel. An important part of this course will be using Excel to solve business problems by completing hands-on activities to design, create and modify basic to advanced electronic spreadsheets. Activities will include the following concepts and techniques: formulas and functions, spreadsheet designs, charts and graphics, lists, sorting and filtering, templates, consolidation and 3-D formulas, protection, data validation, Web features, data tables, scenario management, importing data, using macros, and VBA.

CIS 112 **Fundamentals of Computer Concepts**
3 credits / 2 class hrs / 2 lab hrs

This course is an introduction to end-user computer concepts and applications. The course focuses on personal computer software applications, computer concepts and terminology regularly used in a computerized business environment to solve business problems. An important part of this course will be hands-on activities using Microsoft Office Suite to demonstrate various information system concepts. Activities will involve the following introductory concepts: windows operating systems and utility programs, word processing, electronic spreadsheets, database management systems, presentation graphics, and several Internet applications. It will also cover common computer concepts pertaining to security, safety, privacy, and network communications and components of the system unit.

CIS 113 **Introduction to Microcomputer Applications**
3 credits / 3 class hrs

Provides an overview of microcomputer applications, including a brief introduction to computer concepts, microcomputer operating systems, and hands-on experience with a business software suite consisting of word processing, spreadsheets, databases, and presentation graphics.

CIS 118 **Office Computer Applications**
3 credits / 3 class hrs

This course is designed to develop student proficiency in data manipulation, data exchange and information presentation using a desktop workstation. The lab software used is the Microsoft Office suite of applications operating in a Windows environment. Advanced projects in Word, Excel, Access and PowerPoint are completed. Prerequisite: CIS 112 or CIS 113

CIS 129 **Database Applications for Business**
3 credits / 3 class hrs

Provides a comprehensive coverage of database management systems using Microsoft Access. An important part of this course will be using Access to solve business problems by completing hands-on activities to design, create and modify basic to advanced database applications. Activities will include: designing databases, creating and maintaining a database, defining table relationships, using queries and action queries, creating forms and reports, using the switchboard manager, integration and Web features, using macros and VBA, and managing and securing a database.

CIS 220 **Web Development & Publications**
3 credits / 3 class hrs

Examines the development, handling and moving of information primarily using Web based technology for the purpose of increased office information. The course emphasis is on Internet Web page development using HTML tagging language and Web authoring tools with emphasis using Microsoft FrontPage. Desktop publishing using Adobe PageMaker is included for exposure to various types of professional publications which can be converted to HTML or PDF formats for electronic viewing. Because the use of images in business publications is essential to effective print and Web publications, this course also provides a survey of digital imaging concepts and technologies. Prerequisite: CIS 112 or CIS 113

COE 112 **Introduction to Linux**
3 credits / 2 class hrs / 2 lab hrs

This course is intended for students who want to learn about the Linux operating system. It does not assume any prior knowledge of Linux and is geared toward those interested in systems administration as well as those who will use or develop programs for Linux systems. The course provides comprehensive coverage of topics related to Linux certification, including Linux distributions, installation, administration, X-Windows, networking, and security.

COE 113 **Operating Systems**
3 credits / 2 class hrs / 2 lab hrs

This course prepares students to develop the skills needed to deploy and manage the Windows Operating System and to prepare to pass the latest Microsoft certification exam. Students learn about the new features in Windows and learn how to manage Windows devices in a secure network environment. New topics include client Hyper-V and using Microsoft Intune to manage Windows mobile and desktop devices. The text includes a section devoted to troubleshooting and doubles as a manual that professionals can take on the job.

COE 116 **A+ Certification Preparation**
3 credits / 3 class hrs

Principles of computer servicing including system configuration, memory interfacing, CPU and support circuits, keyboards, hard drives-SATA - SCSI - IDE, floppy drives and modems. Troubleshooting and maintenance of peripherals such as monitors, multimedia, and drives. Considerable hands-on time is spent gaining troubleshooting skills using test equipment and software diagnostics. Corequisite: COE118.

COE 118 **A+ Certification Preparation Lab**
3 credits/ 9 lab hrs

This course is the laboratory component of COE 116 A+ Cert Prep. Corequisite: COE 116

COE 125 **Computer Networking Hardware**
3 credits / 2 class hrs / 2 lab hrs

Provides the student with the basic knowledge and skills needed to install and maintain a network. The course prepares students to become Network+ certified. Network+ is a leading vendor-neutral certification in the computer industry for network technicians. The course covers network security, installing Windows operating systems; installing network interface cards; cabling; peer-to-peer networks; client/server networks; configuring TCP/IP, DHCP, TCP/IP utilities; 100BaseT; wireless technology; star, ring, bus topologies; monitoring network traffic; protocols and the OSI model; accessing the Internet; measuring server performance; analyzing network traffic; and maintaining and supporting the network.

COE 128 **Advanced Operating Systems**
3 credits / 2 class hrs / 2 lab hrs

In this course students master configuration or support for Windows computers, devices, users and associated network and security resources. Those in this IT Professional career field work with networks configured as a domain-based or peer-to-peer environment with access to the internet and cloud services. These IT Professionals could be consultants, full-time desktop support technicians, or IT generalists who administer Windows-based computers and devices as a portion of their broader technical responsibilities. Additional skills are addressed, including: Designing an Installation and Application Strategy, Maintain Resource Access, Maintaining Windows Clients and Devices and Managing Windows using Cloud Services and Microsoft Desktop Optimization Pack.

COE 217 **Installing & Configuring Servers**
4 credits / 2 class hrs / 4 lab hrs

This course gives in-depth coverage of Microsoft certification exam objectives and focuses on the skills needed to install and configure Windows Server. Upon completion of this course, students will have an in-depth knowledge of Windows Server, including installation, file and storage services, virtualization, Windows containers, and Nano Server, among many other topics.

COE 218 **Network Administration**
4 credits / 2 class hrs / 3 lab hrs

Provides in-depth coverage of Microsoft certification exam objectives and focuses on the skills needed to configure networking with Windows Server. Upon completion of this course, students have an in-depth knowledge of Windows Server 2016 networking services, including TCP/IP, DNS, DHCP, IPAM, remote access, and advanced networking solutions.

COE 219 **Electronics for Computer Technicians**
3 credits / 2 class hrs / 3 lab hrs

This course prepares students to solve electronic problems involving current, voltage, resistance and power. Students will be able to explain the relationship between current, voltage, resistance and power. Students will be able to discuss the relationship between electricity and magnetism and will construct DC circuits using a schematic diagram as a guide, with components such as resistors, relays, switches, lamps, batteries and capacitors. Students will use multi-meters, power supplies and electronic trainers throughout the course.

COE 220 **Introduction to Computer Forensics**
3 credits / 2 class hrs / 2 lab hrs

This course focuses on the use of the most popular forensics tools and provides specific guidance on dealing with civil and criminal matters relating to the law and technology. Includes discussions on how to manage a digital forensics operation in today's business environment. In addition, this course also covers valuable skills such as: Data Acquisition, Processing Crime and Incident Scenes, Working with Windows and CLI Systems, Current Computer Forensics Tools, Macintosh and Linux Boot Processes and File Systems, amd Recovering Graphics Files.

COE 227 **Configuring Advanced Windows Server**
4 credits/ 2 class hrs / 4 lab hrs

This course will help validate the skills and knowledge necessary to administer a Windows Server Infrastructure in an enterprise environment. This course focuses on real skills for real jobs and prepares students to provide mastery of Advanced Windows Server Services such as advanced configuring tasks necessary to deploy, manage and maintain a Windows Server infrastructure. It covers such skills as fault tolerance, certificate services and identity federation. In addition, this course also covers valuable skills such as: Implementing Advanced Network Services, Implementing Advanced File Services, Implementing Dynamic Access Control, Implementing Network Load Balancing and Implementing Failover Clustering.

COE 228 **Security+ Certification**
3 credits / 2 class hrs / 2 lab hrs

This course offers a comprehensive guide for anyone wishing to take the CompTIA Security+ Certification Exam. It provides an introduction to the fundamentals of network security, including compliance and operational security; threats and vulnerabilities; application, data, and host security; access control and identity management; and cryptography. The course covers new topics in network security as well, including psychological approaches to social engineering attacks, Web application attacks, penetration testing, data loss prevention, cloud computing security, and application programming development security.

COE 229 **Ethical Hacking**
3 credits / 2 class hrs / 2 lab hrs

This course provides an in-depth understanding of how to effectively protect computer networks. Students will learn the tools and penetration testing methodologies used by ethical hackers. In addition, the course provides a thorough discussion of what and who an ethical hacker is and how important they are in protecting corporate and government data from cyber-attacks. Students will learn updated computer security resources that describe new vulnerabilities and innovative methods to protect networks. Also covered is a thorough update of federal and state computer crime laws, as well as changes in penalties for illegal computer hacking. Prerequisites: COE 125 and COE 228

COL 103 **College Success**
1 credit / 1 class hr

College Success is designed to help students feel comfortable with the experience of being a college student. As a class, students will examine the academic culture of college and look at ways to be successful at NMCC. Through interactive exercises and assignments, the class will discuss a variety of topics including the transition to college life, goal setting, study skills, time management, campus resources, and information literacy. The ultimate purpose of the course is to provide an opportunity for students to learn and adopt strategies to be successful in college and beyond. Students who have successfully completed at least 15 hours with a GPA of 2.0 are exempt from this requirement.

COM 111 **Speech**
3 credits / 3 class hrs

This is an oral communication course that offers experience in the selection and organization of speech content, audience analysis and delivery. Classroom experience emphasizes preparation and delivery of informative, persuasive, short speeches plus other types of oral presentations.

COM 212 **Business Communications**
3 credits / 3 class hrs

Focuses on principles of nonacademic spoken and written expression that will help the student succeed in a business occupation. Concentrates on the practical written and oral applications of communication theory in the forms of business correspondence, memoranda, employment-related documents and oral presentations. The class also includes technological applications and ethical and cross-cultural considerations in business communication practices. Other interpersonal communication topics that may be discussed are nonverbal communication, listening skills, telephone skills and business etiquette. Prerequisite: ENG 111

COM 221 **Technical Communications**
3 credits / 3 class hrs

Designed to strengthen students' oral and written communication skills by focusing on elements of technical writing and business correspondence. Emphasis is given to utilizing visual aids effectively, writing several types of job-related reports, and giving oral presentations. Prerequisite: ENG 111

DIB 113 **Introduction to Digital Systems**
3 credits / 2 class hrs / 2 lab hrs

Virtually all electronic and electrical systems today use digital techniques to accomplish their functions. After completing this course, students will be familiar with a wide range of integrated circuits, their uses and characteristics. Students will have a working knowledge of semiconductor devices, logic circuits, memory devices, data conversion, and digital troubleshooting. The course concludes with a design project which incorporates circuitry studied throughout the course. Prerequisites: ELS 115 and ELS 116

DIM 112 **Introduction to Diesel Hydraulics Technology**
3 credits / 3 class hrs / 9 lab hrs

Introduces the diesel technician to the field and shop operating procedures and preventive maintenance programs. Covered in detail are: preventative maintenance for trucks and equipment used in the transportation industry; personal, work and tool safety; laws regulating hazardous material; and shop recordkeeping requirements of the federal motor vehicle safety standards. Performing a preventative maintenance inspection will be practiced during an overview of the various P.M.I areas. This course meets for 8 weeks.

DIM 114 **Engine Diagnosis & Tune-up**
Credits / 3 class hrs / 9 lab hrs

Diagnosis and service of diesel engines to include details of construction, theory of operating of two and four-cycle engines, plus failure analysis. Disassembly and rebuilding for service and study of engine components is done on mechanical and electronic controlled engines. Engine tune-up, valve settings injector timing, and dynamic/static timing will be practiced for competency and accuracy. Prerequisite: DIM 112. This course meets for 8 weeks.

DIM 122 **Electrical Systems- Heavy Equipment**
3 credits / 3 class hrs / 9 lab hrs

Emphasizes the practical aspects of a charging system, starting system, lighting and accessory components, as well as the proper use of the test equipment needed. Reading wiring diagrams and schematics and following circuits through each is practiced. Introduction into the electronic controls of diesel engines is covered extensively with hands-on training. Prerequisites: AUT 115 and DIM 114. This course meets for 8 weeks.

DIM 123 **Brake Systems**
3.5 credits / 3 class hrs / 9 lab hrs

Truck air brake systems are explained in detail throughout this course. air brake operation, system components and the Federal Motor Vehicle Safety standard will be discussed along with practical hands-on learning of servicing, inspecting, adjusting and identifying common brake failures systematically to ensure brake balance. Basic ABS systems failure diagnosis is introduced. Basic component adjustment and replacement are also covered. Prerequisite: DIM 122. This course meets for 4 weeks.

DIM 125 **Suspension & Steering Systems**
1.5 credits / 3 class hrs / 9 lab hrs

Detailed analysis of the four main suspension systems used in the trucking industry, walking beam, air, spring and torsion bar design. Troubleshooting and repair of these systems will be covered in detail. Maintenance of tire and wheel components along with wheel end adjustment, replacement and inspection procedures will be practiced. Front axle alignments and adjustments to toe angle will be practiced for competency and accuracy. Introduction to equipment suspensions will be introduced; tract and roller systems. Prerequisite: DIM 123. This course meets for 4 weeks.

DIM 211 **Hydraulics Technology**
3 credits / 3 class hrs / 9 lab hrs

Introduction to fluid forces and their application to power transfer with emphasis on troubleshooting and repair of hydraulic systems. To include schematic terminology, construction, circuit analysis and testing of the hydraulic system. This unit will also expand the student's knowledge of hydraulic braking and steering systems. Prerequisite: DIM 125. This course meets for 8 weeks.

DIM 213 **Diesel Engine Rebuilding Technology**
3 credits / 3 class hrs / 9 lab hrs

Diagnosis and service of diesel engines to include details of construction, theory of operation of two-cycle engines and four-cycle engines, plus failure analysis. Disassembly and rebuilding for service and study of engine components is done on mechanical and electronic controlled engines. Students have the opportunity to expand their knowledge and apply technical skills. Prerequisite: DIM 211. This course meets for 8 weeks.

DIM 221 **Drive Train Systems**
3 credits / 3 class hrs / 9 lab hrs

Includes diagnosis, removal, repair and replacement of components from engine to drive axles. Includes clutches, manual transmissions, axles, differentials, propeller shafts, axle and tracked suspension systems. Prerequisite: DIM 213. This course meets for 8 weeks.

DIM 222 **Air Conditioning Systems / Transport Refrigeration**
3 credits / 3 class hrs / 9 lab hrs

Introduces the theory of operation of mobile refrigerated units. Emphasis is on maintenance, service and diagnosis of air conditioners on automotive and heavy equipment. Students will have an opportunity to expand their knowledge of and apply foundation skills and workplace competencies as described in SCANS. Prerequisite: DIM 213. This course meets for 8 weeks.

DRR 109 **Print Reading for Welders**
3 credits / 2 class hrs / 2 lab hrs

This course provides students the knowledge to read and comprehend the various types of prints found in the welding industry. Content includes print reading basics, math and measurement, an overview of welding processes, types of welds and joints, and welding symbol use.

DRR 117 **Blueprint Reading for Construction Trades**
3 credits / 2 class hrs / 2 lab hrs

This course introduces students to orthographic drawings and the interpretation of construction documents. Students will review architectural, civil structural, mechanical, and electrical prints to become familiar with drawings used in residential and light commercial construction. Interpreting technical specifications and preparing a construction cost estimate are also included.

ECE 101 **Healthy Learning Environments for Children**
3 credits / 3 class hrs

Examines organizing space and equipment for indoor and outdoor activities; helping children learn to play together; understanding and providing for children's health, safety and nutritional needs; and maintaining a safe learning and play environment in and outside of the classroom.

ECE 105 **Advancing Intellectual & Social Development in Young Children**
3 credits / 3 class hrs

Covers the intellectual (cognitive) and social development of children and the ways that teachers support development in their daily interactions with young children. Topics to include encouraging young children to explain, experiment and question; advancing language use and comprehension; and building positive self-concept in the young child. Focus of the course will be applying developing knowledge of young children to help them learn in a manner that supports development in the whole child.

ECE 120 **Programmatic & Professional Development in Childcare Field**
3 credits / 3 class hrs

Covers topics including: techniques for establishing positive and productive relationships with the families of childcare/development program participants; program management skills such as planning, recordkeeping, communication and cooperation; and the processes inherent in establishing and maintaining a demonstrated commitment to professionalism.

ECE 192 **Field Experience in Early Childhood Education I**
3 credits / 9 lab hrs

Provides students with the opportunity to actively experience work in the childcare/early education field through exposure and hands-on experience working with infants, toddlers, preschool and/or school-aged children in community-based group-care settings. Field experience allows students to implement and practice skills learned in related coursework, while periodic seminars help students to connect their field work to related theory and receive support from peers completing field experience in other settings. Satisfies the first 90 hours of total practical experience required for CDA credential. Program immunization requirements and criminal background checks are required for course enrollment.

ECE 196 **Field Experience in Early Childhood Education II**
4 credits / 1 class hr / 9 lab hrs

Provides students with practical experience working with and observing young children in a variety of community-based childcare settings and allows students to actively experience work in the childcare field and learn from skilled practitioners. Students will implement and practice skills learned in related coursework to observe, plan and implement developmentally appropriate learning activities for children in infant, toddler, preschool and/or school-aged children's programs. Regular (weekly or bi-weekly) seminars are an integral part of the experience and will allow students to connect their field work with professional theory and philosophy as well as experience support from colleagues enrolled in field experiences in a variety of settings. Satisfies 180 hours of total practical experience requirement for CDA credential. Prerequisite: ECE 192. Enrollment limited to students matriculated in Early Childhood Education program. Program immunization requirements and criminal background checks are required for course enrollment.

ECE 197 **Field Experience in Early Childhood Education III**
5 credits / 1 class hr / 12 lab hrs

Continues to build on the foundation of skills begun in previous practicum work. Students will have increased involvement with children and will develop, understand and practice techniques for child assessment and planning. Course requires students to take a more active role in observing, planning for and delivering curriculum to young children. Periodic seminars remain an integral part of the experience and allow students to share learning experiences from different field sites. Students may elect to conduct their field experience in a specialized area of early childhood education. Satisfies final 180 hours of total practical experience requirement for CDA credential. Prerequisite: ECE 196. Enrollment limited to students matriculated in Early Childhood Education program. Program immunization requirements and criminal background checks are required for course enrollment.

ECE 200 **Child Growth and Development**
3 credits/ 3 class hrs

The development of children from conception to pre-adolescence will be studied. The focus of the course will be on four age groups of early childhood -- infants, toddlers, preschoolers, and early elementary children in relation to the four domains of development: physical, cognitive, social-emotional, and acquisition of language and communication. Explores the latest child development research, including the neurological bases of learning or "brain-based" learning. Students will develop an understanding of how experiences provided in childcare settings can impact the development of the young child.

ECE 205 **Children's Literature**
3 credits / 3 class hrs

Emphasis is placed on the creation of an environment that supports the development of emergent literacy and encourages young children's exploration and enjoyment of literature. Experiences will include the development of reading centers; storytelling; creative dramatics; and evaluation, selection and presentation of age-appropriate reading materials. Students will directly explore a variety of children's literature appropriate for use in early childhood settings.

ECE 210 **Child Guidance and Discipline**
3 credits / 3 class hrs

Discusses the differences between punishment and discipline and techniques for guiding young children. Topics will include positive reinforcement, redirection of negative behavior, setting and enforcing limits, and the natural and logical consequences of a child's choices. Students will also learn techniques for self-control and stress management and will develop an understanding that effective discipline follows development of a respect for the dignity of the child. Prerequisites: PSY 101, ECE 105 and ECE 200 or commensurate experience

ECE 220 **Education of Young Children with Special Needs**
3 credits / 3 class hrs

Includes: observation and documentation of child behavior; categories and descriptions of special needs; adapting curriculum to meet individual needs; and developing healthy attitudes and behaviors in children, staff and parents toward the special needs child. Emphasis will be placed on developing and maintaining supportive relationships with parents of children with special needs and developing cooperative relationships with other professionals involved with the child, including therapists, social workers and medical personnel. Prerequisite: ECE 200 or commensurate experience

ECE 230 **Curriculum in Early Childhood Education (Birth-3 years)**
3 credits / 3 class hrs

Provides an in-depth study of the development and implementation of developmentally appropriate curriculum for infants and toddlers based on an understanding and knowledge of child development, individual children, the group of children, and community and program goals. Topics will include assessment of children; age- appropriate scheduling and instructional planning; and maintaining a physically and psychologically safe learning environment. Students will develop creative instructional materials and will evaluate and utilize commercially developed products. Prerequisite: ECE 200 or commensurate experience

ECE 235 **Curriculum in Early Childhood Education (Ages 3-8)**
3 credits / 3 class hrs

Continues topics studied in ECE 230 with emphasis on the development and evaluation of curriculum and materials suitable for the preschool child and for school-aged children in childcare settings. Coursework will focus on curricula as exemplars of developmentally appropriate practice in early childhood education and on practical issues around implementation of curricula for children in this age group. Students will work toward development of their personal definition, goals and values around curriculum. Prerequisites: ECE 105 and ECE 200 or commensurate experience.

ECO 213 **Macroeconomics**
3 credits / 3 class hrs

This course is based on a basic theory of macroeconomics which provides a unique textual and visual learning system that presents and reinforces core concepts, then immediately assesses comprehension to ensure understanding highlights the latest information on economic growth, income distribution, federal deficits, environmental issues, and other economic developments while applying concepts to everyday life. Note: ECO 111 Principles of Economics will substitute.

EET 221 **Control Systems & PLCs**
3 credits / 2 class hrs / 3 lab hrs

Programmable Logic Controllers are used extensively in process control and machine control. The course provides a strong foundation for understanding the fundamentals that apply to all PLC brands and offers an introduction to applications where PLCs are used in industry. Theory will be reinforced by applying ladder diagram concepts from hard wired circuits to ladder logic programming using PLC equipment. Students will gain experience with hardware and software systems for the Koyo DL 105, Allen Bradley SLC 500, Compact Logix, and Control Logix platforms. Introductions to DeviceNet and Panel View Plus systems will also be presented. Prerequisites: DIB 113, ELS 124, and ELS 125

ELC 110 **National Electrical Code**
3 credits / 3 class hrs

Presents the fundamentals of the current National Electrical Code (NEC). Classroom discussion emphasizes single and multi-family dwellings while reviewing concepts of motors, control wiring and commercial wiring systems. Introduces the concept of using the NEC book as a tool and emphasizes methodology of reading and understanding the NEC. Periodic examinations are given. An excellent course for beginning electricians preparing for the journeyman license exam.

ELC 116 **National Electrical Code for Industry**
3 credits / 3 class hrs

Presents the fundamentals of the current National Electrical Code (NEC). Classroom discussion emphasizes commercial and industrial wiring techniques while reviewing residential wiring concepts. Introduces the concept of using the NEC book as a tool and emphasizes methodology of reading and understanding the NEC. Periodic examinations are given. An excellent course for electricians preparing for the master license exam. Prerequisite: ELC 110 or instructor's permission

ELE 112 **Basic Residential Wiring**
3 credits / 2 class hrs / 2 lab hrs

A beginning course in electrical wiring methods using electricians' tools and wiring materials. Wiring projects include single-pole switching, 3-way switching, and 4-way switching of lighting circuits, receptacle circuits including GFCI and AFCI protection, and installation of romex cable, boxes, and associated hardware.

ELE 210 **Electrical Construction & Maintenance I**
3 credits / 3 class hrs

Students learn the elements involved in residential and commercial wiring, acquiring the skills necessary to plan, layout and install wiring materials and devices common to building construction in accordance with the guidelines set forth in the National Electrical Code and in accordance with usual practices in the industry. Students will obtain a basic fundamental knowledge of DC and AC power technology motors and transformers on which to build an applied knowledge of control techniques. Prerequisites: ELE 112, ELS 124 and ELS 125; Corequisite: ELE 212

ELE 212 **Electrical Construction & Maintenance I Lab**
3 credits / 9 lab hrs

Lab component of ELE 210. Corequisite: ELE 210

ELE 222 **Electrical Construction & Maintenance II**
3 credits / 3 class hrs

Students will learn the key elements involved with commercial and industrial wiring, acquiring the skills necessary to install wiring materials and devices common to commercial and industrial construction in accordance with the National Electrical Code and in accordance with usual practices in the industry. Prerequisites: ELE 210 and ELE 212; Corequisite: ELE 223

ELE 223 **Electrical Construction & Maintenance II Lab**
3 credits / 9 lab hrs

Lab component of ELE 222. Corequisite: ELE 222

ELS 115 **Basic Electricity / Electronics**
3 credits / 3 class hrs

Examines the subject at the beginner's level. Topics include current, voltage, resistance, OHM's law, magnetism, electrical measurements, DC circuits, inductance, capacitance, AC measurements, and transformers. Corequisite: ELS 116

ELS 116 **Basic Electricity / Electronics Lab**
2 credits / 6 lab hrs

Lab component of ELS 115. Corequisite: ELS 115

ELS 119 **Introduction to Electronic Systems**
2 credits / 1 class hr / 2 lab hrs

This course will introduce students to the basic concepts required to maintain and troubleshoot electronic control systems. The course begins with a study of the relationships between current, voltage and resistance in both DC and AC systems, then progresses to a comparison of analog and digital measuring instruments. Electrical safety, as well as an introduction to components used in industrial control systems, will be presented next. The course concludes with an introduction to schematic diagrams and troubleshooting techniques used to maintain typical water and wastewater control systems.

ELS 124 **Industrial Electronics**
3 credits / 2 class hrs / 3 lab hrs

Integrates concepts learned in AC and DC circuits as they apply to industrial manufacturing equipment. It provides an introduction to industrial control systems with a focus on equipment applications. Topics include power supplies, thyristors, discrete and analog sensors and devices, opto-electronics computer-based control equipment, and industrial network communication. Lab exercises provide practical experience with shop equipment, troubleshooting circuits and reading schematics. Prerequisites: ELS 115 and ELS 116

ELS 125 **Motors & Controls**
3 credits / 2 class hrs / 3 lab hrs

Studies electric motors and how they are controlled. Units of study include: single phase motors; motor control basics; three phase motors and control specialty motors and control; power distribution and monitoring systems; and DC motors, generators and control. Laboratory exercises using real life motors and control devices help students gain practical experience with equipment they will encounter in the work environment. Prerequisites: ELS 115 and ELS
116

EMS 112 **Respiratory Emergencies**
2 credits / 23 class hrs / 22 lab hrs

This course is designed to provide students with an in depth understanding of the respiratory system. Topics will include a review of anatomy and physiology of the respiratory system, respiratory pathophysiology, and assessment and management of the respiratory patient. Students will practice basic, as well as advanced level airway management techniques and procedures. This course serves as the major fundamental foundation for Advanced EMT licensure and practice.

EMS 113 **Cardiology I**
2 credits / 30 class hrs

This course is designed to provide students with an understanding of the cardiovascular system, including conduction system of the heart, electrocardiography, 12-lead ECG, and beginning treatment of a patient presenting with cardiac related conditions. Students will demonstrate use of the ECG monitor/defibrillator including defibrillation, non-invasive pacing, and cardio version. Topics will include a review of the anatomy and physiology of the heart and circulatory system, electrophysiology, and assessment of the cardiac patient.

EMS 114 A**EMT Lab**
1 credit / 45 lab hrs

This laboratory course is designed to enhance, develop and establish student's overall patient management skill level. Subject matter is complementary to instruction provided in the Fundamentals of EMS, Respiratory Emergencies, and Cardiology I courses. Students will perform with proficiency skills such as airway management, medication administration, peripheral and intraosseous access, and patient assessment/management. This course is required before any AEMT student enters the clinical setting. Corequisites: EMS 113 and EMS 115.

EMS 115 **Fundamentals of EMS**
3 credits / 38 class hrs / 22 lab hrs

This course introduces the student to the role of the advanced life support provider. Topics covered include roles and responsibilities of the EMS professional, medical terminology, self-care, and an introduction to pathophysiology. Student's learning will include, but not be limited to, how to perform a health history and advanced level physical examination, intravenous and intraosseous cannulation, medication administration, and introductory pharmacology concepts. Prerequisite: Matriculation in the AAS or AEMT Certificate program.

EMS 116 **Emergency Medical Technician-Basic**
6 credits / 60 class hrs / 90 lab hrs

This course is designed to give students, through lectures, practical lab, and clinical experience, the entry-level knowledge and skills necessary to provide basic emergency medical care and transportation for patients who access the emergency medical system. Upon successful course completion, students are eligible to take the National Registry of Emergency Medical Technicians (NREMT) certification examinations, at the EMT level. Students will perform interventions necessary to provide patient care and transportation including patient assessment, airway management, oxygen administration, CPR, spinal motion restriction, shock management, bandaging, splinting, and medication administration. Knowledge and skills obtained at the EMT level provide the foundation for advancement to Advanced EMT and Paramedic.

EMS 122 **AEMT Clinical Externship I**
2 credits / 100 clinical hrs

This clinical course provides students with the opportunity to apply, in the hospital setting, skills and knowledge learned in the classroom, lab and simulation. Students partner with assigned preceptors at local hospitals to develop skills in but not limited to, critical decision-making, ECG interpretation, physical assessment, and advanced airway management. Hospital rotations include ER, ICU, OR, IV therapy, and various others. Students must complete the minimum number of hours and skills established by the NMCC program in order to successfully pass courses and ultimately be eligible for AEMT licensure. This is one of two required clinical courses for the AEMT program. Prerequisite: EMS 114

EMS 126 **AEMT Externship II**
2 credits / 100 clinical hrs

Building on skills learned in lab and the hospital setting, students will apply their knowledge to actual patient situations in pre-hospital settings. Students are partnered with preceptors who will assist the student in the role of an advanced-level EMS professional. Students must complete the minimum number of hours and skills established by the program and approved by CoAEMSP to be eligible for certification exams. This is one of two required clinical courses for the AEMT program. Prerequisite: EMS 114; Corequisite: EMS 122

EMS 130 **AEMT-Skills Seminar**
1 credit / 45 lab hrs

This course can serve as a refresher course for those who are currently licensed Advanced EMTs or advancing license to Paramedics, as well as students who wish to become nationally certified at the AEMT level. Students will review and practice all AEMT skills in an interactive seminar format. Multiple case studies, interactive lab sessions, and creative teaching methods are used, concluding with mandatory skills and written testing to assure mastery of topics, prior to sitting for the NREMT – AEMT exams. This is a pass/fail course. Prerequisite: EMS 114; Corequisite: EMS 126.

EMS 140 **Intro to Community Paramedicine**
1 credit (15 lecture hours)

This course introduces students to the role of the Community Paramedic provider. Various concepts will be examined that will serve as the foundation for the practice of community paramedicine. Topics explored include but are not limited to the personal safety and wellness of the CP provider, scope of practice, establishing professional boundaries, healthcare ethics, cultural competence, performing patients' needs assessment, and the role of community paramedicine in public health.

Upon completion of this course, the student will be eligible for licensure through Maine EMS at the Affiliate level.

EMS 141 **Community Paramedicine I**
1 credit (15 lecture hours)

This course is designed to build upon the knowledge base provided in the EMS 140 Intro to Community Paramedicine course to further explore and introduce the student to the expanded role of the CP provider. Course content includes but is not limited to scope of practice, mental health, geriatrics, hospice and palliative care, and nutrition. A significant portion of this course is reserved to discuss social determinate of health and the role of the community paramedic in public health.

Upon successful completion of this course with the lab course, the student will be eligible for licensure through Maine EMS at the Technician level.

EMS 142 **Community Paramedicine I Lab**
1 credit (45 lab hours)

This lab and simulation-based course allows for the practice and development of basic and intermediate level community paramedicine skills needed to deliver safe and effective care to the diverse patient populous. During this course the student will learn and demonstrate various patient screening exams, medication administration and management, as well as the monitoring and treatment of various chronic conditions.

Upon successful completion of this course with the class course above, the student will be eligible for licensure through Maine EMS at the Technician level.

EMS 205 **Medical Emergencies**
3 credits / 45 class hrs

This course explores the pathophysiology and management of selected diseases and conditions. Topics include infectious and communicable diseases, toxicology, hematology, neurologic, endocrine, allergy and anaphylaxis, renal, and gastroenterology emergencies. Prerequisites: EMS 213. This course includes completion of Advanced Medical Life Support (AMLS).

EMS 213 **Advanced Emergency Cardiovascular Care**
4 credits / 45 class hrs / 45 lab hrs

A comprehensive study of cardiac and vascular disorders. Topics include pathophysiology, advanced cardiac assessment, detection and treatment of cardiac rhythm disturbances, 12-lead ECG analysis, and treatment of cardiovascular disorders. Lecture and lab sessions include cardiac arrest management and clinical decision making. Students successfully completing this course will receive a certificate in Advanced Cardiac Life Support (ACLS). Prerequisite: EMS 130

EMS 214 **Advanced Emergency Pharmacology**
3 credits / 38 class hrs / 8 lab hrs

This course provides students with knowledge about the principles of pharmacology. It includes pharmacologic classifications, mechanisms of drug actions, pharmacokinetics, key adverse effects and drug interactions. An overview of the bodily effects of drugs is covered, as well as review of major drug categories are covered. This course provides students with knowledge, responsibilities, and accountability in the administration of medications across the lifespan. This course will also cover dosage calculations necessary for safe preparation and administration of medications. Corequisite: Matriculation into the Paramedic Certificate Program or associate degree program.

EMS 216 **Paramedic Clinical Externship I**
5 credits / 225 clinical hrs

This faculty-directed practicum gives each student the changes to develop competency in the clinical setting while working one-on-one with an experienced preceptor. Clinical rotations occur in both the hospital and field including: cardiac care units, emergency departments, operating rooms, and ambulance services to name a few. Students must complete the minimum number of skills and hours established by the program and CoAEMSP to be eligible for certification exams. This is one of three required clinical courses at the paramedic level. Corequisites: ALH 124, EMS 205, EMS 220 and EMS 222

EMS 220 **Pediatric Emergencies**
2 credits / 23 class hrs / 22 lab hrs

This course is designed to allow students to integrate pathophysiologic principles and assessment findings to formulate a field impression and implement an assessment and treatment plan for neonatal and pediatric patient. Topics will include age-specific assessment and management of respiratory, cardiac, trauma, neurological, obstetric and gynecological emergencies. The lab portion of this course includes Pediatric Advanced Life Support and Emergency Pediatric Care (EPC). (These certifications require additional fees.)

EMS 222 **Trauma Management**
3 credits / 31 class hrs / 37 lab hrs

This course covers the pathophysiology, kinematics and management of the trauma patient. Topics include, but are not limited to, multisystem trauma, burns, spinal, head, orthopedic, and internal injury, as well as current trends in trauma management. Through the lab portion of this course, students will complete a Pre-hospital Trauma Life Support (PHTLS) course. (There is an additional cost for this certification.)

EMS 226 **Paramedic Clinical Externship II**
4 credits / 170 clinical hrs

Building on the skills and knowledge presented in previous courses, this externship will allow students to continue to grow and refine advanced EMS skills and assessment. Students will spend this rotation perfecting clinical and assessment skills in a variety of settings. Students will immerse themselves in emergency ambulance response, interfacility transport ambulances, OB units, Intensive Care Units, and physician offices. Students will continue to develop leadership skills while partnered with an experienced EMS preceptor.
Students must complete the minimum number of skills and hours established by this program and CoAEMSP to be eligible for certification exams. This is one of three required clinical courses at the paramedic level. Prerequisite: EMS 216

EMS 229 **Paramedic Skills Seminar**
1 credit / 45 lab hrs

Designed as the capstone course for the paramedic education program, this course will provide students with an intense review of didactic and psychomotor experiences that simulate professional practice. Students completing this course will practice the skills necessary to successfully pass the national examinations and to become effective entry-level field practitioners. Additionally, a comprehensive review of didactic content is included. Topics include ambulance service management, concepts of lifelong learning, Maine's Paramedic Interfacility Transport Module (PIFT), quality improvement, and the ALS providers' role in the community. Students will have the opportunity to perfect assessment-based management through a case scenario approach. Utilizing both high and low fidelity simulation, the course concludes with students taking the National Registry Certification Examination. Corequisite: EMS 226

EMS 231 **Special Populations**
1 credit / 15 class hrs

This course is designed to allow students to integrate pathophysiologic principles and assessment findings to formulate a field impression and implement an assessment and treatment plan for the geriatric and psychiatric patient, as well as for the patient with special needs. Topics will include age/condition-specific assessment and management of respiratory, cardiac, trauma, neurological, and behavioral emergencies.

EMS 232 **Paramedic Clinical Capstone**
1 credit / 45 clinical hrs

Designed as the clinical capstone course for the paramedic program. Students will apply and integrate all key didactic, psychomotor, affective, and clinical constructs of the EMS program and apply it to contemporary practice in the pre-hospital setting. Students will demonstrate and exercise the ability to function as an entry- level paramedic while being guided, overseen, and evaluated by experienced paramedic preceptors. Corequisite: EMS 226

EMS 233 **EMS Operations**
1 credit / 45 lab hrs

Upon completion of this course, students will be able to utilize knowledge and skills gained to safely manage multi-casualty incidents and rescue situations; utilize air medical resources; and identify hazardous materials and other specialized incidents. Some portions of this course may take place off- campus for a better student experience.

EMS 236 **Paramedic Assessment Based Management**
1 credit /45 lab hrs

Designed to be a summative laboratory course, students will be evaluated in both the team lead and team member role in scenarios. This course serves to culminate the skills practiced and evaluated in previous courses and evaluate the student's ability to be both a team member and the clinical decision maker in given patient care scenarios. The scenario lab component provides students the contextual opportunity to demonstrate competence in the simulated environment prior to progressing to the role of Team Lead in a field clinical environment. Corequisite: Matriculation into the Paramedic Certificate Program or associate degree program.

EMS 243 **Community Paramedicine**
8 credits / 90 class hrs / 30 lab hrs

This course takes the experienced paramedic and expands upon their role into the role of community paramedic. Course content includes medical legal issues, scope of practice, financial implications, nutrition, and public health. A significant portion of this course is reserved for discussion of the social determinates of health and the role of the community paramedic in public health. Students will learn about high risk populations, health promotion and injury prevention strategies, as well as chronic disease management. Advanced physical assessment, laboratory test interpretation and bed side diagnostics are introduced. Corequisite: Matriculation in the Community Paramedicine program.

EMS 245 **Community Paramedicine Clinical**
3 credits / 90 clinical hrs

Designed to allow students to apply the skills learned in the didactic and lab courses to a variety of clinical settings under the direction of a preceptor. Clinical rotations occur at hospitals, schools, public health facilities, long-term care facilities, clinical diagnostic laboratories, primary care offices, and in a variety of other specialty areas. The goal of the clinical experience is to expose the student to a variety of roles. Corequisite: ALH 124, EMS 244

EMS 246 **Leadership in EMS**
2 credits / 30 class hrs

This course serves to provide the student with a deeper understanding of the major components and principles of a leadership role, as well as adapting to the changing role of the EMS provider. The student will learn different styles of leadership and investigate the qualities of a successful leader. Students will develop a comprehensive understanding of public relations, education, medical direction and their roles in the advancement of a stronger EMS system. Prerequisite: Current EMS licensure.

EMS 247 **Community Paramedic Seminar**
1 credit / 45 lab hrs

Designed as a capstone course, the seminar will provide the student with an intense lab experience that simulates professional practice, as well as the opportunity to present their capstone project worked on throughout the program. Additional topics covered include ambulance services management, concepts of lifelong learning, quality improvement, and the provider's role in their community. Prerequisite: EMS 245

EMS 248 **Community Paramedicine II**
4 credits (45 lecture hours/45 lab hours)

This course is designed to provide students, through lecture, lab and simulation experiences, the knowledge and skills needed to perform advanced community paramedic assessments and interventions. This course includes an intense lab experience that simulates professional practice. Students will learn about high-risk patient populations, health promotion and injury prevention strategies, chronic disease management, and community needs assessment. Students enrolled in this course will also have the opportunity to present their capstone project worked on throughout the program.

EMS 249 **Diagnostics for Community Paramedicine**
2 credits (30 lecture hours)

This course provides the student with a greater understanding of various diagnostic modalities utilized for the ongoing management of acute and subacute patient populations and chronic disease management. Students enrolled in this course will gain greater knowledge related to laboratory testing and analysis, radiographic imaging, and bedside diagnostic assessments and interventions.

EMS 250 **Pharmacology for Community Paramedicine**
2 credits (30 lecture hours)

This course provides the student with pharmacological principles and knowledge needed for the safe and effective management and administration of medications by the community paramedic provider. This course will provide an overview of the pharmacodynamics, pharmacokinetics and profiles of major medication classes utilized in chronic disease management and those common to the community paramedic patient populations.

EMS 251 **Research in Health Science**
3 credits (45 lecture hours)

The ability to assimilate, evaluate, and implement research into healthcare practices is of paramount importance for the community paramedic provider. This course will provide foundational information and ensure the student acquires methods of collecting research, reviewing research, and ultimately utilizing it to promote improved efficacy.

EMS 296 **Critical Care Emergency Medical Transport**
7 credits / 100 class hrs

This course is the nationally accepted University of Maryland-Baltimore County Critical Care Emergency Transport Program. This program is designed to prepare paramedics and nurses to function as members of a critical care transport team. Critical patients who must be transported between facilities require a different level of care from hospital or emergency field patients. Participants will gain an understanding of the special needs of critical patients during transport, become familiar with the purpose and mechanisms of hospital procedures during transport. Topics include: The Critical Care Environment, Breathing Management, Surgical Airway Management, Hemodynamic Management, Cardiac Management, Pharmacological Management, GI, GU and Renal Management, Neurological Management, Complications of Transport and Special Considerations. Students with 100% attendance will be evaluated with a written examination at the end of the course. Successful participants are issued a renewable certificate from the University of Maryland-Baltimore County (valid for three years). Prerequisites: Must be a licensed Paramedic or Registered Nurse with certifications in BLS, ACLS, ITLS/NCC/PHTLS, PALS and one year of field experience.

ENG 017 **Reading & Writing Fundamentals**
4 credits / 4 class hrs

This course is designed to help students improve their reading, vocabulary, and writing skills (including paragraph and essay development), comprehension, study and test-taking abilities. The class will cover critical reading and writing skills, main ideas, vocabulary development, supporting details, organizational patterns, study skills and strategies, and inference. We will use a wide variety of resources such as the textbook, a collection of essays, newspapers, magazines, internet websites, blogs, and books to help the student strengthen and build reading and writing basic skills. Credit from this course is not applicable towards graduation.

ENG 111 **English Composition**
3 credits / 3 class hrs

Basic writing course intended to strengthen the student's ability think logically and to write clearly. The course will cover grammar, paragraph organization, the essay and the research paper with a strong emphasis on revision.

ENG 226 **Introduction to Literature**
3 credits / 3 class hrs

An introduction to the study of literature designed to help students develop the ability to read, interpret, and criticize a variety of literary forms and to appreciate literature as a source of insight into human values. Prerequisite: ENG 111

ENG 227 **Advanced Composition**
3 credits / 3 class hrs

Students will review the writing process and the strategies for drafting, revising and editing covered in English Composition. Students will continue to work on developing the ability to critically read and analytically write papers that clearly express their ideas. Emphasis will be on primary and secondary research skills and the use of MLA and APA style documentation. Students will learn and practice the writing conventions used within their major area of study. The course will prepare students for upper-level course work in their majors, research in the workplace, and/or transfer to four-year programs. Prerequisite: ENG 111

ENG 228 **Topics in Literature**
3 credits / 3 class hrs

Close reading of texts related by topic, theme, or historical period. May be repeated for credit. Prerequisite: ENG 111

ENG 231 **Women in Literature**
3 credits / 3 class hrs

Examines and explores the role of literary expression in defining, understanding and communicating the experience of being alive and female, as it has been expressed in texts written in the English language. This course analyzes how women have used literature to claim a voice, defining and writing themselves and their experiences into existence. This course will consider the ways that race, class, ethnicity, sexuality, age, religion and physical ability inform women's struggle for understanding, self-determination and power in a world dominated by patriarchal privilege. Students will read a variety of women's perspectives that will address these issues and develop their own skills and voice in understanding, speaking and writing about women's literature. Prerequisite: ENG 111

ENG 239 **Introduction to Creative Writing**
3 credits / 3 class hrs

This course is portfolio-based and will cover three genres: fiction, poetry, and nonfiction. In each genre, students will read a great deal, up to three short works or several works by multiple poets each week. Class time will be used to write and discuss exercises, workshop, and analyze texts. Prerequisite: ENG 111

HIS 123 **U.S. History, 1500-1865**
3 credits / 3 class hrs

A survey of the political, social, economic and cultural forces that shaped American history from the beginnings of European exploration to the end of the Civil War.

HIS 125 **U.S. History, 1865 to Present**
3 credits / 3 class hrs

A survey of the political, social, economic, and cultural forces that shaped American history from the end of the Civil War until the present.

HIS 206 **American Sports History**
3 credits / 3 class hrs

This course is a survey of American sports history from the colonial era to the present. An emphasis will be placed on the role of sports in American life and how broad social and cultural changes in American society have been reflected in and by sports.

HIS 207 **Maine History**
3 credits / 3 class hrs

A survey of Maine history from the age of discovery to the present.

HIT 111 **Medical Law & Ethics**
3 credits / 3 class hrs

Provides students with a study of law and legal concepts as they apply to the practice of health information management. Emphasis is on HIPAA Privacy/Security Rule regarding privacy and confidentiality; health record documentation management and release of information practices; and use and disclosure of patient information. Other topics will include state and federal statutory regulations for legal health records, medical staff appointments, healthcare provider credentialing, healthcare risk management, physician liability, and the expanding role of medical record information and subsequent impact due to the advance of electronic health records. Issues that occur in biomedical ethics will also be presented. It will provide the language and framework for understanding more about ethics within the context of dealing with complex health information issues as well as the process that HIM professionals can use to make appropriate ethical choices and to analyze what is and is not justified from an ethical perspective. Corequisites: HIT 115, HIT 214 and BIO 211.

HIT 112 **Medical Law, Reimbursement & Delivery Systems**
3 credits / 3 class hrs

This course emphasizes three areas of health information: (1) the uses of coded data and health information in reimbursement and payment systems appropriate to healthcare settings and managed care; (2) basic health data structure, content, and standards; healthcare delivery systems and information technology systems; and (3) relevant legal compliance and ethical issues faced by clinical coders in the workplace setting. Special emphasis is placed on HIPAA compliance issues and ensuring that coders have the critical thinking skills to appropriately meet ethical and privacy issues in their workplace. Corequisites: HIT 114 and HIT 116

HIT 114 **Clinical Classification Systems I with Lab**
3 credits / 2 class hrs / 2 lab hrs

Emphasizes the principles and conventions of clinical classification systems used in today's healthcare settings. Emphasis is placed on ICD-10-CM and ICD-10-PCS. A history of nomenclatures and classifications systems is covered, as well as the relationship between coding and healthcare reimbursement. Other topics include: applicable licensing and regulatory issues relative to coded data, payment and reimbursement systems, professional ethics, content of the medical record, decision-making processes, data validity and integrity, classification systems and nomenclature, quality assessment and improvement, work and legal standards related to reimbursement, and retrieval of information. Concepts covered in the class are explored in greater detail in the coding lab. Corequisites: ALH 220 and BIO 114.

HIT 115 **Clinical Applications of Pathophysiology & Pharmacology**
3 credits / 3 class hrs

Designed to educate Allied Health students on the study of pathophysiology and general health management of disease and injuries across the human lifespan. The course will examine the fundamentals of pathophysiology as it is manifested within each body system. It will include pathogenesis etiology, clinical manifestations, current diagnostics, and pharmacological and other treatment modalities. Emphasis will be on disease terminology and abbreviations with identification of disease symptomatology, differential diagnosis and evaluation of laboratory data and drug therapy through textbook readings. It will also focus on the principles of drug action and how the use of drugs alters the disease process. Also included will be the cellular mechanisms of drug actions and the mechanisms of adverse drug effects. Prerequisite: BIO 114

HIT 116 **Clinical Classification Systems II with Lab**
3 credits / 3 class hrs / 2 lab hrs

Emphasizes the principles and conventions of the HCPCS/CPT clinical classification systems used in today's healthcare settings. Other topics in the course include applicable licensing and regulatory issues relative to coded data, payment and reimbursement systems, professional ethics, content of the medical record, decision-making processes, data validity and integrity, classification systems and nomenclature, and quality assessment and improvement. Students will be expected to apply decision making in record review for complete, accurate, and timely coding. HCPCS/CPT coding will also be practiced and applied in conjunction with ICD-10-CM for hospital ambulatory surgery, the physician's office setting and other outpatient settings. The CMS developed Prospective Payment System for ambulatory care will be reviewed. Concepts covered in the class are explored in greater detail in the coding lab. Corequisites: ALH 220 and BIO 114

HIT 214 **ICD-10-CM/PCS Coding Part II**
3 credits / 3 class hrs

Integrates and builds on knowledge and skills gained in HIT114, enhancing the skill level by coding complex clinical case studies. Reimbursement topics include coding compliance, case mix analysis, 123 severity of illness systems, coding quality monitors, coding auditing strategies, and official coding guidelines. Emphasis is placed on accurate code selection and correct sequencing of principal and secondary diagnosis as well as ICD-10-PCS procedure coding for medical documentation and reimbursement. Student learning is reinforced on diagnostic and procedure-based prospective payment systems including MS-DRGs, and APR-DRGs. Also reinforced are diagnostic coding systems including ICD-O, and DSM-5, Systemized Nomenclature of Medicine (SNOMED) and its role as a basis for the electronic health record. Prerequisites: HIT 114 and HIT 116; Corequisites: HIT 115 and HIT 216

HIT 216 **CPT Coding Part II**
3 credits / 3 class hrs

Integrates and builds on knowledge and skills gained in HIT116, enhancing the skill level by coding complex clinical case studies in the outpatient setting utilizing complex CPT code assignments. Special emphasis is placed on outpatient reimbursement issues including RUGs, PACs, RBRVs, and E/M Coding. Concepts covered in the course will be reinforced in greater detail in the coding lab. Prerequisites: HIT 114 and HIT 116; Corequisites: HIT 115 and HIT 214

HIT 219 **Professional Practical Experience**
2 credits / 3 class hrs

This course is a supervised work experience that provides students with exposure to coding practices in a hospital, physician's office, clinic or other healthcare setting with directed projects common to the typical coding tasks of a clinical coding specialist. Students are introduced to the health information process and coding procedures through observation, study and work. This experience will be a hands-on experience coding authentic patient records, whether through a field-based or virtual professional practice experience. Students must be available to complete a 60-hour internship during the semester to include actual coding time, recorded presentations and other resources made available to the student. HIT 219 cannot be taken until all other program requirements have been successfully completed.

HPB 110 **High Pressure Boiler Operator**
3 credits / 3 class hrs

Meets the education requirements necessary to take the State of Maine high-pressure boiler operator examination. Emphasis on boiler classification, design, accessories and theory of operation, as well as State of Maine boiler rules.

INS 110 **Instrumentation & Process Controls**
3 credits / 2 class hrs / 2 lab hrs

This course will introduce students to the fundamentals of process measurement and control systems. The course will begin with a study of industrial instrumentation including pressure, level, flow and analytical measurement systems. A thorough understanding of 4-20mA process signals will be provided as well as an introduction to PID process loop controllers. The course will conclude with an introduction to motor speed control concepts including configuration and troubleshooting variable frequency drive systems. Prerequisite: ELS 119

MAT 011 **Foundational Mathematics**
3 credits /3 class hrs

This course prepares the student for upper-level math courses. Credit from this course is not applicable for graduation.

MAT 115 **Business Mathematics**
3 credits / 3 class hrs

Designed to provide solid, practical and current coverage of the mathematical topics students must master to succeed in business today. Students will develop the computational and vocabulary skills necessary for retailing, marketing, accounting, business management, and finance. Topics include: interest, banking, depreciation systems, payroll, statistics, and graphs.

MAT 116 **Quantitative Reasoning**
3 credits / 3 class hrs

This survey mathematics class includes use of basic quantitative skills with fractions, decimals, and percentages; fundamentals of algebra; and the exploration of the mathematical concepts of unit analysis, personal finance, and basic statistics.

MAT 121 **Technical Mathematics**
4 credits / 4 class hrs

This applied mathematics course reviews and strengthens the student's understanding of fundamental algebra, measurement, plane geometry, solid figures and geometric constructions skills. Emphasis is placed on problem solving in the specific trade areas to prepare the student to meet the mathematical challenges that they will encounter in physics, technical lab, and field of employment.

MAT 125 **College Algebra**
3 credits / 3 class hrs

This course covers variables and symbols; scientific notation; formulas and literal equations; slope, intercepts, and equations of lines; graphs of linear and quadratic functions; graphs of linear inequalities; solving systems of linear equations; polynomials, products and factors; roots, rational exponents, and complex numbers; rational expressions; solving linear, quadratic, and higher order equations; solving linear inequalities; an introduction to exponential and logarithmic functions, and applied problem solving.

MAT 210 **Statistics**
3 credits /3 class hrs

This course is designed to develop techniques for organizing, evaluating and analyzing data. This includes frequency distributions, measures of central tendency, variation, probability, the normal and binomial distributions, and hypothesis testing.

MDA 100 **Introduction to Medical Assisting**
1 credit / 1 class hr

This course introduces the student to the healthcare industry and the medical assisting profession. Students will learn therapeutic communication skills and how to properly interact with patients and different healthcare professionals. Students will begin learning about the different healthcare records and how they work in the medical office. This is a 7-week course that will run from the beginning of the semester through week 7. Corequisites: ALH 220, BIO 114, MDA 110 and MDA 112

MDA 110 **Medical Assisting Office Procedures**
3 credits / 3 class hrs

This is an 8-week course that will start during the 7th week of the semester and go through the end of the semester. This course will assist the student in developing the skills necessary to perform effectively within the medical office. These skills will include interpersonal skills, computer and telephone techniques, patient processing, office operations, and health information management. Students will learn how to schedule patient appointments and procedures as well as how to use practice management software. Students will learn the finance part of the medical office and how to bill patients for services rendered. This course will give the student an overall look at the administrative duties required of a medical assistant. Corequisites: ALH 220, BIO 114, MDA 100 and MDA 112

MDA 112 **Medical Assisting Procedures I with Lab**
4 credits / 3 class hrs / 2 lab hrs

This course provides the basics of clinical medical assisting to include infection control, patient assessment, patient education, nutrition/ health promotion and assisting with medical emergencies that may occur in ambulatory care settings. Students will learn about different medical specialties and how to assist providers with exams that are done in those specialty departments. Students will learn the basics of pharmacology and pharmacology math to give them the skills necessary to properly administer oral medications and parenteral (injectable, excluding IV) medications. Students will learn how to properly document patient care in the medical record to comply with healthcare regulations. Corequisites: ALH 220, BIO 114, MDA 100 and MDA 110

MDA 125 **Medical Insurance and Coding**
3 credits / 3 class hrs

Focuses on understanding medical insurance and billing of the diverse medical insurances, including Blue Cross/Blue Shield, Medicare and Medicaid in the healthcare industry. Provides an overview of insurance claim procedures and legal aspects of billing. Students will learn how to do procedural and diagnostic medical coding. Provides a forum in which students strive for accuracy in completing medical insurance forms. Prerequisites: ALH 220, BIO 114, MDA 100, MDA 110 and MDA 112; Corequisites: MDA 213

MDA 213 **Medical Assisting Procedures II with Lab**
4 credits / 3 class hrs / 2 lab hrs

This course builds on the content and skills of Medical Assisting Procedures I with Lab and continues preparing students to assist in different medical specialties. Students will continue to learn clinical skills that will be used in the ambulatory care setting including: assisting with minor surgical procedures, performing EKGs, assisting with OB/GYN exams, phlebotomy, and assisting with pediatric care. This course also prepares students to complete different CLIA-waived laboratory skills that may be performed as a medical assistant. Prerequisites: ALH 220, BIO 114, MDA 100, MDA 110, and MDA 112; Corequisite: MDA 125

MDA 223 **Medical Assisting Externship**
5 credits / 1 class hr / 4 lab-clinical hrs

This is a 5-credit course that requires students to complete 165 unpaid hours of clinical externship within an ambulatory care setting. During the 165 unpaid hours, students will perform the administrative and clinical competencies that they have learned in the classroom and laboratory while under professional supervision. Upon completion of this course, students should be able to function as an entry level medical assistant. Prerequisites: ALH 220, BIO 114, and MDA 213

MDA 224 **Electronic Health Records**
3 credits / 3 class hrs

This course is designed to prepare the student to more efficiently use the computer software of an electronic health record. The course emphasizes that thorough documentation is essential for the highest reimbursement possible. Hands-on activities will provide students with transferable skills that will prepare them for success in the medical office, regardless of what software their practice uses.

NUR 100 **Nursing Program Success - First Semester Experience**
1 credit / 15 class hrs

This course is designed to equip the incoming nursing student with tools that promote success. Students will be engaged in several academic advising sessions in both individual and group formats and will be expected to complete a Personal Learning Plan, focusing on the student's strategy towards success in the nursing program. Classes will address issues such as learning styles, communication skills, study habits, time management, establishing professional collaborative relationships, test taking skills and coping strategies. This foundational course must be taken in the student's first semester of the nursing program. Corequisites: NUR 117 and NUR 128

NUR 101 **Fundamentals of Practical Nursing**
8 credits / 8 class hrs

This course introduces and examines concepts that form the foundation for the practice of nursing and the related role of the Practical Nurse. It not only examines the history and evolution of nursing, but also explores healthcare delivery systems, ethical and legal issues, safety, infection control, and documentation. Student learning will be focused on the holistic and basic human needs of individuals across the lifespan, within the framework of the nursing process. Skills and tools of communication, delegation, the role of the Practical Nurse in the nursing process, and critical thinking will be introduced and used to care for diverse, stable client(s). Corequisites: ALH 124, ENG 111, BIO 201 and NUR 106

NUR 105 **Pharmacology for the Practical Nurse**
3 credits / 3 class hrs

This course will provide Practical Nurse students with knowledge of the basic principles of pharmacology. This will cover mechanisms of safe client administration following client rights, routes and regulations. Math concepts necessary for dosage calculations will be taught. Additional items will include medication classifications, mechanisms of drug actions, key adverse effects, drug interactions, and client safety. Substance abuse and drug diversion will be addressed. Students will learn and practice the skills needed to document and safely administer oral, intra-dermal, intramuscular, subcutaneous, intravenous, and other non-oral routes for administration of medications. There is no clinical component to NUR105. Prerequisites: NUR101, NUR106 and ALH 124 Corequisites: NUR 107, NUR 109 and BIO 211

NUR 106 **Clinical Practicum I Adult/Geriatric**
3 credits / 9 lab hrs

This clinical and lab course for the Practical Nurse student allows practice and development of the basic nursing skills needed to deliver safe client care to diverse adult and geriatric clients. Clinical learning experiences occur in structured healthcare settings and are correlated with classroom instruction. Students are expected to meet the clinical guidelines and polices for the Practical Nurse program and the off-campus clinical site(s) as required by the respective facility. Prerequisite: ALH 124; Corequisites: NUR 101 and BIO 201

NUR 107 **Practical Nursing Across the Lifespan**
8 credits / 8 class hrs

Students will continue to examine the role of the Practical Nurse in the care of stable individuals and groups of clients with common, well-defined health problems from prenatal through death. Included is an introduction to the bio-psychosocial concepts of the childbearing and child-rearing family. Medical and surgical concepts across the lifespan will be introduced while examining the Practical Nurse role as part of the healthcare team. Fundamental concepts will be reinforced and used to build upon concepts related to growth and development; nutrition and diet therapy; maintenance of physical and mental health; and the prevention of illness for diverse individuals and groups across the lifespan. The Practical Nurse's role within the nursing process will be used to provide safe and effective care while meeting the holistic needs of clients. Prerequisites: NUR 101, NUR 106 and ALH 124; Corequisites: NUR 105, NUR 109 and BIO 211

NUR 108 **Clinical Practicum II Special Populations**
3 credits / 9 lab hrs

This clinical and lab course for the Practical Nurse student allows for advanced skills practice and training for the student to provide
safe and effective care for diverse clients across the lifespan. Clinical learning experiences occur in structured healthcare settings and are correlated with classroom instruction. Students are expected
to meet the clinical guidelines and policies for the Practical Nurse program and the off-campus clinical site(s) as required by the respective facility. Prerequisites: NUR 101, NUR 106 and ALH 124; Corequisites: NUR 105, NUR 107 and BIO 211

NUR 115 **Pharmacology for Nurses**
3 credits / 3 class hrs

This course discusses pharmacological principles and knowledge regarding nursing responsibilities and accountability in administering medications across the lifespan. It includes an overview of the bodily effects of drugs as well as a review of major drug categories. Pharmacological classifications, mechanisms of drug actions, pharmacological, key adverse effects, and drug interactions will be discussed. This course will continue to build on first-semester skills in performing dosage calculations necessary for the safe preparation and administration of medications. There is no clinical component to NUR 115; Corequisite: NUR 130

NUR 117 **Nutrition**
3 credits / 3 class hrs

This course provides nursing students with knowledge about fundamental concepts of nutrition across the lifespan, including the relationship of nutrition to health, necessary nutrients for healthy functioning, energy balance and fitness, food safety, and national guidelines, with applications to individuals and groups. Strategies include classroom presentations, nutritional assessments of self and case-study clients, planning of interventions, and evaluation of various nutritional approaches. There is no clinical component to NUR 117; Corequisite: NUR 128

NUR 124 **Role Transition**
1 credit / 15 class hrs (1 week)

Designed for LPNs who are entering the nursing program for semester two. The course focuses on the role change of the licensed practical nurse to that of an associate degree nurse. The role of the AD nurse as a member within the discipline of nursing, provider of care and manager of care is emphasized. The nursing process is utilized as a method to assist the learner to meet the basic, bio-psychosocial needs of individuals throughout the lifespan. Prerequisites: State of Maine LPN licensure, one or more years' work experience as a practical nurse. This is usually taught as a one-week course prior to the start of the spring semester. Note: For LPNs, this prerequisite must have been successfully completed within three years prior to acceptance into NUR 130.

NUR 128 **Foundations of Nursing**
4 credits / 4 class hrs

Introduces students to concepts that form the foundation for the practice of nursing. Student learning is focused on the basic human needs of individuals presented within the framework of the nursing process. Includes basic principles of nutrition, pharmacology, applied physiology, the aging process, and the role of the nurse which addresses ethical and legal responsibilities. Prerequisite(s): BIO 201, ENG 111 and MAT 116 (*unless admitted directly from HS, then HS biology and chemistry with lab (completed within the past 10 years or BIO114; and HS level algebra); Corequisite: NUR 100, NUR 117, NUR 129 and BIO 211

NUR 129 **Clinical Practicum I / Geriatric Population**
3 credits / 9 lab hrs

This course allows students to apply concepts covered in NUR 128 that form the foundation for the practice of nursing. Clinical experience is focused on the basic human needs of individuals presented within the framework of the nursing process. Clinical learning experiences provide an opportunity for students to develop, practice and refine basic nursing skills safely in lab, simulation and clinical settings, with a focus on older adults. Prerequisite: Current American Heart Association BLS (Health Care Provider) certification; Corequisites: ALH 124, NUR 100, NUR 117 and NUR 128

NUR 130 **Nursing Across the Lifespan I**
4 credits / 4 class hrs

Provides students with continuing opportunity to assess the bio-psychosocial aspects of individuals throughout the lifespan. Included is an introduction to the bio-psychosocial aspects of the childbearing/child-rearing family through a family-centered approach. The course includes exploration of the normal prenatal period and addresses development needs of persons of all age groups. Through the use of the nursing process, students develop the necessary knowledge and skills to provide nursing care to the childbearing/child-rearing family and to individuals throughout the lifespan experiencing alterations in meeting basic human needs. Prerequisites NUR 100, NUR 117, NUR 128, NUR 129, and NUR 124 (*if LPN); Corequisites: NUR 115, NUR 131 and PSY 101

NUR 131 **Clinical Practicum II / Across the Lifespan**
3 credits / 9 lab hrs

The clinical, lab, and simulation course for second-semester nursing students allows further development and application of intermediate nursing skills needed to deliver safe client care to individuals across the lifespan with a focus on childbearing families. Clinical learning experiences occur in structured healthcare settings and are correlated with NUR 130 classroom instruction. Prerequisites: NUR 128, NUR 129, NUR 117, BIO 201 and NUR 124 (*if LPN), current American Heart Association BLS (Health Care Provider) certification; Corequisites: NUR 130, NUR 115 and PSY 101

NUR 195 **Clinical Externship**
3 credits / 135 clinical hrs

Provides nursing students with an opportunity to develop and further refine nursing skills acquired in NUR 129 and NUR 131. This course is an elective for nursing students who have successfully completed the second semester in nursing. Enrollment may be limited based on availability. Clinical learning experiences utilize the nursing process to provide nursing care to clients in structured healthcare settings. Prerequisites: NUR 115, NUR 130, BIO 211 and PSY 101

NUR 225 **Nursing Across the Lifespan II**
5 credits / 5 class hrs

Emphasis is placed on a holistic approach to the provision of nursing care to diverse individuals throughout the lifespan experiencing common, well-defined health problems. Through the use of the nursing process as the mechanism for the delivery of nursing care, emphasis is given to the restoration and maintenance of an individual's bio-psychosocial needs. Prerequisite(s): NUR 130, NUR 131, NUR 115, BIO 211 and PSY101; Corequisite(s): NUR 228, BIO 218 and PSY 207

NUR 228 **Clinical Practicum III / Across the Lifespan**
4 credits / 12 lab hrs

Clinical learning experiences in this course allow for advanced skills in practice in lab and simulation and provision of holistic, evidence-based nursing care to diverse clients across the lifespan in a variety of settings. Clinical experiences are correlated with NUR 225 classroom instruction and promote the development of critical thinking and priority-setting while providing compassionate, age and culturally appropriate nursing care. Prerequisites: NUR 130, NUR 131, NUR 115, BIO 211 and PSY 101; Corequisites: NUR 225, BIO 218 and PSY 207

NUR 230 **Nursing Across the Lifespan III**
5 credits / 5 class hrs

Focuses on a holistic approach to the care of diverse individuals or groups of individuals throughout the lifespan who are experiencing multiple, common, well-defined health problems. Emphasizes the completion of the role change process as the student prepares to assume the full scope and legal framework of associate degree nursing practice. Students explore the impact of current issues in nursing on the role of the ADN. Prerequisites: NUR 225, NUR 228, BIO 218 and PSY 207; Corequisites: NUR 231, COM
111 and humanities elective

NUR 231 **Clinical Practicum IV / Across the Lifespan**
4 credits / 12 clinical hrs

This clinical practicum is correlated with NUR 230 classroom instruction and builds on the concepts and knowledge gained from previous nursing courses, allowing for the application of theories and concepts associated with nursing leadership, nursing research, and management of care. This practicum includes a clinical preceptorship which enables students to enhance their clinical reasoning skills and collaborate with the interprofessional healthcare team to manage and coordinate safe, quality care for clients, families, and groups. Prerequisites: NUR 225, NUR 228, BIO 218 and PSY 207; Corequisites: NUR 230, COM 111 and humanities elective

NUR 230 **Nursing Across the Lifespan III**
5 credits / 5 class hrs

Focuses on a holistic approach to the care of the diverse individuals or groups of individuals throughout the lifespan who are experiencing multiple, common, well-defined health problems. Emphasizes the completion of the role change process as the student prepares to assume the full scope and legal framework of associate degree nursing practice. Students explore the impact of current issues in nursing on the role of the ADN. Prerequisites: NUR 225, NUR 228, BIO 218 and PSY 207; Corequisites: NUR 231, COM
111 and humanities elective

NUR 231 **Clinical Practicum IV / Across the Lifespan**
4 credits / 12 clinical hrs

This clinical practicum is correlated with NUR 230 classroom instruction and builds on the concepts and knowledge gained from previous nursing courses, allowing for the application of theories and concepts associated with nursing leadership, nursing research, and management of care. This practicum includes a clinical preceptorship which enables students to enhance their clinical reasoning skills and collaborate with the interprofessional healthcare team to manage and coordinate safe, quality care for clients, families, and groups. Prerequisites: NUR 225, NUR 228, BIO 218 and PSY 207; Corequisites: NUR 230, COM 111 and humanities elective

NUT 101 **Introduction to Nutrition**
3 credits / 3 class hrs

This course provides an overview of nutrition and wellness promotion. Fundamental concepts of nutrition across the lifespan are introduced, including the relationship of nutrition to health, necessary nutrients for healthy functioning, energy balance and fitness, food safety, and national guidelines, with applications to individuals and groups. Strategies include classroom presentations, nutritional assessments of self and case-study clients, planning of interventions, and evaluation of various nutritional approaches. Self-care strategies are presented, including the use of non-pharmacologic, integrative interventions.

PHI 111 **Everyday Ethics**
3 credits / 3 class hrs

An introduction to virtue ethics and how the virtues apply to the dilemmas of everyday life.

PHI 121 **Introduction to Philosophy**
3 credits / 3 class hrs

An introduction to reading, analyzing, and discussing philosophical texts. Students will explore the principal concerns of philosophy, including the limits of our knowledge, the nature of reality, the existence of God and free will, and the relationship between the individual and society. Students will apply philosophical concepts and methods to contemporary problems in the world.

PHI 201 **Ethics**
3 credits / 3 class hrs

An introduction to morality, moral theory and moral thinking. Students will be exposed to basic moral concepts, theory, and reasoning before applying that knowledge to specific moral problems. Prerequisite: ENG 111

PHI 206 **World Religions**
3 credits / 3 class hrs

World Religions is an introduction to the world's major religions through the study of their founders, beliefs, rituals, practices, sacred texts, and sects.

PHY 150 **Physics**
4 credits / 3 class hrs / 2 lab hrs

Physics is the foundation of all sciences and technologies. This algebra/trigonometry-based physics course is designed to serve Associate of Applied Science students in trade and technical occupations. Its purpose is to acquaint the student with basic physical concepts relating to measurement, the interaction forces, work and energy, properties of fluids, thermodynamics, and power. Students gain a broad understanding through the use of unifying principles across multiple energy systems. There is an emphasis on standard units of measurement, formulae, and written and spoken language associated with these basic physical concepts. Laboratory activities add to course content and reinforce course objectives.
Prerequisites: Any 100-level math course.

PLH 101 **Plumbing Technology**
3 credits / 3 class hrs

This course will introduce the student to the fundamental principles of plumbing technology. The course stresses quality plumbing installations along with the basic knowledge of how plumbing systems function in relationship to the Maine State Plumbing Code. The course begins with safety, fundamentals of plumbing drainage, venting of the plumbing system, potable water pipe installation, subsurface drainage systems, pipe and fitting identification and several other basic principles of the art of plumbing. Common methods of pipe fitting assembly such as copper, IPS, PEX and PVC systems, drain waste and vent system fundamental and sizing, potable water fundamentals, fixture installation and plumbing service are covered.

PLH 109 **Plumbing Lab I**
3 credits / 9 lab hrs

Provides hands-on training in several areas associated with the plumbing career. Beginning with the assembly of the common piping systems including copper, IPS, PEX and PVC, students will work on installation of the 'rough-in' practices of plumbing drainage and water supplies, faucet and fixture installations and service along with basic plumbing systems. Corequisite: PLH 101

PLH 113 **Pipefitting Calculations**
3 credits / 3 class hrs

Introduces students to pipe-fitting mathematics with particular attention given to the plumbing and heating trades. Emphasis is to help the student develop a strong skill in commonly used pipe calculations. This course will particularly help candidates for the Maine plumbing journeyman or master license examination.

PLH 122 **Plumbing Code Review**
3 credits / 3 class hrs

Introduces the student to the Maine State Plumbing Code and explains each chapter in detail. Particular attention will be given to the sizing of DWV, potable and storm piping systems. This course is designed to be a preparation for the Maine Journeyman's exam.

PLH 123 **Plumbing Lab II**
3 credits / 9 lab hrs

This is a skills-based course that gives the student hands-on training in many areas of the plumbing and pipefitting trades. The majority of lab time will be used to develop skills in proper assembly and testing of potable hot and cold water lines, DWV lines, various plumbing fixtures and appliances, domestic hot water sources, and faucet installation and repair. Prerequisites: PLH 101 and PLH 109; Corequisite: PLH 122

PLH 126 **Water Pumps & Water Treatment**
2 credits / 1 class hr / 2 lab hrs

This course will introduce students to fundamentals of residential water pumps and water treatment. Review of well types, the hydrological cycle, basic operation of jet and submersible pumps, tank and pump accessories, troubleshooting, and a review of Maine laws that apply to installation of water pumps will be the major focus of the water pump portions of this course. Water treatment includes the installation of water softeners, reverse osmosis systems, Biolight systems, as well as water filtration. Maine State Well Drillers and Pump installers codes will also be covered.

PLH 209 **HVAC Controls**
2 credits / 1 class hr / 2 lab hrs

This course will introduce students to fundamental working concepts for comfort heating such as oil burner parts, warm air heating installations, basic duct work, furnace and boiler controls and wiring, combustion analysis, heating mediums with a major concentration in hot water (hydronic) heat and radiant heat installations. The topics will be hydronic (hot water) heating sources and emitters, hydronic piping arrangements, and electrical component wiring and control devices.

PLH 214 **Heating Technology I**
3 credits / 3 class hrs

This course will introduce students to fundamental concepts for comfort heating such as oil burner basics, warm air heating, fundamentals of heat, heat loss through the building envelope, calculating heat loss, combustion, heating mediums with a major concentration in hot water (hydronic) heat and radiant heat methods. The topics included are oil burners, Hydronic heating systems design and sizing, heat transfer fundamentals, heating load estimates, hydronic (hot water)heating sources and emitters, hydronic piping arrangements, and electrical component wiring and control devices. Prerequisites: PLH122, PLH 123, or instructor's permission.

PLH 216 **Propane & Natural Gas I**
3 credits / 2 class hrs / 2 lab hrs

Meets the criteria for three fuel gas licenses. Students will study basic principles and practices, appliance servicing, and installation of propane and natural gas equipment. Each section will include examination for state licensing, which is necessary for employment in the field of propane and natural gas in Maine. The coursework consists of a combination of lectures, demonstrations, homework and tests.

PLH 218 **Heating Lab I**
3 credits / 9 lab hrs

This course will introduce students to fundamental working concepts for comfort heating such as: oil burner parts, warm air heating installations, basic duct work, furnace and boiler controls and wiring, combustion analysis, heating mediums with a major concentration in hot water (hydronic) heat and radiant heat installations. The topics included will be: hydronic (hot water) heating sources and emitters, hydronic piping arrangements, and electrical component wiring and control devices. Prerequisites: PLH122, PLH 123 or instructor's permission; Corequisites: PLH 214

PLH 219 **Propane & Natural Gas II**
3 credits / 2 class hrs / 2 lab hrs

This course is a continuation of PLH 216 and meets the criteria for additional fuel gas licenses. Students will study the basic principles and practices, appliance servicing and installation of propane and natural gas equipment. Each section will include examination for state licensing which is necessary for employment in the field of propane and natural gas in Maine. Prerequisite: PLH 216

PLH 222 **Heating Technology II**
3 credits / 9 lab hrs

A continuation of PLH 214, covering the following: fuel oil and its application to domestic burners; oil tanks and tank piping; fuel units; combustion theory; chimneys and draft; commercial oil burners; combustion efficiency testing; heating control wiring; heating system design and sizing; and customer satisfaction. Lab time will also be used to properly install control wiring. Prerequisites: PLH 214 and PLH 218; Corequisite: PLH 225

PLH 225 **Maine Oil & Solid Fuel Conditioning**
credits

Introduces the student to the laws and rules that apply to all oil and solid fuel-burning appliances. National Fire Protection Association pamphlets #31 and #211, and portions of the National Electrical Code.

PLH 226 **Refrigeration & Air Conditioning**
2 credits / 1 class hr / 2 lab hrs

This course covers the fundamentals of refrigeration and air conditioning. Upon completing the course, students can test for the EPA 608 Certification. The students will be trained to safely use the tools required for the trade. Major topics discussed will be: refrigeration, heat pump installation and service, compressors, controls, refrigerants, along with hermetic systems. Considerable time will be spent on the refrigerant evacuation and re-fill and line testing.

PLH 227 **Maine Oil & Solid Fuel Code**
3 credits / 3 class hr

Introduces the student to the laws and rules that apply to all oil and solid fuel burning appliances in Maine. Discussions and lectures will be centered around the State of Maine rules book for the installation of oil and solid fuel burning appliances, National Fire Protection Association pamphlets #31 and #211, and portions of the National Electrical Code.

PMT 110 **3D Solid Modeling**
2 credits / 1 class hr / 2 lab hrs

An introductory course in designing parts and preparing basic mechanical drawings used in the machine trades industry. Students will learn the proper use of software, drafting and design techniques and the graphic presentation of mechanical components. Students will learn to understand dimensioning, orthographic projection and isometric drawing. Students will use computer software to develop manufacturing parts and drawings and use a 3D printer to print parts.

PMT 111 **CNC Mill & Lathe Operations**
4 credits / 1 class hr / 9 lab hrs

An introductory course in operating Computer Numerical Control (CNC) mills and lathes to produce a variety of machined components in work-like conditions. This course will focus on maintaining quality and safety standards; keeping records; maintaining equipment and supplies. Program training includes basic CNC operator skills, inspection, and process adjustments.

PMT 112 **CNC Mill Programming**
2 credits / 2 class hrs

Introduces the student to basic CNC Mill programming. Students will write simple programs to perform facing, contouring, and hole-making operations for typical CNC Vertical Machining Centers. Emphasis is placed on developing an understanding of typical G and M codes used in modern CNC controls. Throughout the course, students will be required to perform calculations for speeds and feeds for various tooling and machining applications.

PMT 113 **Print Reading for Machinists**
2 credits/ 2 class hrs

An introductory course in reading and understanding basic mechanical drawings in the machine trades industry. Actual industrial prints prepare the student for the real conditions found in a machine shop.

PMT 114 **CNC Lathe Programming**
2 credits / 2 class hrs

Introduces the student to basic CNC Mill programming with an emphasis on the following: coordinate system; G-Code motion commands; M-Code functions; cutting tool selection; machining conditions such as speeds, feeds, data points, and tool nose compensation.

PMT 115 **CNC Mill Setup**
1 credit / 3 lab hrs

An introductory course in the setup 3 axis CNC mills through practical application. Every aspect of machine setup is covered from selecting the starting stock to performing a first article inspection on the completed part. Students will load tools, set up work-holding fixtures, set work and tool offsets. Students will verify their setup is correct before machining by running a graphic simulation and above-part verification. They will cut the first piece and inspect their own work, adjusting offsets as necessary to produce a part within customer specifications.

PMT 117 **CNC Lathe Setup**
1 credit / 3 lab hrs

An introductory course in the setup of 2 axis CNC lathes through practical application. Every aspect of the machine setup is covered from selecting the starting stock to performing a first article inspection on the completed part. Students will load tools, set up work-holding fixtures, and set work and tool offsets. Students will verify their setup is correct before machining by running a graphic simulation and above-part verification. They will cut the first piece and inspect their own work, adjusting offsets as necessary to produce a part within customer specification.

PMT 119 **Inspection**
2 credits / 1 class hr / 3 lab hrs

Provides the student with training in geometric dimensioning & tolerancing (GD&T) interpretation and inspection, per the ASME Y14.5-2009 standard. This course also reinforces dimensional metrology practices and introduces new methods such as Coordinate Measuring Machine (CMM) and FARO Arm inspection. With the use of precise inspection equipment, students will verify part quality and document results for quality control. This course provides the student with the complete fundamentals of geometric dimensioning and tolerancing (GD&T) concepts as adopted by ANSI and published by ASME. It builds on prior knowledge of blueprints and machined parts and applies that knowledge to “geometric toleranced” drawings. Students will learn the terminology and definitions of geometric dimensioning and tolerancing and how to apply its concepts. Prerequisite: PMT 113 or instructor’s permission.

PMT 121 **CNC Mill & Lathe Programming Setup & Operations**
4 credits / 1 class hr / 9 lab hrs

An intermediate course in operating Computer Numerical Control (CNC) mills and lathes to produce a variety of machined components in work-like conditions. This course will further develop skills required to program, set up, and operate CNC mills and lathes. This course will utilize “live” work projects to provide student exposure to real-world machining applications and introduce multi-axis applications such as thread milling, 4th-axis indexing, 5th-axis indexing, external threading, and boring. Prerequisites: PMT 111, PMT 112, and PMT 114, or instructor’s permission.

PMT 122 **Mill CNC Mill & Lathe Setup & Operation I**
4 credits (1 Class/Lecture; 9 Lab/Shop)

An introductory course in setting up and operating Computer Numerical Control (CNC) mills and lathes, to produce a variety of machined components in work-like conditions. This course will focus on maintaining quality and safety standards; keeping records; and maintaining equipment and supplies. Program training includes basic CNC operator skills, setup procedures, inspection methods, and process adjustments. Prerequisite: None Corequisite: None

PMT 124 **Basic CAM for Milling**
2 credits / 1 class hr / 3 lab hrs

An entry-level course in CNC program and tool path generation for milling machine applications using CAM software. By utilizing a graphical software package to generate part programs for a CNC mill, students will learn how to create tool path using solid models. The emphasis on the course is placed on learning to use the CAM software to select tools, manipulate part geometry, and convert screen graphics into a CNC program. This course will focus on basic 2-1/2-axis milling applications. Prerequisite: PMT 112 or instructor’s permission.

PMT 126 **Basic CAM for Turning**
2 credits / 1 class hr / 3 lab hrs

An entry level course in CNC program and tool path generation for turning center applications using CAM software. By utilizing a graphical software package to generate part programs for a CNC mill, students will learn how to create tool path using solid models. The emphasis of the course is placed on learning to use the CAM software to select tools, manipulate part geometry, and convert screen graphics into a CNC program. This course will focus on basic 2-axis turning applications. Prerequisite: PMT 114 or instructor’s permission.

PMT 215 **Auxiliary Devices for CNC Mills**
3 credits / 1 class hr / 6 lab hrs

An intermediate course with a focus on setting up 4th-axis indexers, 5th-axis indexers, spindle probes, and table probes. Prerequisites: PMT 111 and 112, or instructor’s permission.

PMT 217 **Auxiliary Devices for CNC Lathe**
2 credits / 1 class hr / 3 lab hrs

An intermediate course with a focus on setting up a probe arm, tail stock, bar puller, and parts catcher. Prerequisites: PMT 111 and 114 or instructor’s permission.

PMT 222 **CNC Mill & Lathe Setup & Operation II**
4 Credit Hours (1 Class/Lecture; 9 Lab/Shop)

An intermediate course in setup and operating Computer Numerical Control (CNC) mills and lathes, to produce a variety of machined components in work-like conditions. This intermediate course will further develop the skills required to program, set up, and operate CNC mills and lathes. This course will utilize "live" work projects to provide students with exposure to real-world machining applications. Upon successful completion of the course, students will be eligible for both NIMS CNC Mill and CNC Lathe Operator Certifications exams. Prerequisite: PMT122 Corequisites: PMT112, PMT114, or Instructor's permission

POL 101 **American Government**
3 credits / 3 class hrs

Introduces the origins and development of the American system of government. Special consideration will be given to the United States Constitution, the powers and limitations of the executive, legislative and judicial branches of government, the political process and the policy-making process.

PSY 101 **General Psychology**
3 credits / 3 class hrs

Introduces the field of psychology as a study of human behavior. Through lecture and discussion in such areas as learning, human growth and development, an introduction of motivation, sensation/perception, personality, emotions, behavior disorders and self and society are presented.

PSY 207 **Developmental Psychology**
3 credits / 3 class hrs

The development of the individual is an exciting process, beginning at birth and continuing through the intricate changes of growth and aging. The study of the lifespan is also intriguing because each of us, and everyone we care about, is constantly developing. This course therefore includes the biosocial, cognitive and psychosocial domains of human development. Prerequisite: PSY 101

PSY 209 **Abnormal Psychology**
3 credits / 3 class hrs

Students will demonstrate mastery of past and current theoretical perspectives of abnormal behavior. The course will evaluate issues relating to classification, etiology, and treatment of basic abnormal behaviors identified in the diagnostic and statistical manual. Case studies will be examined as they relate to various disorders.
Prerequisite: PSY 101

SAE 117 **Occupational Safety**
1 credit / 1 class hr

This course is intended to provide a variety of training on OSHA 1910 General Industry safety and health standards to entry level workers. The class is designed to emphasize hazard identification, avoidance, control and prevention to students. Students successfully completing all of the requirements will be eligible for the 10-hour OSHA certification.

SAE 121 **Industrial Safety**
3 credits / 3 class hrs

Designed as a course to review 1910 standards, the causes of industrial and occupational accidents, and preventive measures. This includes governmental codes and regulations, ways to develop company safety and related procedures in areas such as lockout/ tag out, machine guarding, hazard communications, personal protective equipment and recordkeeping. Students successfully completing all of the requirements will be eligible for the 30-hour Outreach Program Certification card.

SES 129 **Office Procedures**
3 credits / 3 class hrs

Includes lectures, discussion and/or experience concerning office-support topics; technical and knowledge; communication, problem-solving, compilations, office-support, employment, and critical-thinking skills. A training/teaching presentation and a program-specific application project are included. Prerequisite: CIS 113.

SOC 111 **Sociology**
3 credits / 3 class hrs

Introduces students to sociology, the "science of society," and its approach to human social life. The course shows students how sociologists conduct research, and it describes the basic concepts and theories sociologists use to explain the social world.

SOC 215 **Social Issues & Problems**
3 credits / 3 class hrs

An introduction to the contemporary social issues and problems in the United States, with emphasis on the underlying causes of and competing solutions to each issue. Issues to be discussed include the environment, economics, politics, healthcare, and inequality.

SPA 101 **Elementary Spanish I**
3 credits / 3 class hrs

By using the five aspects of language learning (cultural awareness/ appreciation, speaking, listening, reading, and writing), the student will begin to attain an understanding of and ability to use the Spanish language in a culturally appropriate manner.

SPA102 **Elementary Spanish II**
3 credits / 3 class hrs

By using the five aspects of language learning (cultural awareness/ appreciation, speaking, listening, reading, and writing), the student will begin to attain an understanding of and ability to use the Spanish language in a culturally appropriate manner. Prerequisite: SPA 101 or instructor's permission

TEC 112 **Building Science I**
3 credits / 1.5 class hrs / 3 lab hrs

Introduces students to appropriate materials and methods as found in residential and light commercial construction projects. Units of instruction include: site work, concrete, foundations, masonry, framing systems, and roofing. Environmentally sustainable construction materials will be highlighted.

TEC 123 **Building Science II**
3 credits / 1.5 class hrs / 3 lab hrs

This course continues to familiarize the student with building construction materials and methods, with an emphasis on sustainable building technology. Students will have practical experience working with a variety of materials and building construction products. Heat loss analysis for a residential or light commercial building will be conducted. Prerequisite: TEC 112

TTE 251 **Trade Internship**
1 credit

Provides the student with on-the-job training at an approved worksite in an occupational field directly related to the student's major. At least 45 clock hours must be completed for 1 credit. To qualify for an internship, a student in an associate degree program must have completed 30 credits of course work, have attained a 2.5 GPA, and must be recommended by the department chair and course instructor. Before registering, students must meet with the course instructor to determine internship site and process paperwork.

TTE 252 **Trade Internship**
2 credits

Provides the student with on-the-job training at an approved worksite in an occupational field directly related to the student's major. At least 90 clock hours must be completed for 2 credits. To qualify for an internship, a student in an associate degree program must have completed 30 credits of course work, have attained a 2.5 GPA, and must be recommended by the department chair and course instructor. Before registering, students must meet with the course instructor to determine internship site and process paperwork.

TTE 253 **Trade Internship**
3 credits

Provides the student with on-the-job training at an approved worksite in an occupational field directly related to the student's major. At least 135 clock hours must be completed for 3 credits. To qualify for an internship, a student in an associate degree program must have completed30 credits of course work, have attained a 2.5 GPA, and must be recommended by the department chair and course instructor. Before registering, students must meet with the course instructor to determine internship site and process paperwork.

WEI 101 **Introduction to Welding**
3 credits / 2 class hrs / 2 lab hrs

This is an introductory welding course that helps students develop a basic knowledge of welding processes. An introduction to gas welding techniques including oxy-acetylene welding, cutting, and plasma cutting is provided. Students are also introduced to the arc welding process. Discussion of equipment and materials used is also provided. Lab activities provide practice in developing an understanding of the equipment, proper selection of the welding process determined by materials being joined, and the differences in technique necessary for welding in different positions. Safe handling of welding equipment and supplies is strongly emphasized as is overall shop safety.

WEI 103 **Welding for Automotive Technology**
3 credits / 2 class hrs / 2 lab hrs

This is an introductory welding course that helps students develop a basic knowledge of welding processes. An introduction to gas welding techniques, including oxy-acetylene welding, cutting and plasma cutting, is provided. Students also develop a basic knowledge of the gas metal arc welding (G.M.A.W.) process. Discussion of equipment and materials used is also provided. Lab activities provide practice in developing an understanding of the equipment, proper selection of the welding process determined by materials being joined, and the differences in technique necessary for welding in different positions. Safe handling of welding equipment and supplies is strongly emphasized as is overall shop safety.

WEI 113 **Thin Metals Welding**
3 credits / 2 class hrs / 2 lab hrs

Provides classroom and hands-on training in the welding skills commonly used in automotive collision repair. The course covers the proper safety, setup, and operation of oxyacetylene welding and G.M.A.W. welding equipment for welding on the metals used in the manufacturing of automobiles. Students will perform G.M.A.W. plug welding, continuous welding, and stitch welding on various metals with a concentration on the thin metal welding in the horizontal, vertical and overhead positions.
Students will perform oxyacetylene cutting, heating, brazing and welding. The course includes all elements of the welding module in I-CAR standards.

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WEI 133 **Electric Welding**
3 credits / 2 class hrs / 2 lab hrs

This course helps the student develop basic knowledge and skills necessary to the understanding of welding through a primary focus on arc welding. Discussion focuses on developing an understanding of the different arc welding processes, associated types of equipment and welding materials, and the appropriate selection of welding process as dictated by the materials being joined. Lab activities provide practice in developing basic skills in arc welding processes related to the student's chosen field. The focus is on developing an understanding of equipment operation, proper selection of welding process determined by the material being joined, and the differences in technique for welding in different positions on different thickness materials. Safe handling of equipment and supplies and overall shop safety is strongly emphasized. Prerequisite: WEI 101, or instructor's permission

WEI 135 **I-CAR Welding**
3 credits / 1.5 class hrs / 4.5 lab hrs

This course helps the student develop the basic knowledge and skills necessary to the understanding of welding through a primary focus on the I-CAR weld training. Discussion focuses on developing an understanding of the different gas metal arc welding techniques, associated types of equipment and welding materials, and the appropriate selections of welding parameters as dictated by the materials being joined. Lab activities provide practice in developing the skills needed to successfully complete the I-CAR steel G.M.A.W.
certification test WCSO3. Safe handling of equipment and supplies and overall shop safety are strongly emphasized. Prerequisite: WEI 113

WEI 136 **Gas Metal Arc Welding & Gas Tungsten Arc Welding**
3 credits / 2 class hrs / 2 lab hrs

This is an introductory welding course that helps students develop a basic knowledge of the Gas Metal Arc Welding and the Gas Tungsten Arc Welding processes. An introduction to G.M.A.W. techniques and G.T.A.W. techniques is provided. Discussion of equipment and materials used is also provided. Lab activities provide practice in developing an understanding of the equipment, proper selection of the welding process determined by materials being joined, and the differences in technique necessary for welding in different positions. Safe handling of welding equipment and supplies is strongly emphasized as is overall shop safety. Prerequisite: WEI 133, or instructor's permission

WEI 137 **Structural Welding I**
3 credits / 1.5 class hrs / 4.5 lab hrs

This course provides students with an understanding of the requirements of the American Welding Society Structural Welding Code D1.1, and A.W.S. 3 – 89 Standard for Certified Welders. The student will be given the opportunity to develop skills in the Shielded Metal Arc Welding process on 3/8 steel plate with E7018 electrodes. Prerequisite: WEI 133

WEI 138 **Structural Welding II**
3 credits / 1.5 class hrs / 4.5 lab hrs

This course provides the student with the practice time required to prepare for The American Welding Society's Structural Welder Certification. The student will be given the opportunity to further develop their skills in the shielded metal arc welding process using
E7018 electrodes. Students will work on 3/8 steel plate in the 3G and 4G positions. Safe handling of equipment, supplies and overall shop safety is strongly emphasized. Prerequisite: WEI 137

WEI 139 **Open Root Welding**
3 credits / 1.5 class hrs / 4.5 lab hrs

This course is designed to give the student the ability to develop the skills necessary to successfully complete open root welds on mild steel plate in four positions using E6010 electrodes with the shielded metal arc welding process. Safe handling of equipment, supplies and overall shop safety are strongly emphasized. Prerequisite: WEI 138

WEI 140 **Plasma Table Operation**
2 credits / 1 class hr / 2 lab hrs

Utilizes CAD-CAM tools to lay out and generate code for efficient cutting material using a CNC plasma table. Includes design, tool set-up, tool maintenance, code editing, and safe operation to create a variety of general fabrication and maintenance-related components.

WPT 110 **Safety Fundamentals for Wind Technicians**
3 credits / 2 class hrs / 3 lab hrs

Course focuses on understanding safety and risk assessment related to working with wind turbine systems. Topics include evaluation of high-angle work considerations, tower rescue systems and procedures along with related electrical safety standards. Lecture discussions and lab activities include evaluation of power industry tasks related to working with automated systems. These include risk mitigation methods such as training requirements and working procedures for electrical hazards, LOTO, confined space, elevated working surfaces, cranes, rigging and tool safety. Course references include OSHA Regulations 29 CFR 1910, 29 CFR 1926, ANSI Z359 and NFPA 70E Standards. Students may earn certifications for Competent Wind Energy Rescue and Rigging Basics upon satisfactory completion of this course. Course requirements: Basic First Aid, CPR, AED certifications and CPT physical assessment.

WPT 114 **Introduction to Wind Power Industry**
3 credits / 2 class hrs / 3 lab hrs

Students will be introduced to the wind power industry through discussions on technician skill requirements, career opportunities, latest industry trends, and challenges, along with an overview of wind turbine systems and project operations. Classroom discussions and lab activities will include review of wind data resources, wind turbine siting requirements, hands-on exercises with a variety of wind turbine systems and simulation trainers, industrial wiring practices, along with electric motor function and control. Corequisites: ELS 115 and ELS 116

WPT 119 **Wind Turbine Drive Systems**
3 credits/ 2 class hrs / 3 lab hrs

This course provides an understanding of mechanical systems utilized in wind turbine systems. Discussion topics include: mechanical drive systems, shafts and sealing devices, gear systems, and bearings. The course will also cover hydraulic principles necessary to control modern wind turbines such as pumps, actuators, fluid control devices and ancillary systems. Discussion will focus on preventative maintenance practices, which include lubrication requirements, fastener technology, component alignment and vibration testing and monitoring. Some discussions will focus on the use or preventative maintenance data analysis that may be utilized for process improvements through predictive maintenance planning.

WPT 213 **Wind Power Control Systems**
3 credits / 2 class hrs / 3 lab hrs

Considers systems utilized to control wind turbines: AC and DC motor applications, motor control system applications, automated process controls (PLCs), communication systems, remote access and related farm operations. Topics include: basics of AC & DC motor types and function, motor control system fundamentals, introduction to motor control ladder logic and applications, PLC architecture, I/O device introduction, PLC programming fundamentals and use of wind farm management tools. Course also includes an introduction to communication media fundamentals for Ethernet and optical fiber network applications. Lab exercises provide hands-on activities with basic motor and control applications, automated system applications with PLCs and motor control, introduction to PLC programming, and networking basics, along with data storage, transfer and analysis activities. Network activities include hardware assembly, cable installation and related testing equipment. Prerequisites: ELS 115 and ELS 116

WPT 214 **Wind Power Delivery Systems**
3 credits / 2 class hrs / 3 lab hrs

This course considers the elements fundamental to generating electricity and then moves that electricity to an end-user. Subjects of study include generators; converters; collection, transmission and distribution of energy; and the architecture of power electronics. Lab activities include use of electrical test instruments for circuit analysis, power quality and insulation resistance along with a variety of exercises on transformer technology and related power system operation. Prerequisites: ELS 115 and ELS 116

WPT 215 **Troubleshooting Automated Systems**
3 credits / 2 class hrs / 3 lab hrs

Course considers troubleshooting and repair of electrical, electronic, hydraulic and mechanical systems utilized to operate wind turbines, wind farm infrastructure and remote equipment operations. Topics include: use of control system information such as fault codes, operations data, and production data along with service activity reports to assist with system defect analysis and correction. Discussions also use system diagrams, schematics, manufacturer-supplied information and other resources for troubleshooting and repair activities. Lab exercises provide hands-on activities with control system assembly, troubleshooting and repair. Prerequisites: ELS 115 and ELS 116

WTT 103 **Introduction to Water Treatment Technology**
3 credits / 3 class hrs

This course is designed to introduce the students to the field of Water and Wastewater Treatment. This course will begin with a discussion of current issues in water and wastewater treatment. The course will then discuss the basics of water treatment to include water regulations, water purification, coagulation and flocculation, sedimentation, filtration, disinfection, and distribution. The course will continue with the basics of wastewater treatment to include wastewater regulations; wastewater sources and treatment; collection systems; preliminary, primary, biological, secondary, and advanced wastewater disinfection; and various solids treatment processes. This course will prepare students to succeed in subsequent program major courses outlined in the curriculum.

WTT 111 **Water Treatment I**
3 credits/ 2 class hrs / 2 lab hrs

This course will begin with a study of safe drinking water and public health protection through the operation of water treatment facilities. Topics include coagulation, flocculation, sedimentation, filtration, disinfection, corrosion control, and taste and odor control. This course will prepare students for the State of Maine DHHS Class I & II Water Treatment Operator License Exam.

WTT 113 **Water Plant Operations**
3 credits / 3 class hrs

This course is designed to introduce students to the fundamentals required to understand the regulatory requirements and the day-to-day operational processes used by water treatment plants. It will also provide an introduction into various physical and chemical processes used with the industry. This class will introduce the student to documentary and recordkeeping procedures used in the industry. This course will prepare students for the State of Maine DHHS Class I & II Water Treatment Operator License Exam.

WTT 120 **Treatment Plant Safety**
3 credits / 3 class hrs

This course is designed to introduce the students to the need for safety requirements within the water and wastewater industry. This course will begin with a discussion on safe work practices in the water and wastewater industry. This will include the following topics: hazard communication, lockout/tagout, confined space entry, respiratory protection, noise control, PPE requirements, electrical safety, laboratory safety, excavation safety, emergency response and process safety, bloodborne pathogens, and safe work practices for water and wastewater plant operators. This course will prepare students for the State of Maine DHHS Class I & II Water Treatment Operator License Exam and the Maine DEP Wastewater Treatment Plant Grade I & II Operator License Exam.

WTT 121 **Wastewater Treatment I**
3 credits / 2 class hrs / 2 lab hrs

This course will provide an introduction to the operation of wastewater treatment plants. The course will begin with a look at different aspects of wastewater treatment to include: wastewater characteristics, preliminary treatment, primary treatment, biological treatment, wastewater treatment ponds, fixed film treatment, activated sludge, nutrient removal, and disinfection. This course will prepare students for the State of Maine DEP Grade I & II Wastewater Treatment Plant Operator License Exam.

WTT 124 **Wastewater Plant Operation**
3 credits / 3 class hrs

This course is designed to introduce students to the fundamentals required to understand the regulatory requirements and the day-to-day operational processes used by wastewater treatment plants. The course will cover the following topics: laboratory procedures, computers for plant O&M, records and report writing, plant administration, review of plant O&M manuals, review of plant budgets, review of plant discharge license, and review of QA/QC testing requirements. This course will prepare students for the State of Maine DEP Grade I & II Wastewater Treatment Plant Operator License Exam.

WTT 201 **Water Distribution Systems**
3 credits / 2 class hrs / 2 lab hrs

This course will focus on municipal water distribution systems. The course will cover the following topics: water storage facilities, distribution system facilities, operation and maintenance, disinfection, safety, and management of distribution systems. This course will prepare students for the State of Maine DHHS Class I & II Water Distribution Operator License Exam. Prerequisite: WTT 111.

WTT 202 **Water Distribution Systems**
3 Credit Hours (3 Class/Lecture hours; 0 Lab/Shop

This course will focus on municipal water distribution systems. The course will cover the following topics: water storage facilities, distribution system facilities, operation and maintenance, disinfection, safety, and management of distribution systems. This course will prepare students for the State of Maine DHHS Class I & II Water Distribution Operator License Exam. Prerequisites: WTT111 Corequisite: None

WTT 205 **Wastewater Collection Systems**
3 credits/ 2 class hrs / 2 lab hrs

This course will cover wastewater collection systems for operators and managers. The topics covered will include: introduction to wastewater collection, safe procedures, inspecting and testing collection systems, pipeline cleaning methods, and underground repair and construction. This course will prepare students for the NEWEA Grade I & II Collection System Exam.

WTT206 **Wastewater Collection Systems**
3 Credit Hours (3 Class/Lecture hours; 0 Lab/Shop

This course will cover wastewater collection systems for operators and managers. The topics covered will include: introduction to wastewater collection, safe procedures, inspecting and testing collection systems, pipeline cleaning methods, and underground repair and construction. This course will prepare students for the NEWEA Grade I & II Collection System Exam. Prerequisite: None Corequisite: None

WTT 211 **Water Treatment II**
4 credits/ 3 class hrs / 2 lab hrs

This course is designed to reinforce the student's understanding of the regulatory requirements and day-to-day operational processes used in water treatment facilities. The topics covered will include: specialized treatment processes, membrane treatment processes, maintenance, and drinking water regulations. The students will perform laboratory testing, analyze testing results, as well as review documentation and recordkeeping methods. This course will prepare students for the State of Maine DHHS Water Treatment Plant Operator License Exam. Prerequisite: WTT 111.

WTT 221 **Wastewater Treatment II**
4 credits / 3 class hrs / 2 lab hrs

This course is designed to reinforce the student's understanding of the regulatory requirements and day-to-day operational processes used in wastewater treatment plants. The topics covered will include sludge digestion and solids handling, effluent discharge, reclamation and reuse, plant safety, maintenance, and administration. The students will review documentary and recordkeeping procedures. This course will prepare students for the State of Maine DEP Grade I & II Wastewater Treatment Plant Operators License Exam. Prerequisite: WTT 121.

Full-time Faculty

Jessica Bartlett
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BA, St. Lawrence University
MFA, Oregon State University

Matthew M. Beil, CCEMTP
Emergency Medical Services Faculty
EMS Paramedic Transport Certificate, Northern Maine Technical College
Critical Care Emergency Medical Certificate, University of Maryland Baltimore County

Pamela Buck
Department Chair, Trade & Technical Occupations
AAS, Vermont Technical College
BUS, University of Maine, Orono
MS, University of Southern Maine
Licensed Professional Engineer

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Diesel Hydraulics Faculty
AAS, Northern Maine Technical College
ASE Master Certified T2-T8

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Certified Medical Surgical Nurse by MSNCB
Certifications: Basic Life Support, Advanced Cardiac Life Support

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Certified Class A,B,C,D,E,T Inspection Technician
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Eric Pelkey
English Faculty
BA, University of Maine Presque Isle
MA, University of Rhode Island

David Raymond
Department Chair, Arts & Sciences
BA, University of Maine Presque Isle
MA, University of Maine
MA, California State University
Dominquez Hills Author: A Brief History of NMCC 1961-2021

Hallie Richards
Early Childhood Education Faculty
BS, University of Maine at Presque Isle
M.Ed., St. Joseph's College of Maine

Jason Sargent
Automotive Collision Repair Faculty
Diploma, Northern Maine Technical College
ASE Master Certified, B2 - B6

Michelle Soucy, MSN, RN
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AAS, Northern Maine Community College
BS, University of Maine Fort Kent

Trena Soucy
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BS, University of Maine, Orono
MS, Johns Hopkins University
Certification: Basic Life Support

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Structural Welding Faculty
Certificate, Technical Careers Institute I-CAR Steel Welding Certification

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BS, University of Maine Presque Isle
MS, Montana State University
Ed.D., Capella University

Patrick Wiley
Water Treatment Technology Faculty
Certificate, Southern Maine Technical College
BS, University of Maine
MS, Humboldt State University
Ph.D., University of California, Merced
Certificates: State of Maine Grade V Wastewater Treatment Plant Operator, New England Grade IV Wastewater Collection System Operator (C-6295), New England Grade I Wastewater Laboratory Analyst (C-5011)

Adjunct Faculty

Heather Bresett, MSN, RN
Nursing Faculty
BSN, University of Southern Maine
MSN, University of Maine, Orono

Sara Carr, BSN, RN
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Certifications: Lactation Counselor, Neonatal Resuscitation Provider, Basic Life Support, Advanced Cardiac Life Support

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AAS, Northern Maine Community College
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Ph.D., University of Connecticut

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MBA, Husson University

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Nursing Faculty
AAS, St. Petersburg Jr. College
AAS, Tampa College
BS, St. Leo College
MSN, University of Pheonix

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BSN, University of Maine Fort Kent
Certifications: Basic Life Support, Advanced Cardiac Life Support, Pediatric Advanced Life Support

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MA, University of Maine Orono
PhD, University of Maine Orono

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BA, MEd., University of Maine, Orono
MATL, University of Southern Mississippi

Joshua Patrick
Emergency Medical Services Faculty
AS, New Hampshire Technical Institute
AS, Northern Maine Community College
BASc, Siena Heights University
MPSLA, Arizona State University
Certifications: Community Paramedic, International Board of Specialty Certifications; Paramedic, National Registry of EMTs

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CCEMT-P, University of Maine Fort Kent
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State of Maine Grade 5 Wastewater Plant Operator License; State of Maine Class 2 Water Supply System Operator License

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MBA, Husson University

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AAS, Northern Maine Community College

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Simulation Operations Specialist
AAS, Northern Maine Technical College
AAS, Pittsburg Institute of Mortuary Science/Funeral Directing
Certification: Basic EMT

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BS, Bellevue University

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BSN, University of Maine Fort Kent
MSN, Brookline College
Certifications: Basic Life Support, Advanced Cardiac Life Support, Pediatric Advanced Life Support, Neonatal Resuscitation Provider

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BA, Cal State

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JMG College Success Specialist
BS, University of Maine Presque Isle
M.Ed., University of Maine

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Accountant II - Purchasing
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BS, BA, Husson University

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State of Maine Class A Driver Education Instructor License
with Commercial Vehicle Endorsement

Bruce Dube
Carpenter

Jarrod Flanders
Information Systems Specialist
AAS, Northern Maine Technical College

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College Security Coordinator
BS, University of Maine Presque Isle
MS, Husson University

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MBA, Husson University

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Administrative Coordinator Workforce Development

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Licensure: Professional Engineer

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BA, University of British Columbia
C, University of Virginia

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Title IV Coordinator
BS, University of Maine Presque Isle
M.S. Ed., University of Maine Farmington

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Student Navigator
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BSW, University of Maine Presque Isle
MS, Kaplan University

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MBA, Husson University

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Administrative Specialist III, Registration

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BA, University of Maine at Presque Isle

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Nate Kinney
Commercial Driving Academy Trainer Specialist

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Certificate, Northern Maine Community College
BS, Husson University

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MS, Husson University

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MS, Husson University

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Security Officer
AA, Northern Maine Community College

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State of Maine Class B Education Instructor License with Commercial Vehicle Endorsement

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Senior Administrative Secretary

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Information Systems Specialist
AAS, Northern Maine Community College
AA, Northern Maine Community College
AS, Southern Maine Community College

Melissa Perry
Counselor
BA, University of Maine at Presque Isle

Teila Pimental
Administrative Specialist III
AAS, Northern Maine Community College

Nicole Poulin
Admissions Specialist
AAS, Northern Maine Community College

Kord Putnam
Mechanic
AAS, Northern Maine Community College

Tammy Putnam
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AAS, Northern Maine Technical College

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AAS, Northern Maine Vocational Technical Institute
BA, University of Maine Presque Isle
MEd., Antioch University

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Student Support Career Specialist
BS, University of Maine Farmington
MS, University of Maine Farmington

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Manager of Energy & Information Systems
AAS, Northern Maine Technical College

Ann Spinney
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BM, Oberlin College
MM, Northwestern University
MS, Archives Management, Simmons School of Library and Information Science
Ph.D., Harvard University

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BS, University of Maine at Presque Isle
MBA, Husson University

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BS, University of Maine Orono
Certified Public Accountant, Certified Internal Auditor

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AA, University of Maine Fort Kent
AAS, Northern Maine Community College
BS, University of Maine Orono
MBA, Husson University

Mark Yerxa
Data Analyst
BS, University of Maine Orono

Professional Governance

The College is governed by the Maine Community College System Board of Trustees:

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Student Trustee

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Maine Department of Education

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Commissioner (Ex officio, non-voting member)
Maine Department of Labor

Maine's Community Colleges

Maine Community College System
323 State Street
Augusta, Maine 04330
(207) 287-1070

Campus Directory

Academic Affairs		
Interim Academic Dean	Eileen McDougal	768-2750
Senior Administrative Secretary	Cheri Ouellette	768-2810
Registrar	Shannon Cook	768-2791
Administrative Specialist	Crystal Hobbs	768-2787
Academic Resource Center (ARC) | E. Perrin Edmunds Library		
Assistant Dean of Learning Resources	Ann Spinney Morrison	768-2735
ARC Director	J.R. Kierstead	768-2761
Circulation Desk		768-2718
Admissions		
Director	Sarah Stackhouse	768-2782
Assistant Director	Jacqueline Martin	768-2771
Counselor	Raegyn Chavez	768-2789
Admissions Specialist	Nicole Poulin	768-2785
On-Course for College	Jennifer Donohue	768-2782
Arts & Sciences		
Department Chair	David Raymond	768-2773
NMCC Bookstore		
Manager	Kimberly Filiatreault	768-2835
Business Office		
Dean of Finance	Michael Williams	768-2712
Manager	Wendy Caverhill	768-2708
Business Technology		
Department Chair	Dwight Clayton	768-2738
Food Services		
Director	Victor Hartley	768-2716
College Store	*The Hangar*	768-2824
Continuing Education		
Assistant Dean of Continuing Education	Leah Buck	768-2768
Administrative Coordinator	Holly Grant	768-2845
Counseling Office		
Director	Johna Lovely	768-2829
Student Navigator	Ashley Hall	768-2786
Counselor	Melissa Perry	768-2747
Career Specialist	Cassie Rogeski	768-2793
Administrative Specialist	Teila Pimental	768-2839
Development & Public Affairs		
Dean of Development & Public Affairs	Griffin Goins	768-2809
Director of Marketing & Communications	Christine Nordlund Grillo	760-1122
Foundation & Events Coordinator	Angela Wardwell	760-1125
Emergency Medical Services		
Department Chair	Andrew Gagnon	768-2753
Administrative Specialist	Malerie Buck	760-1121

Campus Directory cont.

Facilities	Lee Griffin	768-2702
Manager		
Financial Aid		
Director	Brian Hall	768-2707
Assistant Director	Cheryl Lamoreau	768-2790
Houlton/Hodgdon Adult E		
Director	Elizabeth Carroll	538-3191 ex 0361
Assistant Director	Ken Ervin	531-3191 ex 0363
Administrative Assistant	Patricia Sloat	531-3191 ex 0362
Human Resources		
Manager	Lindsy LeBlanc	768-2739
Payroll Coordinator	Carol McCleary	768-2898
Nursing & Allied Health		
Department Chair	Andrew Gagnon	768-2753
Administrative Specialist	Malerie Buck	768-2718
President's Office		
Interim President	Angela Buck	768-2750
Senior Executive Assistant/CDS Project Mgr	Nicole Cote	768-2754
Residential Life		
Director	Matt Bartlett	768-2795
Security		
Manager	Peter Goheen	540-5719
Officer	George Brigham	551-5765
Officer	Patrick Michaud	760-1108
Student Services		
Dean of Students, Title IV Coordinator	Matt Grillo	768-2792
Technology		
Dean of Technology & Facilities	Barry Ingraham	768-2706
Manager of Energy & Information Systems	Robert Smith	768-2851
Information Specialist	Jarrod Flanders	
Information Specialist	Chris Perry	768-2857
Sr. Program Analyst	David Wyman	768-2722
Data Analyst	Mark Yerxa	768-2705
Senior Administrative Coordinator	Julie Edgecomb-Clark	768-2758
		768-2760
Testing Center		
Coordinator	Maura Bishop	
		768-2806
Trade & Technology Occupations		
Department Chair	Pam Buck	768-2763
Administrative Specialist	Maura Bishop	760-1123

For a more complete listing of employee phone numbers, including faculty, please see your Student Handbook or visit nmcc.edu.

Campus Map

- H Andrews Hall
- L Aroostook Hall (ARO)
- E Automotive Collision Repair (AB)
- C Christie Building (CHR)
- A Edmunds Building (EDM)
- B Mailman Trades Building (MTD)
- G Maintenance Buildings
- D Martin Building (MRT)
- M Penobscot Hall
- J Reed Dining Commons
- F Smith Wellness Center
- I Snow Hall
- K Washington Hall

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