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DEPOSITS

Classroom Deposit.................................................. $100
Housing Deposit........................................................ $100

Correction: Removed *Credited toward the student’s first semester.

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CHANGES TO CURRICULA

Program Changes/Program Name Changes:
• Computer Aided-Drafting to Engineering Design Technology
• Computer Electronics to Computer & Network Technology
• General Technology to Career Studies

Programs with Curriculum Changes:
• Building Construction
• Business Administration
• Computer & Network Technology
• Electrical Construction & Maintenance
• Liberal Studies
• Medical Assisting
• Plumbing & Heating
• Precision & Machining Technology
• Wind Power Technology

New Courses/Descriptions
• HIS206 American Sports History – Humanities Elective – 3 crs
  This course is a survey of American sport history from the colonial era to the present. 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.
• ENG226 Intro to Literature – Humanities Elective – 3 crs
  An introduction to the study of literature designed to help students develop the ability to read, interpret and criticize a variety of literary form and to appreciate literature as a source of insight into human values. Prerequisite: ENG111 English Composition
• PHI106 Ethics in the Workplace – Humanities Elective – 1 cr
  This course is a study of ethical principles and how they can be applied in the workplace.
• PHI104 Philosophy of Work – Humanities Elective – 1 cr
  Through a series of readings of poetry, literature and essays, students will study the individual and moral dimensions of work and develop a personal philosophy of work.
New Courses/Descriptions

• WPT216 Intro to SCADA Systems – 3 crs
  Considers control systems utilized with wind turbines, SCADA, wind farm infrastructure and remote access and operations. Topics include: Introduction to SCADA, control system architecture, hardware, software and protocols, network fundamentals, troubleshooting and maintenance, along with farm management tools. Other topics include optical fiber communication fundamentals, optical fiber construction, cable designs, connector assembly, network applications, installation practices, and test equipment. Lab exercises provide hands-on activities with control system hardware, typical network connections, data storage and analysis, along with component troubleshooting. Optic fiber activities include network hardware, cable installation, comparison of single mode and multi mode fiber applications, fiber terminations using connectors along with mechanical and fusion splices. Other optical fiber activities include network signal loss troubleshooting with an OTDR and power meter set.
  Pre-requisite: ELS124 Industrial Electronics

• WPT215 Troubleshooting Automated Systems – 3 crs
  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, production data along with service activity reports to assist with system defect analysis and correction. Discussions also use system diagrams, schematics manufacturers supplied information and other resources for troubleshooting and repair activities. Lab exercises provide hands-on activities with control system assembly, troubleshooting and repair.
  Pre-requisite: WPT216 Intro to SCADA Systems

• WPT110 Safety Fund for Wind Technicians – 3 crs
  Focuses on understanding of safety and risk assessment related to working with wind turbine systems. Course includes working at heights, tower rescue along with electrical safety procedures and industry practices related to NFPA 70E. The course also includes evaluation and correct use of personal protective equipment along with best industry practices related to hand tools, test equipment, mechanical systems along with safety procedures related to chemical handling, hazardous waste operations, crane operations, riggings and power bolting equipment.
  • ELS117 Basic Electricity – 4 crs
    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.
    • COE116 A+ Cert Prep – 3 crs
      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 maintaining of peripherals such as monitors, multimedia, drives, and printers, including laser. Considerable hands-on time is spent gaining troubleshooting skills using test equipment and software diagnostics. The A+ exam is the final exam for the course; the cost is approximately $86 per exam (2014 academic pricing). One exam covers core technology, and the other covers operating systems.
      • COE118 A+ Prep Lab – 3 crs
        This course is the laboratory component of COE116 A+ Cert Prep
        Co-requisite: COE116 A+ Cert Prep
        • COE119 Operating Systems Configuration Windows 8.1 – 4 crs
          Operating Systems covers the first of two exams required for Microsoft Certified Solutions Associate (MCSA): Windows 8.1 certification. Students master configuration or support for Windows 8 computers, devices, users and associated network and security resources. Those in this IT Professional career field are prepared to work with networks configured as a domain-based or peer-to-peer environment with access to the Internet and cloud services. In addition, these IT Professionals will have mastered the skills required to be a consultant, full-time desktop support technician, or IT generalist who administers Windows 8-based computers and devices as a portion of their broader technical responsibilities. Additional skills addressed, including the recent 8.1 objectives: Install and Upgrade to Windows 8, Configure Hardware and Applications, Configure Network Connectivity, Configure Access to Resources, Configure Remote Access and Mobility, Monitor and Maintain Windows Clients, and Configure Backup and Recovery Options. This is an on-line course with lab work completed on virtual machines. The Microsoft 70-687 certification exam is the final exam. Approximate cost for the exam is $150.
New Courses/Descriptions
• COE128 Advanced Operating Systems – 3 crs
  Helps prepare students for the second of two exams required for Microsoft Certified Solutions Associate (MCSA): Windows 8.1 certification. Students master configuration or support for Windows 8.1 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 8.1 based computers and devices as a portion of their broader technical responsibilities. Additional skills addressed, including the recent 8.1 objectives: Design an Installation and Application Strategy, Maintain Resource Access, Maintain Windows Clients and Devices and Manage Windows 8 Using Cloud Services and Microsoft Desktop Optimization Pack.
  Pre-requisite: COE119 Operating Systems Configurations Windows 8.1
• COE217 Installing & Configuring Servers – 4 crs
  This course prepares students for the first of a series of three exams which validate the skills and knowledge necessary to implement a core Windows Server 2012 infrastructure into an existing enterprise environment. This Microsoft Official Academic Course is mapped to the 70-410 Installing and Configuring Windows Server 2012 exam objectives. This course focuses on real skills for real jobs and prepares students to prove mastery of core services such as Active Directory and networking services. In addition, this book also covers such valuable skills as: Managing Active Directory Domain Services Objects, Automating Active Directory Domain Services Administration, Implementing Local Storage, Implementing File and Print Services, Implementing Group Policy and Implementing Server Virtualization with Hyper-V.
• COE218 Network Administration – 4 crs
  Using Microsoft Windows Server 2012 the course provides students with information covering the basics of network administration. Deploying and managing server images, implementing patch management, monitoring servers, configuring distributed file systems, configuring file services and disk encryption, configuring advanced audit polices, configuring DNS zones, configuring DNS records, configuring VPN and routing, configuring direct access, configuring a network policy server, configuring NPS policies, configuring network access protection, configuring server authentication, configuring domain controllers, maintaining active directory, configuring account policies, configuring group policy processing, configuring group policy settings, managing group policy objects and configuring group policy preferences. This course is done on-line using virtual labs. Students will need to meet, on-site, the first and last classes. The course prepares students for the Microsoft Administering Windows Server 2012 exam (70-411). Students are encouraged to take the 70-411 Microsoft certification exam upon course completion.
• COE219 Electronics for Computer Techs – 3 crs
  The Electronics for Computer Techs 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. Students 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.
• COE227 Configuring Advanced Windows Server – 4 crs
  Configuring Advanced Windows Server 2012 covers the third of three exams required for Microsoft Certified Solutions Associate (MCSA): Windows Server 2012 certification. This course will help validate the skills and knowledge necessary to administer a Windows Server 2012 Infrastructure in an enterprise environment. The three MCSA exams collectively validate the skills and knowledge necessary for implementing, managing, maintaining and provisioning services and infrastructure in a Windows Server 2012 environment. This Microsoft Official Academic Course is mapped to the 70-412 Configuring Advanced Windows Server 2012 Services exam skills, including the recent R2 objectives. This course focuses on real skills for real jobs and prepares students to provide mastery of Advanced Windows Server 2012 Services such as advanced configuring tasks necessary to deploy, manage and maintain a Windows Server 2012 infrastructure. It covers such skills as fault tolerance, certificate services and identify federation. In addition, this course also covers such valuable skills as: Implementing Advanced Network Services, Implementing Advanced File Services, Implementing Dynamic Access Control, Implementing Network Load Balancing and Implementing Failover Clustering.
  Pre-requisite: COE218 Network Administration
New Courses/Descriptions

• PLH212 Refrigeration & Air Conditioning – 2 crs –
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.
Co-requisite: ELE117 Heating and Cooling Controls

• PMM117 CAM for Milling – 2 crs
This course provides students with an understanding of how to create toolpath for parts requiring prismatic milling. It also includes an introduction to rotary axis indexing, suitable for both 4-axis milling. The student will also be introduced to the ToolStore, providing the basic knowledge required to begin adding user-specific cutting tools, stock, fixtures and setup information to the database. Students will learn how to create toolpath using solid models, focusing on toolpath creation (CAM), with most of the classroom training spent on creating toolpath using solid models, not drawing part geometry (CAD). Importing DXF<DWG & IGES and sketching wire-frame geometry are also covered, but the focus is on machining solids.
Pre-requisite: Knowledge of basic CNC machining; proficient with Microsoft Windows

• PMM119 CAM for Turning – 2 crs
The course provides students with an understanding of how to create toolpath for parts requiring 2-axis turning. The class also introduces students to the ToolStore, providing the basic knowledge required to begin adding user-specific cutting tools, stock, fixtures and setup information to the database. Students will learn how to create toolpath using solid models. Please note that this class is focused on toolpath creation (CAM), with most of the classroom training spent on creating toolpath using solid models, not drawing part geometry (CAD). Importing DXF<DWG & IGES and sketching wire-frame geometry are also covered, but the focus is on machining solids.
Pre-requisite: Knowledge of basic CNC machining; proficient with Microsoft Windows

• PMM102 Intro to CNC Operations – 2 crs
An introductory course in setting up and operating Computer Numerical Control (CNC) mills and lathes, to provide a variety of machined components. This course will focus on maintaining quality and safety standards; keeping records; maintaining equipment and supplies. Program training includes basic CNC operator skills and CNC set-up processes.

• BCT111 Framing Systems – 6 crs
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 as well as finishing techniques with pine and/or hardwood. Students will compute material lists from sketches, floor plans and scaled drawings.

• BCT121 Interior Materials and Methods – 6 crs
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 will 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.

Pre-requisite: BCT111 Framing Systems

• BCT211 Adv Framing and Finish Apps – 6 crs
This course focuses on the continued practice and use of hand and power tools needed during building construction. Emphasis will be on: understanding various house plans/sketches; floor and roof layouts; window and door installations with finish trim work; eave and rake fascia types and returns; stairs, stairwells, terminology and function; sheet rocking and dry walling and transit/elevation and site work.

Pre-requisite: BCT121 Interior Materials and Methods
New Courses/Descriptions
• BCT221 Finish Carpentry – 6 crs
This course will continue the practice and use of hand and power tools needed during building construction. Emphasis will be on understanding various building plans and sketches and material lists; window and door installation; finish trim work for windows and doors, including various moldings; kitchen cabinet and countertop construction and installation; advanced drywalling; house wraps, insulation and vapor barrier techniques; paint and finishing techniques. Students will demonstrate an understanding of building air quality, moisture control and various roof venting techniques.
Pre-requisite: BCT211 Advanced Framing & Finish Applications

New Program Outcomes for Computer & Network Technology
• Be eligible for CompTIA A+ certification
• Be eligible for CompTIA Network+ certification
• Be eligible for CompTIA Security+ certification
• Be eligible for CompTIA HealthCare IT certification
• Be eligible for CompTIA Linux+ certification
• Be eligible for Microsoft MCSA Windows 8.1 certification
• Be eligible for Microsoft MCSA Windows Server 2012 certification
• Demonstrate safe and proper use of typical tools for electronic technicians
• Properly select and use electronic diagnostic equipment
• An ability to use current techniques, skills and tools necessary for the trade
• An ability to function on teams to accomplish a common goal
• Read and comprehend electronic schematic diagrams
• Understand the mathematical relationships that govern electrical circuits
• Exhibit a high standard of ethics in the workplace
• Understand digital logic systems and numbering systems
• An ability to communicate effectively on technical subject matters
• An ability to identify, formulate and solve computer-related problems
• A recognition of the need for, and an ability to engage in lifelong learning
• Ability to install and troubleshoot system hardware
• Ability to install, configure and troubleshoot client operating systems
• Ability to install, configure and troubleshoot server operating systems
• Ability to use proper computer system and networking terminology
• Ability to troubleshoot/debug, upgrade, replace basic components, and reassemble servers and client systems
• Ability to implement Local Area Networks using both static and dynamic addressing techniques including subnetting
• Ability to install and configure domain-based networks
• Ability to perform routine repair of printers
• Write technical reports and interpret technical manuals
• Understand the natural laws of physics as they pertain to the trade
• Understand fundamental computer forensics
• Understand computer and network security

Change in Course Pre-requisites/Co-requisites – Effective Fall 2016
• NUR125 Found of Nursing; Pre-requisite: Must be a nursing major; Co-requisite: NUR115 Pharmacology for Nurses
• NUR127 Nursing Across the Lifespan I; Pre-requisite: Must be a nursing major; Co-requisite: NUR117 Nutrition
• NUR115 Pharmacology for Nurses; Pre-requisite: Must be a nursing major
• NUR117 Nutrition; Pre-requisite: Must be a nursing major
CHANGES TO FACULTY

New Full-Time Faculty:
• Ryan Drost, Math Instructor. BS, 2006, University of Maine at Presque Isle; MA, 2013, University of Houston.
• Loren Gordon, Plumbing & Heating Instructor. Maine State Master Plumbing License, Maine State Master Heating License, Maine State Solid Fuels License, and Universal Refrigeration License.

New Adjunct Faculty:
• Seanna Catron, BA 2001, Athens State University; Certificate in Technical Writing; Masters Program at University of Alabama.
• Eugene Katsman, MA Bemidji State University.
• Teri St. Pierre, BS, 1999, University of Maine at Presque Isle; MS, 2005, University of Southern Maine.

Faculty No Longer on Staff:
• Carl Allen
• Richard Duplessis
• Kim Esquibel
• Miriam Gregg - adjunct
• Ellen Michalowski - adjunct
• Tracy Rockwell - adjunct
• Javed Siddiqui - adjunct
• Kurt Soucy
• Alan St. Peter - adjunct
• Betty White - adjunct

Faculty Name Change:
• Shelli Lunney is now Shelli Good

CHANGES TO PROFESSIONAL STAFF

Title Changes to Current Staff:
• Mary Cornelio, RN, Nursing & Allied Health Department Chair
• Tom Richard, Director of Wellness Center

New Professional Staff:
• Jon Blanchard, Director of Residential Life; BA, St. Anselm College
• Wendy Caverhill, Business Department Manager; BS, Husson University; AAS, Northern Maine Community College.
• Heather Libby, Student Navigator, Maine is IT; AAS, Northern Maine Community College; BA, University of Maine at Presque Isle; MSB, Husson University.
• Colleen Rand, Business & Industry Staff; AAS, Northern Maine Community College; Medical Coding Certificate, Northern Maine Community College; BS, Husson University.
• Kerri Watson-Blaisdell, Associate Director of Development & College Relations; BA, University of Maine at Machias; MA, Communication, University of Maine at Orono.

No Longer on Staff:
• Carole Belanger-Bittle
• Leslie Jackson
• Diane Peters
Northern Maine Community College is accredited by the New England Association of Schools and Colleges, Inc. through its Commission on Institutions of Higher Education. 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, and 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. In addition, a number of college programs are certified by applicable professional organizations. 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 as prescribed by federal and/or state law on the basis of race, color, religion, national origin, sex, sexual orientation, age, disability, or marital, parental or veteran's status in specified programs and activities. Inquiries about the College's compliance with, and policies that prohibit discrimination on, these bases may be directed to:

Affirmative Action Officer and/or Maine Human Rights Commission (MHRC)
Northern Maine Community College
33 Edgemont Drive
Presque Isle, ME 04769
Telephone: 207-768-2791
Maine Relay Service: 800-457-1220
Fax: 207-768-2848
E-mail: bharris@nmcc.edu
Internet: http://www.nmcc.edu

and/or

United States Department of Education and/or Equal Employment Opportunity Commission
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/about/offices/list/ocr/index.html?src=oc

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.
MESSAGE FROM THE PRESIDENT

I invite you to get acquainted with NMCC and see how we can help you reach your goals and achieve your dreams. NMCC has been providing education and training for over fifty years and our commitment to our students and our community is at the forefront of all that we do. In our catalog, you will find the program descriptions and course information you will need. I encourage you to do more than just look under the hood, check us out at NMCC.edu. Find out not only what we offer, but how we approach our students and our community. A campus visit will provide an opportunity for you to speak with the faculty and staff members. I am proud of the work they do to help students improve their lives and am confident that after a review of our catalog and a visit with our employees, you will be excited about being part of the NMCC community.

Your education will improve your life! We welcome the opportunity to help you take the next step to a more fulfilling life.

Sincerely,

Timothy D. Crowley, President
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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 an impressive building program and has modern facilities to house its programs.

NMCC currently offers 42 full-time associate degree, advanced certificate and certificate programs. A wide range of credit and non-credit courses are also offered in the evening and during the summer term. All programs are offered to women and men, and each are encouraged to enroll in programs considered nontraditional for their gender. Qualified people with disabilities are also encouraged to apply and are provided appropriate support services.

Most programs are designed to give male and female 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 four-year institutions assist students in continuing their education.

INSTITUTIONAL ACCREDITATION

Northern Maine Community College is accredited by the New England Association of Schools and Colleges, Inc., through its Commission on Institutions of Higher Education. Accreditation of an institution by the New England Association indicates that it meets or exceeds criteria for the assessment of institutional quality periodically applied through a peer group review process. An accredited college is one that has available the necessary resources to achieve its stated purposes through appropriate educational programs, is substantially doing so, and gives reasonable evidence that it will continue to do so in the foreseeable future. Institutional integrity is also addressed through accreditation.

Accreditation by the New England Association is not partial but applies to 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.

THE MISSION OF THE COLLEGE

Northern Maine Community College provides career and transfer programs that lead to associate degrees or certificates. The students served have an opportunity to develop as individuals and to acquire the knowledge and skills necessary for employment and/or transfer to a senior college or university. The college assists in economic and human resource development by offering programs of study, courses or seminars to employed individuals, specialized training to attract business and industry, and various community-interest courses or seminars.

The following principles guide the college in fulfilling its mission.

1. Prepare students for employment in business, industry and public service.
2. Offer students access to higher education with a broad range of transfer opportunities.
3. Offer technically current and continually improving curricula and services.
4. Provide curricula that prepare individuals to be responsible and active citizens.
5. Broaden the students’ educational foundation to enable and encourage them to pursue lifelong learning.
6. Utilize knowledgeable representatives to advise the institution regarding curricula needs and program content.
7. Provide guidance and placement services to assist prospective students, enrolled students and graduates.
8. Provide developmental education opportunities.
9. Provide opportunities for students to participate in cultural, athletic and social extracurricular activities.
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 advanced certificate and certificate credentials.

NMCC PHILOSOPHY OF GENERAL EDUCATION

The NMCC faculty is dedicated to providing quality education to all students who enroll in our programs. Quality education consists of two closely related components.

First, is a firm grounding in the basics of a technical or major field of study. Students are provided with the latest knowledge in their chosen field of study in preparation for work and/or transfer to another institution of higher education.

Second, and equally important for future success in the student’s chosen field of endeavor, is a general education core that instills in the student the essential qualities of an educated person. The general education core is designed to ensure that all graduates exit the college with the tools necessary to lead thoughtful and productive lives.

To that end, the faculty has identified what they deem to be the essential knowledge, skills, and values of an educated person.

Knowledge

To begin with, all students need in-depth knowledge of a chosen field of study so they can become effective and productive workers. This includes a firm understanding of the scientific and mathematical knowledge that serves as a basis for the body of technical knowledge. In addition, the faculty recognizes that we are more than producers and consumers of goods and services; we are also citizens, members of families, and individuals who should be as concerned with civic and social responsibility as making a good life and a good living for ourselves. To that end, an educated person needs a broad-based knowledge of society and culture, an understanding of and respect for the diversity found in any given culture, and a strong sense of the past and its role in shaping the present. Only when one is educated for work and for life, will a person be able to become a truly productive citizen.

Skills

The accumulation of knowledge does not end at graduation and thus the educated person must be willing and able to engage in a lifetime of learning. The pursuit of knowledge is facilitated by certain skills and abilities that are characteristic of all educated people. An educated person has the ability to listen, read, view, write and communicate effectively; to use, locate, access, evaluate and manage data and information; to calculate and to reason mathematically; and to do so with the essential tool of the 21st century, the computer. Mastery of these skills provides one with the essential intellectual tools needed for a lifetime of learning.

Values

Finally, an educated person needs wisdom to apply his/her knowledge and skills in an ethical and just manner. An educated person is one who has developed a logical system of ethics and values and is able to apply those values and morality to everyday situations in a reasoned and rational manner. Without a sense of values and morality, the knowledge and skills acquired during one’s education might be used for immoral purposes to the detriment of all. With a strong sense of morality, an educated person feels a sense of civic and social responsibility and is able to interact with others in a moral manner. Values and morals are also essential as a basic guide to making a good life for him/herself.
Summary

In short, an educated person is one who is fully literate, able to read, write, listen, speak, and think with clarity and precision; who has a strong sense of the past and its role in shaping the present; who understands his/her role as a citizen and a member of society; who understands and is able to relate scientific and technological knowledge to the issues that affect the quality of human life on this planet; who is able to use numerical data with ease and precision; who is able to find work that is fulfilling and useful, does it to the best of his/her ability and thus contributes to the good of society; and who is able to use the aforementioned knowledge and his/her experience to find meaning and purpose in life.
Admission
ADMISSION

ADMISSION POLICY

Completion of a four-year high school program or a state high school equivalency certificate is required for admission to the associate degree and certificate programs offered at NMCC. Other admission criteria are specified in the matrix at the end of this section. A rolling admission policy affords candidates the opportunity to apply and be considered for acceptance throughout the year, but early application (9-10 months prior to the beginning of a given school year) is recommended because of competition and enrollment capacities established for each program. Some programs are subject to a competitive admission process.

All programs are offered to women and men. Students are encouraged to enroll in programs considered nontraditional for their gender. Qualified persons with disabilities are also encouraged to apply and are provided appropriate support services.

APPLICATION PROCEDURE

The following procedures constitute the admission process:

1. An NMCC application form must be submitted by a non-refundable $20 application fee.
2. A complete high school transcript, for all years attended, must also be submitted to the admission office. Current high school seniors must include grades for the ranking periods completed at the time of their application to NMCC.
3. GED/HiSET test scores must be submitted to the admission office by those who have not received a high school diploma.
4. College transcripts must be submitted to the admission office by applicants who have attended other colleges or postsecondary schools.
5. a. Placement testing, individual interviews and campus tours are required, in most cases, prior to admission notification.
   b. Prospective students, with a native language other than English, will be required to demonstrate a proficiency in the English language. The Test of English as a Foreign Language (TOEFL), administered by the National Testing Service, will be made a part of the applicant’s file. Minimum scores required; BT=85 or pBT=61.
6. Admission decisions are made as quickly as possible once an individual candidate's file is complete.
7. Accepted applicants are required to make a $100 deposit within thirty days of their acceptance notification. Students wishing on-campus housing are required to submit an additional $100 deposit to reserve space in the residential complex.

CONDITIONAL ADMISSION

Some students are admitted with conditions, including, but not limited to, an on-campus developmental studies program in reading, writing and/or mathematics. The conditions in a given applicant’s acceptance letter typically must be completed during the first semester of attendance and are removed upon successful completion of the specified requirement.

TRANSFER CREDIT

Applicants requesting transfer credit must submit their request to the admission director, preferably prior to enrollment. Courses accepted for transfer credit are not included as part of any student’s grade-point average at NMCC. Official college transcript is required.

I. The college’s policy is to accept no more than six credit hours from another institution while the student is currently enrolled in a prescribed two year program at NMCC. Determination will be made on an individual basis.

1. A student wishing to attend another institution while enrolled at NMCC must make a written request.
2. Request must be approved by the registrar.
3. The written approval and final grades are to be submitted to be recorded on the permanent transcript as transfer credit.
4. For transfer courses to be accepted, a minimum grade of C is required. Courses accepted as transfer credit are not included as part of a student's grade point average at NMCC.

II. Occupational lab credits are acceptable for up to four full semesters (usually 24 credit hours). Credit for occupational lab may be fulfilled by one or more of the following methods:
1. Successful completion of a recognized apprenticeship training program approved by the Maine State Apprenticeship Council.
2. Applicants who have successfully completed a Journeyman’s Examination may submit written application for lab credit.
3. Applicants presently enrolled or having completed in-house training in which formal apprenticeship training or examinations are not used.

III. Nursing Program Guidelines:
Individuals entering nursing and allied health programs 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 must be repeated if they were taken more than 10 years previously.

ADVANCED STANDING

-By Examination: Students may be awarded up to 15 credit hours toward the requirements of a certificate or associate degree at NMCC through the General or Subject Examinations of the College Level Examination Program (CLEP) or through the Defense Activity for Non-Traditional Education Support (DANTES) examinations. The college accepts the American Council on Education’s (ACE) recommendations on acceptable scores and credit hours for the awarding of credit by examination. Whatever the ACE recommended score (General Examination or Subject Examination) is, at the time of request, shall be the college’s minimum acceptable score for the awarding of such credit. Requests must be submitted to the dean of students.

-By Work Experience: Matriculated students may receive course credit for substantial previous work experience directly related to required courses within the curricular programs in which they are enrolled, subject to approval of the appropriate instructors, department chairperson, and academic dean. Any student seeking work experience credit must submit a detailed resume of the activities or skills exercised on the job and a letter from the employer recommending the awarding of credit; the student must then be interviewed by the department chairperson and an appropriate instructor, whose recommendation must then be acted upon by the academic dean.

SERVICES FOR STUDENTS WITH DISABILITIES

Students applying for admission to the college are encouraged to indicate a physical disability, learning disability or health problem that may require accommodations to the classroom or residential life environment. Requests for special accommodations must be submitted in writing to the director of counseling at least three weeks prior to admissions testing and/or the first day of classes each semester.

Students are also responsible for providing appropriate and current documentation from a qualified professional that supports such requests. In some cases students may be required (at their own expense) to undergo re-evaluation. Accommodations must be approved by the dean of students.

FULL-TIME, PART-TIME AND NON-DEGREE STUDENTS

Students who are admitted to a program of study at the college may choose to enroll as either full- or part-time students in any given semester.

NMCC defines a full-time student as one who enrolls for 12 credit hours or more per semester. Most agencies and programs, including financial aid, veterans’ assistance, the Social Security Commission and insurance benefits, also define a full-time course load as 12 credits per semester.

Anyone interested in taking one or more day or evening courses without enrolling in a degree program may do so by registering for the course(s) during registration periods. Course pre & co-requisites apply. Non-degree students do not need to apply for admission to the college in order to take courses.
NEW ENGLAND REGIONAL & NEW BRUNSWICK STUDENT PROGRAMS

Students who are legal residents of any New England state may be eligible for admission consideration under the New England Regional Student Program. Students in this program will pay tuition equal to 150% of applicable resident tuition.

Students admitted under the MCCS/NBCC agreement are eligible to take classes at in-state tuition rates. Not all programs are available under this agreement, and applicants must first contact the admission office at their local New Brunswick community college. All other New Brunswick residents are eligible to receive the New England Regional Program tuition rate of 150% of applicable resident tuition.

ACADEMIC SKILLS ASSESSMENT

Skills assessment is required of all applicants for admission. Performance on testing may affect a student’s acceptance into a program in the college. Results are used for appropriate placement in English, reading and mathematics courses.

IMMUNIZATION

Maine Law (22-MRSA§6359) requires that all students born after 1956 attending any public or private postsecondary institution in Maine have on file at the institution a “Certificate of Immunization” signifying that (s)he is in compliance with the above stated Maine law, as amended. Some programs will require additional medical clearance.

EARLY ADMISSION OF HIGH SCHOOL STUDENTS

High school juniors who qualify may enroll as full-time matriculated students. With the recommendation of the high school principal and guidance counselor, students can simultaneously complete high school graduation requirements and their freshman year of college. The college will consider only highly motivated students who are entering their senior year, have a strong academic background and are in the upper half of their class. Particular consideration will be paid to the students’ motivation and maturity. Applicants must follow the regular admission process with the addition of letters of recommendation from the high school principal and guidance counselor. NOTE: These students will not be eligible for federal financial aid until they receive their high school diploma or GED.

ON COURSE FOR COLLEGE

On Course for College offers high school students a portfolio of activities, including dual enrollment, concurrent enrollment, articulated credit, and defined programs of study, to enhance the transition from high school to the college setting. Many of these opportunities are funded in part or fully by the College and its secondary partners.

Under the auspices of the Carl D. Perkins Career and Technical Education (CTE) Improvement Act of 2006, NMCC works in partnership with Maine’s CTE regions and centers, their sending schools, business and industry, and communities to prepare students for success in the workplace or at the next level of learning.

Students who participate in On Course for College activities while still in high school could gain the following advantages:

- transferable college credits awarded at a significantly reduced cost to the student;
- less duplication of coursework at high school and college;
- advanced standing in his/her program of study;
- a more efficient and effective transition from high school to college.

Interested students should check with their local CTE school or the On Course for College office at 207-768-2771 for more information.
Aspirations
This program, funded by the Maine Department of Education, the Maine Community College System and the College, enables qualified Maine high school students to receive a full tuition waiver at NMCC for the first course each semester and a 50 percent tuition waiver for the second course (up to a maximum of six credits/two courses) each semester (12 credits max. annually). This applies to courses taken while simultaneously enrolled in a Maine high school.

Guidelines:
- No more than six credits per student per fall or spring semester.
- Maine HS juniors or seniors with high school recommendation.
- Parent or guardian’s approval.
- Students under the age of 18 must have a Minor Release form on file at NMCC.
- Not to be used in conjunction with or as a replacement for any other tuition reduction program (except as stated above) currently available for Maine high school students (e.g. early admission, Early College for ME, etc.).
- Student must satisfy all course prerequisite conditions, which may include completion of Accuplacer testing, and must adhere to all college rules and regulations, including attendance requirements.
- Courses available under the program are limited to those taught by direct, on-site instruction.
- Students and/or their families are responsible for costs including tuition (if class credit hours exceed program maximum), books, supplies and/or other related expenses.
- Withdrawal from or failure to complete the course may void the waiver.

Funds and course space are limited and are available on a first-come, first-qualified, first-served basis.

Dual Enrollment
Students may complete college-level coursework while in high school. Courses are taught by qualified CTE instructors with the College’s syllabus and materials. Students earn both high school and college credit for their work.

Early College for ME
Early College for ME is a college transition program of the Maine Community College System designed for high school students who are undecided about college, yet have the potential to succeed in college.

VETERAN’S SERVICES
NMCC is approved for the training of veterans, and appropriate assistance is provided through the student affairs office. The director of admissions serves as liaison to the Veterans Administration and the State of Maine’s approval agency.

MAINE NATIONAL GUARD
Members of the Maine National Guard should check with the college’s admission office regarding opportunities for tuition vouchers.
Students who are called up to active duty during a semester have the option of (1) receiving a per diem refund for the unexpired portion of the term for tuition and other refundable fees, or (2) having all tuition and course fees waived for one semester upon their return (as long as they return to school within one year of the end of their active duty). Unless otherwise requested, students will be re-admitted into the major they exited from, if available.

SENIOR CITIZENS
Senior citizens who are Maine residents and 62 years of age or older may attend the college tuition-free where course space is available. All other fees are applicable.
CONTINUING EDUCATION DIVISION

The continuing education division provides a wide variety of professional development and personal enrichment courses designed to upgrade and strengthen job skills. Seminars, non-credit courses and workshops, as well as credit courses and certificate programs tailored to meet the needs of employees in business, industry and government agencies are offered both on- and off-campus. Courses meet during the day and evening, and some Saturday courses are available. Instructors are professionals who have the combination of current expertise in their topic area and experience teaching adults.

Commercial Driving Academy

Our State of Maine licensed tractor-trailer driving school is designed to train students to become professional truck drivers. A combination of classroom and hands-on experiences will give you the skills necessary to handle a tractor-trailer safely and efficiently for a new career in one of today’s fastest growing industries. Courses are available in day or evening/weekend formats. For a listing of admission requirements or additional information about truck driver training options, call 768-2768 or visit the continuing education link on NMCC’s web-site.

Distance Learning

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. Look in the continuing education on-line courses section of the NMCC web-site for a complete listing and registration options.

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 customized training options is available by calling 768-2768.

Fees, Insurance and Policies

The costs of continuing education/contract training offerings are based upon the level of customization, enrollment, and the cost of the training materials. Insurance may also be required depending on the nature of the course.

The Continuing Education Unit

Continuing Education Units (CEUs) are awarded for non-credit courses. The CEU recognizes individual and institutional participation in non-traditional studies and special activities. The CEU meets the need for uniformity in the planning and educational experiences for technical and professional people to improve their competency and skill levels through staff development. One CEU is awarded for each ten hours of satisfactorily completed course hours.
*MCCS & NMCC recommend the following minimum Accuplacer scores for placement into related college-level courses.

<table>
<thead>
<tr>
<th>Credential</th>
<th>HS Diploma/GED</th>
<th>Academic Testing *</th>
<th>Two Years of Math</th>
<th>Accounting</th>
<th>Algebra I</th>
<th>Algebra II</th>
<th>Geometry</th>
<th>Physics</th>
<th>Chemistry</th>
<th>Biology with Lab</th>
<th>Accounting</th>
<th>4 Years of English or equivalent</th>
<th>Paramedic License</th>
<th>Value Drivers License</th>
<th>Recommendations</th>
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AD = Associate Degree  CRT = Certificate  D = Desired  R = Required
Tuition and Fees
TUITION AND FEES

TUITION

2014 - 2015

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<tbody>
<tr>
<td>Resident</td>
<td>$  90 per credit hour</td>
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<tr>
<td>New England Regional Student Program</td>
<td>$135 per credit hour</td>
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<tr>
<td><strong>New Brunswick Students</strong></td>
<td>$135 per credit hour</td>
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<tr>
<td>Non-Resident</td>
<td>$180 per credit hour</td>
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Note: For planning purposes, 16 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 student affairs office.

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 bonafide 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 for 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 he/she has 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.

BUSINESS OFFICE

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. Students with outstanding bills will be unable to receive grades, transcripts or diplomas.

DEPOSITS

Classroom Deposit........................... $100*
Housing Deposit............................ $100*

*Credited toward the student’s first semester.
FEES

ROOM & BOARD ANNUAL RATES
Double Room w/19 meals/week....... $6460
Double Room w/14 meals/week....... $5800
Double Room w/12 meals/week....... $5310
Single Room w/19 meals/week......... $7400
Single Room w/14 meals/week......... $6740
Single Room w/12 meals/week......... $6250

ADDITIONAL FEES
Registration Fee (full-time)............. $13/sem.
(part-time).............................. $11/sem.
Comprehensive Fee......................... $3/cr.hr.
Information Services Fee................ $6/cr.hr.
Course Fees (Lab)........................ $16/cr.hr.
(Non-Lab)................................ $8/cr.hr.
Student Activity Fee (full-time)........ $26/sem.
(part-time).............................. $13/sem.
Health Fee (full-time)..................... $40/sem.
(part-time).............................. $15/sem.
Health Insurance ......................... $745♦
Liability Insurance (nursing students).. $15
Liability Insurance (EMS majors)....... $61.50
Liability Insurance (ECE majors)........ $17
Orientation Fee.......................... $35♣
Graduation Fee (Seniors)................ $65
Early Cancellation Fee (Housing)....... $350

* All resident students must purchase a meal plan.
♦ Optional with proof of existing health insurance.
♣ Incoming first year students only.

Notes:
Books and supplies vary with demands of individual programs. Many trade and business programs also have additional tool or notebook computer expenses. Insurance costs are subject to change based on premium changes.

TUITION AND FEE CHANGES

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.

GRADUATION FEE

A required $65 graduation fee covers the cost of the graduate's diploma and other graduation expenses.

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.

The refund will be based on the current policy of the Maine Community College System:

For tuition and fees refunds, a student who officially withdrawals from a course(s) within six calendar days of the semester's first day of classes will receive 100 percent refund of each dropped course.

• Withdrawal between seven and 10 calendar 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 calendar days of the semester's first day of class, or for unofficial withdrawal at any time.

For room and board refunds,
• 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 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.

The financial aid award 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 pro-rata refund policy and may be obliged to repay disbursed financial aid. The total refund amount is calculated on a pro rata basis through 60 percent of the payment period (payment period is 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
DELINQUENT PAYMENT

The Maine Community College System Board of Trustees authorizes the college presidents to withhold grades, degrees, diplomas and transcripts from students for failure to pay all lawful fees and charges.

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 by the College. Student loan checks will be available for disbursement no longer than 30 calendar days from the college’s receipt of the loan(s) in accordance with U.S. Department of Education regulations.

*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

Students enrolled in an academic program that requires a laptop computer or a tablet as a classroom tool have the opportunity to purchase the device through the college with their financial aid funds. This program is subject to the availability of a local vendor(s) to participate. The computers offered will meet or exceed the college’s defined minimum system requirement specifications. All orders will be approved by the director of finance and placed by the bookstore manager.

More information on this program can be obtained by contacting the bookstore manager.

TRANSCRIPT FEE

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 student affairs office as well as on the college web-site. Students requesting a transcript must do so in writing. There is a charge of $2 for each transcript. Expedited transcript requests (processed within one working day of the request) will cost $25 per request. Facsimile transmissions will cost $10, and overnight delivery will cost $30, in addition to the expedited transcript fee.

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. Appeals may be made under 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.

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

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.

Refunds for non-credit courses are determined on an individual basis.
Financial Aid
FINANCIAL AID

PURPOSE

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 need 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 students affairs area located in the A.K. Christie Building.

HOW TO APPLY FOR AID

1. Apply for admission to the college.
2. Get a PIN # at http://www.pin.ed.gov to electronically sign FAFSA.
4. Complete NMCC CONFIDENTIAL FINANCIAL AID APPLICATION.
5. Complete and return all forms requested by the financial aid office.

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.

COLLEGE POLICY 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 which the family may have.

Education expenses which are considered a basis for establishing student need 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.

All students who are awarded financial aid are required to sign a Statement of Educational Purpose which states that all funds received will be used only for educational purposes.

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 its 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 financial need.
5. Maintain satisfactory progress in a course of study according to the standards and practices of NMCC.
6. Not owe a refund on a Pell Grant or Supplemental Grant at NMCC.
7. Not be in default on any: Federal Family Education Loan, Perkins (National/Direct Student) Loan, Stafford Loan (formerly Guaranteed Student Loan) or Unsubsidized Stafford Loan.
8. Have met legal requirements for selective service registration.
9. 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 your financial aid load. [1/2 time = 6-8 cr. hrs. in your program of study (major)/per semester; 3/4 time = 9-11 cr. hrs. in your program of study (major) per semester; Full time = 12 or more cr. hrs. 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 from the financial aid application and other documentation as required, such as the Federal Income Tax transcript of the parents and/or student. 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% of credits attempted each term (PACE). Students failing to earn 67% 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 probation or disqualification, as applicable.

Students in default on any Perkins (NDSL)/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 denied financial aid for any reason or who wishes to request a waiver of financial aid office policy has the right to petition. Petition forms are reviewed by a committee of financial aid office staff.

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 section of this catalog.
FINANCIAL AID PROGRAMS

Financial aid consists of programs which are funded and regulated by the federal and state governments. The programs are of three different kinds: grants, work 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 Grant: Pell grants range from $555 - $5,730 annually.

Federal Supplemental Educational Opportunity Grant (FSEOG): FSEOG is awarded according to a formula based on student need and generally will range from $300-$600 per academic year.

State of Maine Grants: This state and federally funded grant program provides 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 $500 to $1,000 per academic year. FAFSA must be received by May 1 for State grant.

Work

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

Federal Work-Study (FWS): 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 and 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 which is borrowed now and must be paid back after leaving school. Students with bachelor’s degrees may be eligible. Federal Direct Student Loan Programs that NMCC students may participate in include:

1. Federal Direct Subsidized Loans
2. Federal Direct Unsubsidized Loans
3. Federal Direct PLUS Loans for Parents
4. Alternative Education Loans

Students receiving loans are required to do both an entrance and an exit on-line counseling session.

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 NMCC scholarship committee evaluates applications for scholarships awarded by the Northern Maine Community College Foundation and privately sponsored scholarships offered to students currently attending or transferring to NMCC. Scholarships are available to both first year and second year students. The foundation also awards numerous grants dependent on student need.

Students may apply for these scholarships on-line through the financial aid section at my.NMCC.edu.

DISBURSEMENT OF FINANCIAL AID

See “Student Credit Balances” in the Tuition and Fees section.
VETERANS INFORMATION

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; and two for members of the Selected Reserve. The programs are described in greater detail on page 29.

Students who believe they qualify for veterans’ educational benefits should contact the student affairs office.

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

SENIOR CITIZENS

Senior citizens who are Maine residents and 62 years of age or older may attend the college tuition-free where course space is available. All other fees are applicable.

MAINE NATIVE AMERICAN TUITION WAIVER POLICY

Northern Maine Community College proudly serves all students and maintains the goal of assisting students achieve 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 and document 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 eligibility 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 a “NMCC Native American Tuition Waiver Application” to the NMCC Financial Aid Office. Once eligibility is established, re-application is not necessary.

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

Waiver Amount: The waiver is equal to 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; 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 earned one degree or two certificate programs at NMCC or up to 90 attempted credit hours at 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
STUDENT AFFAIRS

The staff of the student affairs area 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.

ADMISSION OFFICE

The admission office provides information about NMCC to prospective students and helps students throughout the admission process. It also serves those students who wish to apply for a second degree or continue studies after graduation. The office is responsible for the evaluation and granting of credit earned at other institutions by students transferring to NMCC. The office is also responsible for certifying qualified veterans for appropriate VA education benefits. (Please see the section on Admission for more information.)

CAREER PLANNING AND PLACEMENT

Career planning and placement assistance is available from several sources at NMCC. The staff in student affairs and 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 their places in the working world.

The student affairs office offers information, workshops and counseling to help students explore options and plans for their careers, while encouraging students to explore careers which have been considered nontraditional for men or women. Workshops are held each semester on such topics as resume writing, employment letters and effective interviewing skills. Student affairs also offers assistance to students to help identify their skills, interests and values in relation to career selection. Such information is important to students planning to transfer to a baccalaureate program as well as to those who will go directly to work upon graduation.

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. (Please see the Financial Aid section for more information.)

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 they may have about their records.

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. Inquires should be made to the director of counseling at 768-2747.

TRiO/Student Support Services Program

The 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), or 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 768-2747.

SUPPORT SERVICES FOR STUDENTS IN ACADEMIC JEOPARDY

Students who are on academic probation, or 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 in order that his or her academic progress can be monitored.

VETERANS, NATIONAL GUARD AND RESERVES EDUCATIONAL BENEFITS

Staff in the admissions 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 provides 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 GI 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 admissions for an explanation of program benefits and requirements.

LEARNING RESOURCES

A variety of learning resources are available at NMCC to assist students. Room for reading, research, completion of projects, academic assistance and quiet study is available in the college’s library, media center and academic success center. The library also has two group study rooms available for student use.

Academic Success Center

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

Library

The library is a welcoming and comfortable environment on campus where students, faculty, and staff meet, study, learn, and relax. The library provides physical and online collections that support the curriculum and mission of the college. Diverse resources are selected by staff that encourage academic investigation and personal growth. There are over 16,000 items in the print collection and many electronic resources that can be accessed from the library web page.

The library serves students, faculty, and staff with wireless access, downloadable audiobooks, e-books, databases, interlibrary-loan services, study carrels, two group-study rooms, twenty-one computer workstations, printers, and laptops. Information-literacy instruction is offered throughout the year, and reference assistance is available in person and online.

The library is committed to educating students 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 that information ethically and legally for research and personal purposes.
For additional information about library services, hours, staff, and policies, visit the library web page at www.nmcc.edu/pages/library.php. The library is open to the public.

RESIDENTIAL LIFE

Campus housing at NMCC includes Andrews Hall, Snow Hall, Penobscot Hall and Washington Hall. Andrews Hall houses approximately 80 students in both two-person and one-person (when space is available) rooms equipped with single beds, chests of drawers and desks. Within Snow, Penobscot & Washington Halls are suites designed for 4-5 individuals each. Each suite has 2 or 3 bedrooms, a private bathroom & common living room. All suites come furnished with bedroom and living-room furniture.

All students living on campus must purchase a 19-, 14- or 12-meal plan.

Resident rooms and suites also have cable TV and Internet access. Students must provide their own cable ready TV and personal computer.

Students may purchase campus housing on a space available basis by contacting the director of housing and residential life, who maintains a waiting list for housing availability.

Students living on campus must abide by the Student Code of Conduct, as explained in the student handbook, and the individual housing contracts agreed to when signed by both the student and the college. Violations may result in termination of the contract.

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. Contact the Dept. or Res. Life for more details and conditions.

DINING FACILITIES

Resident dining facilities are located in Reed Commons. Anyone wishing to purchase a full meal is welcomed during meal time service. A la carte food service, in addition to take-out, beverages, snacks, etc., is available in the College Store located in the Akeley Student Center.

BOOKSTORE/COLLEGE STORE

Each student is required to provide at his/her expense all necessary textbooks, equipment and supplies. The bookstore has available all the books and supplies needed for courses. Other offerings include pens, pencils, notebooks, shirts, jackets, mugs and other collegiate items. Bookstore hours will be posted. A bookstore account may be established by contacting the college business office.

Return Policy:
1. The original bookstore sales slip is required for all books brought back for exchange or refund.
2. Refunds for textbooks are allowable any time during the Add/Drop period. Books purchased after that time will be refunded only if returned within five business days of the purchase date. Other merchandise may be returned for refund within ten business days of the purchase.
3. Any item returned for refund must be in the same condition as when purchased (i.e. cellophane cannot be broken). New books, if marked, cannot be returned.
4. Refunds will be made by the method of purchase. For example, books purchased with a credit card will be refunded using the same credit card. Additionally, if books were purchased by check, the student must wait five days from the date of the student's return of the book to receive a refund.
5. Any tools, notebook computers or electronic components will not be returnable once purchased.

STUDENT HEALTH CENTER

The health center is located in the Akeley Student Center near the college store. A nurse practitioner is available for walk-in traffic or by appointment. Hours for the center are Monday - Friday from 8am - 1pm when the college is in session; however, should the health center be closed due to some unforeseen circumstance, students should seek emergency or walk-in care at The Aroostook Medical Center. The college will not assume any financial responsibility for any student’s medical costs regardless of whether or not the campus health center is closed during scheduled hours.

Students are welcome to stop in for pamphlets on all kinds of medical subjects, to have questions answered or to make appointments for
examinations. Services available include: physical exams; pap smears; breast exams; sexually transmitted disease (STD) testing and treatment; laboratory tests; smoking cessation; and treatment for routine health problems such as cholesterol, mononucleosis, strep throat, pregnancy and tuberculosis. Information and immunizations are given for measles, German measles and tetanus/diphtheria. Birth control counseling and materials are available at the health center, as is personal counseling. The health center services are available to NMCC students who have paid the health fee.

All students are required to provide immunization certifications as required by the State of Maine. For more information, contact the health center.

INSURANCE

Students must be covered by an Affordable Care Act compliant health and accident insurance. A student accident and medical insurance plan is available and required of all full-time students unless waived in writing by the student prior to September 15 of a given school year. Waiver forms may be obtained from the business office. Proof of other insurance coverage is required on the waiver.

MOTOR VEHICLES

Students have the privilege to operate motor vehicles on campus. All vehicles must be registered through the business office, and students must park in appropriately designated areas. Vehicles that have no parking permit affixed or are parked inappropriately, will be ticketed and fines will be assessed. Vehicles, like other personal property, are the sole responsibility of their owner. For the complete Parking Policy, please refer to your Student Handbook or to the college’s website.

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. Failure to operate a vehicle in a prudent manner will result in the loss of operating privileges. Any damage caused by vehicles to lawns, shrubbery, etc. will be assessed to the operator.

RECREATIONAL ACTIVITIES/FACILITIES

The student senate helps the student affairs staff plan and promote 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, mountain climbing, hiking, biking and rafting trips are some of the activities sponsored by the student senate and staff coordinators. The school’s gymnasium, tennis courts and wellness center are readily available for student use.

VARSITY ATHLETICS

Intercollegiate sports include golf, basketball and ice hockey. NMCC is a member of the United States Collegiate Athletic Association and competes in the Yankee College Conference. The golf, basketball and soccer teams compete for conference championships, while the ice hockey team competes in the Presque Isle Gentlemen’s Hockey League. All men and women are encouraged to participate. For more information, contact the director of athletics.

INTRAMURAL ATHLETICS

With the assistance of the director of athletics, NMCC promotes leadership and physical health and wellness through intramural activities. Activities may include basketball, softball, volleyball, soccer, and tennis. Other activities may be added at any time if enough interest is shown. All men and women are encouraged to participate.

STUDENT SENATE

The student senate is the governing body for all student activities and serves as the official student voice on campus. The senate is composed of at least one member from each academic area and functions under its own constitution and by-laws.
STUDENT RIGHT TO KNOW

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

ACCESSIBILITY

Facilities at NMCC are designed to be accessible by 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 special needs in the least restrictive environment. Inquiries should be directed to the dean of students or director of counseling.

*Please 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: 1) request the relevant adaptation in writing, and 2) 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. Routine accommodations provided in the past have included: special laboratory equipment, text to auditory translation, extended time, and, in some cases, recordings of lectures. However, recording of lectures is not automatically approved by some instructors; if that accommodation is necessary, it should be requested early in order to allow instructors to plan accordingly. Documentation of need should accompany the request if possible. A minimum of 30 days of lead time is suggested. Students who have never before been responsible for the details of their own lives (i.e. lived away from home or without the guidance of some adult caregiver) need to be aware of the fact that they will be assuming such responsibilities. It is important that they learn to monitor their own activities, respect the rights and privileges of fellow students, exercise self-discipline without relying on reminders from others and, perhaps most importantly, be ready to advocate for themselves and resolve various conflicts within their own peer group when appropriate.

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 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 ID CARDS

Each student will be issued a student identification card. This card must be in the student's possession to attend various school and athletic events throughout the year, to borrow materials from the library, to receive academic or restricted information from any college offices, to utilize charging privileges at the bookstore and/or the dining commons, and to access the residence halls (for students living on campus). Students requiring ID card replacement will be assessed a replacement fee.

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.
Academic Information
ACADEMIC INFORMATION

PROGRAMS OF STUDY

The mission of NMCC is to provide career and transfer programs that lead to associate degrees or certificates. Each degree 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 18 associate in applied science, two associate in science, and one associate in arts degree, as well as, 21 certificates through four academic departments: Arts & Sciences, Business Technology, 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 (A.A.S.) is intended to provide the preparation necessary for potential employment in an occupational specialty.
• The Associate in Science Degree (A.S.) 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 specific 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.

Over the last couple of years, NMCC has taken advantage of technology and begun offering a limited number of hybrid and on-line classes. A hybrid format, means that only a portion of the class is conducted online. On-campus testing is usually required, for hybrid courses. 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. On-line 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, reading 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.

Students who are taking a modular course may register for that course 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, veterans assistance, varsity athletic eligibility, Social Security Commission and insurance benefits, also consider a full-time course load to be at least 12 credits per semester.

To complete a program of study 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 minimum of three credit hours of appropriate NMCC course work must be successfully completed each academic year or an application for re-admission must be filed with the admission office.
MINIMUM RESIDENCY REQUIREMENT

All programs (AA, AAS, AS and certificate) require that a minimum of 25 percent of their major courses be completed at NMCC.

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. Each semester, during a designated registration period, students meet with their advisor and register for the next semester. 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. Students may check at the student affairs office early in their first semester to learn the name of their academic advisor. This information is also available on the student portal.

Students should monitor their own academic progress. Descriptions of specific courses are in this catalog; additional copies may be obtained in the student affairs office. Program guides which list specific course requirements for each academic program are available in student affairs or by accessing the college’s web site.

ATTENDANCE

Class attendance is the student’s responsibility. Regular attendance and punctuality at all classes is expected. 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 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

Students may add or drop a course during the first week of any semester, without penalty, but it is strongly urged that any schedule change be made only after consulting with your advisor. A student may drop any course through the 12th week of a semester and receive a grade of WP- Withdrawn Passing or WF – Withdrawn Failing. Any student dropping a class after the 12th week of the semester will receive a grade of "F" recorded and included in the calculation of the grade point average.

The Add/Drop form may be obtained from student affairs and requires signatures of the student’s advisor and course instructor and must be returned to student affairs before the deadline. Remember, dropping a course may have an adverse effect on any financial aid being received as well as graduation status. Talk with your advisor or counselor before dropping a course.

Note: Refunds of tuitions and fees will be 100% for the first 6 calendar days, 50% between 7 and 10 calendar days. No refunds will be given after the 10th calendar day of the semester. For abbreviated semesters, the above Add-Drop Policy and any associated refund will apply for the proportional equivalent in time.

OFF-CAMPUS CENTER

NMCC offers program courses at the Houlton Higher Education Center. Courses may be offered at other locations, depending upon student demand. Credit courses are organized at various times and locations on the basis of need, interest and availability of suitable facilities. Courses are offered at times which are convenient for most adult students with responsibilities of job and family. 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.

GRADING SYSTEM

Letter grades used at NMCC to evaluate academic achievement are as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>93-100</td>
<td>4.00</td>
</tr>
<tr>
<td>A-</td>
<td>90-92</td>
<td>3.67</td>
</tr>
<tr>
<td>B+</td>
<td>87-89</td>
<td>3.33</td>
</tr>
<tr>
<td>B</td>
<td>83-86</td>
<td>3.00</td>
</tr>
<tr>
<td>B-</td>
<td>80-82</td>
<td>2.67</td>
</tr>
<tr>
<td>C+</td>
<td>77-79</td>
<td>2.33</td>
</tr>
<tr>
<td>C</td>
<td>73-76</td>
<td>2.00</td>
</tr>
<tr>
<td>C-</td>
<td>70-72</td>
<td>1.67</td>
</tr>
<tr>
<td>D+</td>
<td>67-69</td>
<td>1.33</td>
</tr>
<tr>
<td>D</td>
<td>63-66</td>
<td>1.00</td>
</tr>
<tr>
<td>D-</td>
<td>60-62</td>
<td>0.67</td>
</tr>
<tr>
<td>Below 60</td>
<td></td>
<td>0.00</td>
</tr>
</tbody>
</table>

Other grade symbols:

- AF: Attendance Failure
- AP: Advanced Placement
- AU: Audit
- AW: Administrative Withdrawal
- CE: Challenge Exam
- CL: Clep Exam
- I: Incomplete
- WIP: Work In Progress
- NA: Never Attended
- P: (Pass/Fail) Passed
- E: (Pass/Fail) Failed
- QT: Qualify via Tech Prep Articulation
- R: Course Retaken, Most Recent Grade Used in GPA
- *: Course Retaken
- T: Transfer Credit
- W: Withdrew
- WE: Work Experience
- WF: Withdrew Failing
- WP: Withdrew Passing
- X: Exempt/Waived

1. 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 2.00.
2. 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 of 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 (e-mail 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, he/she should contact the chair-person of the department for the course for which the grade was submitted in order to be advised on the appeals procedure.

REPEAT COURSES

If a course is repeated, the latest grade is used to calculate the grade point average.

AUDITING COURSES

Students may audit any course in the day or evening program, provided space is available and they pay regular course costs. When a student audits a course, neither a grade or 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.

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 indicates
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 his/her program
of study. Major courses are clearly identified in the
college catalog.

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. Students are expected to perform
two hours of out of class work/study preparation
for every one hour of class time. 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 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.
Probation and dismissal standards are outlined in the
following chart:

<table>
<thead>
<tr>
<th>Students in two year (4 semester) programs:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cumulative Credit Hours Attempted</td>
</tr>
<tr>
<td>-----------------------------------</td>
</tr>
<tr>
<td>12+*</td>
</tr>
<tr>
<td>30+</td>
</tr>
<tr>
<td>45+</td>
</tr>
</tbody>
</table>

Students in one year (2 semester) programs:

<table>
<thead>
<tr>
<th>Cumulative Credit Hours Attempted</th>
<th>Cumulative GPAs Between the Following Ranges Result In:</th>
</tr>
</thead>
<tbody>
<tr>
<td>12+*</td>
<td>1.50 to 1.99</td>
</tr>
</tbody>
</table>

*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 will result in academic dismissal.

ACADEMIC DISMISAL: Students who
have been academically dismissed may appeal
to the academic dean for re-instatement 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 is required of all courses designated as major courses within the student's program of study. Students failing to achieve this standard will be unable to advance to the next higher-level class (if any) for which a sub-standard class grade is a prerequisite. The registrar will notify a student in writing that he/she has failed to meet the academic standard (2.0) for any major course. A student will be given additional opportunities to retake the major course(s), providing there is space available and he/she is otherwise maintaining satisfactory academic progress. Students majoring in nursing and some allied health programs will be allowed only one opportunity to retake a major subject. A student may request a waiver for a prerequisite course by having a discussion with the instructor of the higher level course for which the prerequisite waiver is required. The waiver must be approved by the instructor of the higher level course, the department chair, and the academic dean.

A student not attaining grades of 2.0 or higher within the major program of study should seriously consider the appropriateness of the major. The student's academic advisor, respective faculty, counselor and other members of the student affairs staff are good resources with whom students may discuss their occupational interests and aptitudes.

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:

1. Only students who have been accepted in a NMCC program will be allowed to participate in the challenge exam process.
2. 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.
3. Students intending to challenge courses must complete the application (available on the portal) and have written approval of the Department Chair prior to taking the exam. The student must take the challenge exam prior to the semester in which the course is offered.
4. The student may not retake the challenge exam.
5. In order to receive credit, the student must score 83 or better on the challenge exam.
6. The student will be charged 50% of the current tuition rate plus registration fee, and it must be paid in advance.

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

INDEPENDENT STUDY

A student with a cumulative GPA of 2.5 or higher may be eligible for a maximum of three credit hours in 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.

Requirements:

1. The student must have 30 credit hours toward his/her program of study before enrollment in the independent study.
2. The sponsoring instructor or advisor must recommend that the student pursue this course.
3. The student and sponsoring instructor will list course objectives and the evaluation process.
4. The independent study form will be approved by the department chairperson prior to the beginning of the project.
5. The sponsoring instructor will be responsible for the awarding of a grade upon the project’s completion.
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 only on a limited basis. A student who has completed a minimum of 30 credit hours with a cumulative average of 2.5 or more may be eligible for a maximum of 9 credits in 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 completion of program which would ordinarily be completed in that term.

Procedure:
1. Directed study application form must be completed by the student; the form must be signed by the participating faculty member, the student's advisor, and the academic dean. The completed form will be submitted to the registrar's office prior to the end of a semester's add/drop period.
2. No credit shall be given for any work done unless prior approval had been granted and the application has been processed according to item one (1).
3. A non-refundable fee of $100, in addition to tuition and any regular course fees, will be charged to the student for the directed study.

For more information, contact your advisor.

SECOND NMCC PROGRAM

When a student enters NMCC, he or she chooses an occupational major with the expectation of receiving a degree or certificate in that area. As a student progresses through his or her program, the instructional staff encourages the student to broaden his/her background by taking electives in separate occupational programs. These opportunities allow the student to broaden his or her area of expertise without compromising or changing his/her occupational goal or primary purpose in coming to NMCC.

The following apply:
1. If a student wants a second credential, then he or she must complete at least 15 credits beyond the requirements of the first program as well as complete all requirements for the second credential.
2. 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.
3. 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 his or her current academic advisor.

WITHDRAWAL FROM NMCC

Any student withdrawing from NMCC is expected to complete an official withdrawal form which may be obtained from the student affairs office. The student is also expected to have an exit interview. When circumstances prevent this, the student or parents should write to the dean of students explaining the reason requiring the student to leave. The date of withdrawal will be the date the student signs the withdrawal form; refunds are also established by the date the student signs the withdrawal form (see Refunds).

A grade notation of AW (Administrative Withdrawal) will be indicated on a student's academic transcript if he/she has been involuntarily separated from the college (examples: disciplinary dismissal, non-payment of bills, etc.)

ACADEMIC HONORS

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

To be selected, students must be enrolled full-time, be 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 12 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 published each summer.

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 course work 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
A copy of a student’s permanent record can be sent, at the student’s written request, to other institutions and prospective employers. Official transcripts bear the college seal and signature of the registrar and are not issued to students. Unofficial transcripts are available via the campus portal (my.nmcc.edu).

Confidentiality of Student Records
NMCC is committed to protecting students from improper disclosure of private information. The Family Educational Rights and Privacy Act of 1974, as amended, provides the following rights for students attending Northern Maine Community College.
1. The right of a student, with limitations, to inspect and review his or her educational records.
2. The right, with exceptions, to prevent disclosure to third parties of information from his or her educational records.
3. The right to withhold public disclosure of any or all items of so-called “Directory Information” by written notification to the dean of students and student affairs 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.
4. 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.

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 assure 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.

ADVANTAGE U PROGRAM
For those students who may be thinking about transferring to a baccalaureate-granting institution, the Advantage U Program can help. Students enrolled in the program will first complete NMCC’s liberal studies program and are guaranteed admission with advanced standing at the University of Maine campus of their choice. Students will work with an advisor from both NMCC and the appropriate University of Maine campus to ensure that proper coursework is completed. Contact 207-768-2829 for more information.
Academic Programs
ACADEMIC PROGRAMS

ACADEMIC DEPARTMENTS

Northern Maine Community College offers four credentials. The Associate in Arts and the Associate in Science degrees are designed primarily to prepare the student for transfer to an upper division baccalaureate degree program. The Associate in Applied Science (AAS) degree is designed to prepare students for employment in a specific career field, although many of these programs have been articulated for transfer as well. All associate-level programs are designed to be completed in two years, although this varies based on student preference and preparation.

Certificates are designed for short-term career preparation, and usually reflect the first year of an Associate in Applied Science degree. Indeed, many students pursuing certificates often continue their education into the associate-level program. Certificate programs can be completed in one year, although, as with the associate-level programs, this may vary.

Note: An individual with a felony conviction may not be able to obtain licensure in certain professions.

ARTS AND SCIENCES DEPARTMENT

The Arts and Sciences Department offers degree programs in liberal studies and early childhood education, as well as the courses that comprise the general education components for all programs. The department provides quality general education to enable students to think critically, communicate effectively, compute accurately and adapt to change appropriately. Courses are designed to complement specific technical skills and to broaden students’ educational backgrounds to meet their needs, as well as the needs of business, industry and the community. The general education core provides students with the knowledge, skills and values that are essential to an educated person.

Early Childhood Education

NMCC’s 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. It also provides transfer opportunities to four-year institutions. The certificate program provides the training needed for entry-level positions and meets the more immediate need for 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 Child Development Assistant (CDA) credential.

Graduates will find employment opportunities in child care centers, summer and day camps, pre-school programs, public schools, recreational centers, one-on-one aide positions, and other agencies that serve children.

Liberal Studies

Liberal studies is an associate in arts degree designed for students whose educational goal is to transfer to a four-year school to earn a Bachelor’s degree or for students who are undecided about their educational or career goals. This flexible degree program is designed to help students complete their general education core requirements before continuing their education in a four-year degree program or in preparation for transfer into one of NMCC’s technical or occupational degree programs.

Liberal Studies students may choose to enroll in the Advantage U Program which facilitates the transfer from NMCC to schools in the University of Maine System. Students will be connected with an advisor at the appropriate University of Maine System campus while attending NMCC. The advisor will help the student select courses which are most appropriate to the program curriculum.

Graduates of the Liberal Studies program will gain a strong foundation in the traditional disciplines of the liberal arts (math, science, social science and humanities). Through this carefully designed program, students will gain the knowledge, skills, and values that are essential for work and a lifetime of 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, and office administration fields. In addition, the students’ preparation allows for upward academic mobility when they wish to transfer credit to a number of baccalaureate-granting colleges and universities.

Classroom learning experiences, provided by the use of laptop computers, 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. In addition, general education courses are an important part of the students’ 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 a variety of activities including involvement in professional organizations, attendance at workshops and seminars, and working in their respective field.

The 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.

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, regulator 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 our 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 then 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. The program continually strives to maintain relevance and a high level of quality throughout the course offerings. Instructors are experienced in the topic area(s) they teach. With their strong business and industry backgrounds, they are able to blend theory and practice in a unique, meaningful way.

Graduates will be qualified for employment as accounting clerks, loan officers, entry level managers, federal and state 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 then transfer, as an advanced student, into a four year program.
Entrepreneurship

The entrepreneurship certificate level 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 can lead to economic self-sufficiency. Self-employment provides people and their families with the potential to create and manage businesses in which they function as the employer or boss, rather than merely being an employee. Graduates who want to expand their business management skills further can go on to complete the business administration associate degree program at NMCC. 30 of the 33 credits earned in the entrepreneurship certificate will apply toward an AAS in business administration.

General Technology - Business Option

General technology is an associate degree program which provides highly individualized and flexible programming to meet the needs of students with significant work and learning experiences whose educational and/or occupational goals cannot be met by the other programs of the college.

Objectives include: recognizing significant work and/or learning experiences in a broad range of technical, business and specialized career fields; enhancing educational opportunities for those students who already possess significant bases of skill and/or learning; and assisting individuals to advance in their chosen occupations.

Since this program is individualized for their specific needs, graduates of this program will be well prepared for their chosen career field.

NURSING AND ALLIED HEALTH DEPARTMENT

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

The programs are supported by general education studies and a number of 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 on-going professional development in order to maintain their individual 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 are able to secure employment in a variety of clinical settings and/or transfer to baccalaureate levels of education in their areas of major.

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, filling gaps in the healthcare workforce. Community paramedics help patients meet critical health needs by helping establish 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 or the Community Paramedicine certificate 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 emergency medical services program is designed to prepare individuals to become National Registered Paramedics. The curriculum combines intense classroom and lab instruction with extensive clinical experiences to assure that graduates are competent, confident practitioners.

The program follows national education standards and graduates are eligible to take the National Registry Paramedic Certification 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), and Paramedic Interfacility Transport (PIFT). The program is authorized as a training center by the Board of Maine EMS. The Emergency Medical Services Program is accredited by the Commission of Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Committee on Accreditation of Education Programs for the 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 and Advanced EMT. Currently licensed providers may be accepted into the higher levels of the program. Those students completing both general education and EMS core courses earn an associate degree, while those taking primarily occupational courses can earn a certificate level of EMS education.

Health Information Management

Health information is the profession dedicated to the effective management of patient information and healthcare data needed to deliver high-quality treatment and care to the public. Health information technicians are an integral part of the healthcare team. They serve the healthcare industry and the public by using best practices in managing healthcare information to support quality healthcare delivery. HIM professionals who perfect their technical skills become experts in health data collections, data abstraction and enhanced coding while maintaining the highest standards of data integrity, confidentiality, and security, in both paper and electronic systems. As healthcare adapts to the electronic health record environment, the health information technician role is critical to ensure that providers, healthcare organizations, and patients have access to the right healthcare information when and where it is needed.

Graduates of the health information management program may find employment opportunities in hospitals, office-based physician practices, nursing homes, home health agencies, mental health facilities and public health agencies. Employment opportunities exist for these professionals in any organization that uses patient data or health information. Although HIM professionals do not provide direct patient care, they work regularly with physicians and other healthcare professionals and are an integral part of the healthcare team.

Medical Assisting

The college's two year medical assisting program combines clinical and administrative training. In the clinical component of the program, students will have the opportunity to understand the concept of professionalism and therapeutic communication. Students will learn to measure
vital signs, obtain and record a medical history, administer oral and parenteral medications, prepare the patient for examination, assist the health care provider with the physical examination, perform diagnostic tests such as 12-lead EKGs, perform specimen collection, perform venipuncture and CLIA-waived laboratory examinations, and teach patients about health and wellness. In the administrative component of the program, students will also learn to maintain patient records; schedule patient appointments; perform bookkeeping procedures, as well as medical and diagnostic coding; and complete insurance claim forms.

Graduates of the medical assisting program will be competent entry-level medical assistants that can secure employment in medical offices or ambulatory clinics. In the State of Maine, medical assistants work under the direction of health care 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 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 three semester certificate program that prepares students for the rapidly expanding field of medical coding and focuses on developing an understanding of the language of medicine and the ability to apply it to professional coding standards. Instruction 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 is done in all healthcare facilities. The student gains knowledge and practice in computer software programs such as encoders and electronic medical records systems, which allows students to have real world, hands-on application of medical practice.

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

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 health care areas such as insurance companies, government agencies, computer software companies, as well as consulting firms.

Nursing

The nursing program is designed to offer individuals the opportunity to enter nursing or to advance in nursing by entering at different levels of the curriculum. Students may enter the program in the first year, or candidates who are graduates of approved practical nursing programs are provided an opportunity for advanced standing in the nursing curriculum.

The nursing curriculum focuses upon basic human needs of individuals throughout the lifespan. Students develop necessary knowledge and skills to provide nursing care to individuals with well-defined health problems. Legal, ethical and role responsibilities of the nurse are addressed within each level. Guided learning experiences in the laboratory and structured health care settings are correlated with classroom instruction. The program holds national accreditation by the Accreditation Commission for Education in Nursing (3343 Peachtree Rd. NE, Suite 850, Atlanta, GA 30326; www.acenursing.org) and is fully approved by the Maine State Board of Nursing (161 Capital St., 158 State House Station, Augusta, ME 04333-0158; www.state.me.us/board of nursing).

Graduates will be eligible to take the NCLEX-RN examination, administered by the National Council of State Boards of Nursing (NCSBN). Male and female graduates will find
employment opportunities in health care settings, such as hospitals, nursing homes and medical offices. Graduates may also choose to transfer to complete their bachelor’s degree in nursing. The registered nurse will be an integral member of the health care team and will function under direct or indirect supervision of a registered nurse with more experience or education.

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, computer-aided drafting technology, plumbing and heating, electrical construction and maintenance, structural welding, and welding and metal fabrication. The technical trades include computer electronics, precision machining 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 certificate level option. The associate degree level is the most comprehensive and requires the most credits for completion, while the certificate offerings focus primarily on technical course work. 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 National Automotive Technology Education Foundation (NATEF) skills standards required for a technician to become Automotive Service Excellence (ASE) certified. Fleet refinishing is also worked on in detail with hands-on training in repair and providing the proper undercoat systems. The latest technology is used with computer matching capabilities in paints and in the measuring of the automobile after sustaining collision damage. Instruction is given in welding, cutting, grinding, the use of plastic and fiberglass in preparation for the application of paint, and SMC panel and plastic parts repair. 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, a process that includes acrylic urethanes, poly urethanes and basecoat, clear coat and tri-coat paint systems. Emphasis is also placed on color matching, mixing and tinting colors with hands-on experience. Second year students also utilize work orders in order to provide accountability for time and materials.

Male and female graduates of the program will find job opportunities with auto body paint shops, new and used car dealers, auto glass shops and truck body builders. 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.

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 for today’s technology. The program emphasizes the National Automotive Technology Education Foundation (NATEF) skills standards required for a technician to become Automotive Service Excellence (ASE) certified.

In the first semester, students concentrate on the under-car 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 automotive electricity, including batteries, starting and charging systems, restraint systems, lighting and vehicle wiring.
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 major engine service, automatic/manual transmissions and final drive assemblies.

Also incorporated into the program are the direct technical related courses that have been added to enhance and maintain current automotive standards. These include basic automotive electricity, automotive electronics, automotive heating and air conditioning, hybrid and electric vehicles, and motor vehicle inspection.

The program meets the quality training of automotive technicians as set by ASE and is master certified by NATEF. Students will be eligible for ASE student certifications upon completion of the program.

Male and female 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.

Building Construction Technology

The building construction technology program provides entering men and women with realistic, up-to-date training in the tools of the carpentry trade, the methods of proper construction, the proper materials to use and the related knowledge necessary to enter the trade.

First year students learn and practice the uses and safety of power and hand tools. The principles of building construction are practiced, including roof framing, roof trusses, floor framing, wall partition framing, exterior finish, roofing, siding and insulation. Second year students supplement their trade skills by learning and practicing interior finish, kitchen cabinets, painting and staining.

Graduates will be qualified as beginning carpenters and may find employment with building contractors, building suppliers, governmental agencies, home specialty companies, manufacturing firms or other organizations. Building Construction Technology students learn about the total construction process in their education, which also provides good advancement opportunities.

Computer-Aided Drafting Technology

The college’s computer-aided drafting program is a great start for those interested in a career in design, engineering, architecture, construction, or the related industries. The two-year program provides a substantial amount of hands-on experience in the computer lab.

Students receive training in basic through advanced computer-aided drafting skills using architectural, civil, mechanical and 3D modeling software. Residential and commercial design, building science, surveying and construction management are important course requirements. Sustainable or “green” building design and construction products are integral to all core classes. Students work on comprehensive design projects simulating professional office practice and also have the opportunity to work on live design and construction projects in conjunction with the other construction trades programs.

Graduates of the computer-aided drafting technology program will be qualified for entry level drafting and related positions within architectural and civil design firms, as well as manufacturing, fabrication, building supply and construction businesses. Some graduates continue their education in engineering, architecture or construction management programs. Others continue their education at the college in related fields.

Computer Electronics

Computer electronics prepares men and women to repair computers, set-up and administer a computer network, and do electronics repair. The first year provides training in Windows XP Professional, Windows 7, Windows 8 and DOS operating systems, DC and AC circuits, semiconductor devices, electronic circuits, digital electronics, 8–bit microprocessors, and networking hardware. The labs are hands-on, learning the proper use of test equipment such as multimeters, power supplies, oscilloscopes, function generators, and frequency counters.
Seniors receive training in network administration, computer operating systems, network security, printer repair, peripheral configuration, microprocessor interfacing and computer diagnostics and repair, along with dot matrix, inkjet and laser printers. The networking classes feature operating systems such as Windows 2008 Server, Windows 2012 Server, Windows 7 and Linux. Labs are hands-on troubleshooting with diagnostic test equipment and diagnostic software.

NMCC is an Academic Partner with CompTIA, allowing the college to provide CompTIA certification exams at academic pricing to students. Graduates will have the opportunity to earn several certifications encompassing the fields of computer repair technicians, network repair technicians and administrators, and basic electronic technicians, including A+, Network+, Security+, Linux+, Computer Service Technician (CST), Healthcare IT and Certified Network System Technician (CNST). Graduates will be qualified for positions as computer electronics technicians, computer network technicians, electronic technicians, and office equipment technicians.

**Diesel Hydraulics Technology**

Diesel hydraulics technology is a program emphasizing the National Automotive Technology Education Foundation (NATEF) skills standards required for a technician to become Automotive Service Excellence (ASE) certified. Fundamental training in all aspects of medium/heavy truck technician training is employed through lecture and hands-on training.

In the first semester, students will concentrate on preventive maintenance inspections and repair, basic principles of diesel engine operation, with emphasis on engine tune-up, and troubleshooting techniques (i.e., engine timing, 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 servicing and diagnosis.

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/replacement, followed by the theory and operation of mobile refrigeration units.

The diesel hydraulics program meets the quality training of diesel hydraulic technicians as set by ASE and is master level certified by NATEF. Students will be eligible for ASE student certifications upon completion of the program. Graduates can find employment with construction companies, logging companies, farm machinery/heavy equipment dealers, and truck dealerships. Capable graduates may advance into management positions (team leader, shift foreman, shop supervisor, parts manager, sales associate). .

**Electrical Construction and Maintenance**

Electrical construction and maintenance 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).

Male and female 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. Students that graduate with an associate’s degree can apply 4,000 hours toward their Journeyman electrical license.
General Technology: Trade Option

This two-year program provides highly individualized and flexible programming to meet the needs of students with significant work and learning experiences whose educational and/or occupational goals cannot be met by the other technical programs of the college.

Objectives include: recognizing significant work and/or learning experiences in a broad range of technical, business and specialized career fields; enhancing educational opportunities for those students who already possess significant bases of skill and/or learning; and assisting individuals to advance in their chosen occupations.

A student may be awarded as many as 20 credit hours toward the career/vocational/technical component of this degree, upon review and evaluation of his/her portfolio. The general education and elective components of the program form the basis of the student's degree work at the college.

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.

The first year is spent in the plumbing and heating 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, plumbing fixtures, drainage and vent lines, and potable water lines. The Maine state plumbing code will be discussed in detail. The student will be eligible to sit for the Maine Plumbers' Journeyman exam, and, if successful, will be allowed to receive a Journeyman in Training license.

The second year covers heating and refrigeration. The student will learn the major concepts of heat flow, warm air and hydronic heating systems, 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. If successful, he or she will be allowed to receive a Journeyman's license. In addition, students will receive training in propane and natural gas, solar heating systems and heat pump installation. Students will have the opportunity to sit for national certification exams in propane and natural gas and refrigerant handling.

Graduates will be qualified for many employment opportunities in the plumbing, heating and cooling field, including service technician, installer, sales, and eventually self-employment.

Precision Machining Technology

The precision machining technology program enables students to develop skills in setting up and operating conventional machine tools to produce precision parts and develop the required skills in preparation for CNC (computer numerical control) programming, setup and operation. Students will develop additional skills in process planning, blueprint reading, CAD/CAM, measurement and inspection, and custom work-holding design, leading to NIMS (National Institute of Metalworking Skills) Level I and II Credentials.

The precision machining technology program at NMCC is Maine's first and only 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. There is a strong general education component integrated into the program to satisfy demands for appropriate work force skills.

Students have consistently been able to have the opportunity to be employed as interns in the summer for several manufacturing facilities. Job opportunities for graduates include machine tool operators, precision machinists, tool and die makers, CNC operators/programmers, and quality control inspectors.

**Structural Welding**

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

Graduates of the program will find employment opportunities with industrial contractors, ship yards, machine shops, fabrication shops, and manufacturing facilities.

**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 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/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. The degree will not be awarded until the student has completed the requirements of the apprenticeship program.

*Registered by Maine State Apprenticeship Council; Bureau of Apprenticeship Training, U.S. Department of Labor; or formal programs approved by the college.
Welding and Metal Fabrication
Welding and metal fabrication is a certificate program. Students develop the technical knowledge and trade skills to design, lay out, assemble, and fabricate metal projects. Welding is an important inter-related skill, and hands-on instruction familiarizes students with gas, electric, TIG, MIG and resistance welding techniques.

Students learn the materials of the trade, the safe use of hand tools, equipment and machines, identifying fasteners, orthographic projection, pattern-making, and parallel and radial line development.

Graduates will be qualified for employment as sheet metal fabricators and welders.

Wind Power Technology
Wind power technology is an associate degree level program that prepares technicians to enter into this rapidly emerging industry. The program offers broad fundamental training in the electrical, electronic, and mechanical aspects of the wind power industry, with a focus on wind turbine maintenance and electrical power production.

The first and second semesters of the program offer electrical and electronics basics, industrial electronics, fundamentals of digital systems, industrial safety, electrical mathematics, introduction to wind power systems, along with general education core courses. The third and fourth semesters provide training on wind power mechanical systems, turbine control systems including networking and PLCs, hydraulic systems, electrical power distribution systems, wind turbine management, and the National Electrical Code.

Graduates of the program will find employment opportunities with wind farm operators, turbine manufacturers, and contractors providing maintenance and turbine support. Graduates of the program will be suited to enter the workforce locally, or to enter the global energy industry.
Curricula
**General Education Core Curriculum**

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

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>ENG 111</td>
<td>English Composition</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Communications</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Humanities</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Social Science</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Humanities or Social Science</td>
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<td></td>
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<tr>
<td>OR</td>
<td>ALH 124 Health &amp; Safety Compliance</td>
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<tr>
<td>OR</td>
<td>ALH 124 Health &amp; Safety Compliance for Health Care Professionals</td>
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<tr>
<td></td>
<td><strong>TOTAL</strong></td>
<td><strong>22-24 credits</strong></td>
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</table>

*Students may choose from the following courses to meet the above minimum requirements:*

**Communications Courses**
- COM 111 Speech
- COM 212 Business Communications I
- COM 221 Technical Communications
- ENG 227 Advanced Composition

**Humanities Courses**
- ART 101 Fundamentals of Art
- ART 122 Architectural History
- COM 210 Mass Communications: Media & Culture
- ENG 113 Working in America
- ENG 120 Introduction to Literature
- ENG 224 American Literature I
- ENG 228 Topics in Literature
- ENG 231 Women in Literature
- ENG 234 American Literature II
- ENG 239 Intro. to Creative Writing
- HIS 117 World Civilization to 1715
- HIS 119 World Civilization 1715 to Present
- HIS 123 U.S. History, 1600-1865
- HIS 125 U.S. History, 1865 to Present
- HIS 203 Religion in America
- HIS 207 Maine History
- HUM 212 Topics in the Humanities
- PHI 111 Everyday Ethics
- PHI 121 Intro to Philosophy
- PHI 201 Ethics
- PHI 206 World Religions
- SPA 101 Elementary Spanish I
- SPA 102 Elementary Spanish II

**Mathematics and/or Science Courses**
- BIO 114 Human Biology
- BIO 120 Anatomy & Physiology I
- BIO 130 Anatomy & Physiology II
- BIO 218 Microbiology
- MAT 115 Business Math
- MAT 118 Electrical Math
- MAT 119 Applied Mathematics
- MAT 125 College Algebra
- MAT 151 College Algebra & Trig
- MAT 210 Statistics
- MAT 227 Calculus
- NUT 101 Intro to Nutrition
- PHY 110 Astronomy
- PHY 150 Physics
- PHY 215 Statics & Strength of Materials

**Social Science Courses**
- ECO 111 Principles of Economics
- POL 101 American Government
- PSY 100 Applied Human Relations
- PSY 101 General Psychology
- PSY 207 Developmental Psychology
- PSY 209 Abnormal Psychology
- SOC 111 Sociology
- SOC 215 Social Issues & Problems
Associate in Applied Science Degree Program

**First Semester**
- ACC 111 Principles of Accounting I 4 0 4
- BUS 117 Business Law 3 0 3
- CIS 105 Intro. to PC Operating Systems 1 0 1
- CIS 113 Intro. to Microcomputer Apps. 3 0 3
- ENG 111 English Composition 3 0 3
- MAT 115 Business Mathematics 3 0 3
  \[17 \text{ C L CR} \]

**Second Semester**
- ACC 121 Principles of Accounting II 4 0 4
- CIS 108 Spreadsheet Applications 3 0 3
- COM 212 Business Communications I 3 0 3
- MAT 125 College Algebra
  Humanities Elective 3 0 3
  \[16 \text{ C L CR} \]

**Third Semester**
- ACC 211 Intermediate Accounting I 4 0 4
- ACC 214 Federal Taxation I 3 0 3
- ACC 234 Accounting Info. Systems I 3 0 3
- CIS 129 Database Applications 3 0 3
- COM 111 Speech 3 0 3
- ECO 111 Principles of Economics 3 0 3
  \[19 \text{ C L CR} \]

**Fourth Semester**
- ACC 221 Intermediate Accounting II 4 0 4
- ACC 225 Federal Taxation II 3 0 3
- ACC 242 Accounting Info. Systems II 3 0 3
- BUS 106 Effective Customer Service
  Business Elective 3 0 3
  \[16 \text{ C L CR} \]

**TOTAL REQUIRED** 68

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

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**Program Outcomes**

- Comply with Generally Accepted Accounting Principles (GAAP).
- Perform the steps of the accounting cycle.
- Demonstrate the ability to prepare financial statements.
- Perform financial statement analysis.
- Utilize accounting information for decision making.
- Interpret and apply the use of federal tax codes to prepare individual and business tax returns.
- Utilize the use of technology to complete accounting functions.
- Demonstrate proficiency in the use of computerized accounting systems.
- Demonstrate knowledge of national and state law.
- Communicate effectively in writing.
- Communicate effectively orally.
- Communicate effectively numerically and statistically.
- Demonstrate quantitative knowledge and skills by successfully completing MAT 115.
- Interpret and analyze financial and managerial information for decision-making purposes.
- Extract relevant data from complex information, process it appropriately, and draw reasonable conclusions.
- Apply the use of technology to solve accounting and business related problems.
- Communicate effectively and professionally while functioning in groups.
- Proficient in the use of technology.
### Associate in Applied Science Degree Program

<table>
<thead>
<tr>
<th>First Semester</th>
<th>C</th>
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<tr>
<td>♦ ACR 111 Nonstructural Repairs</td>
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<td>9</td>
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<tr>
<td>ENG 111 English Composition</td>
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<tr>
<td>MAT 119 Applied Mathematics</td>
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<tr>
<td>♦ ACR 121 Structural Analysis/Plastics</td>
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<td>♦ AUT 115 Automotive Electricity</td>
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<td>SAE 121 Industrial Safety</td>
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<td>WEI 133 Electric Welding</td>
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<td>General Education Elective</td>
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<td>♦ ACR 209 Auto Collision Blueprint &amp; Est</td>
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<tr>
<td>♦ ACR 211 Painting &amp; Refinishing</td>
<td>3</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>♦ AUT 125 Automotive Electronics</td>
<td>2</td>
<td>2</td>
<td>3</td>
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<tr>
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**TOTAL REQUIRED** | **71**

### Major Collision Repair and Refinishing Certificate Program

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<td>♦ AUT 229 Auto Heating &amp; Air Conditioning</td>
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**TOTAL REQUIRED** | **30**

Must have completed the Auto Collision Repair Certificate Program or permission of the instructor to enroll in this certificate program.

### Program Outcomes

- Communicate using proper technical terms and descriptions.
- Maintain a safe working environment for themselves and others.
- Understand the behavior and principles that govern automotive electrical circuits.
- Troubleshoot automotive circuits using available information.
- Read and comprehend schematic diagrams.
- Use mathematics in measuring, analyzing, and estimating tasks.
- Perform entry-level skills in metalwork and plastic fillers.
- Demonstrate basic skills in oxyacetylene, MIG, TIG, and electric arc welding.
- Perform entry-level skills in refinishing vehicles to pre-accident condition.
- Exhibit a high standard of ethics in the workplace.
- Effectively communicate with others using written and oral modes.
- Work independently with minimal supervision.
- Work cooperatively and collaboratively on larger repair projects.
- Follow verbal instruction on processes and repair procedures.
- Document repair procedures and costs by using a repair order system.
- Mix, apply, and finish paint products according to specifications.
- Demonstrate skills in color matching, mixing, and tinting of paints.
- Understand the principles of basic automotive electronic components.
- Select and use appropriate automotive electronic diagnostic equipment.
- Be eligible for the Maine State Motor Vehicle Inspection exam.
- Understand heating and air conditioning principles in automotive vehicles.
- Understand how the laws of the Clean Air Act pertain to the profession.
- Be eligible for ASE Student Certification Testing in Collision Repair.

### Certificate Program

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<thead>
<tr>
<th>First Semester</th>
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<tbody>
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<td>♦ ACR 111 Nonstructural Repairs</td>
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**TOTAL REQUIRED** | **31**

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

Prospective students must complete and return a medical clearance form prior to being admitted to the program.
Program Outcomes

• Communicate using proper technical terms and descriptions.
• Maintain a safe working environment for themselves and others.
• Understand the behavior and principles that govern automotive electrical circuits.
• Troubleshoot automotive circuits using available information.
• Read and comprehend schematic diagrams.
• Use mathematics in measuring, analyzing, and estimating tasks.
• Demonstrate ASE certification skills in Brakes, Suspension and Steering Systems.
• Demonstrate basic skills in oxyacetylene, MIG, TIG, and electric arc welding.
• Perform Wheel Alignments for both two-wheel and four-wheel application.
• Perform service work in tire changing and wheel balancing.
• Exhibit a high standard of ethics in the workplace.
• Effectively communicate with others using written and oral modes.
• Work independently with minimal supervision.
• Work cooperatively and collaboratively on larger repair projects.
• Follow verbal instruction on processes and repair procedures.
• Document repair procedures and costs by using a repair order system.
• Understand the principles of electrical circuits and test equipment.
• Understand a variety of social, economic, and cultural operatives.
• Understand the principles of basic automotive electronic components.
• Select and use appropriate automotive electronic diagnostic equipment.
• Diagnose and repair fuel and emission systems.
• Diagnose and repair computerized engine controls.
• Perform major engine service including diagnostics, repair, and assembly.
• Diagnose and repair automatic transmissions.
• Diagnose and repair power trains, including manual shift transmissions.
• Be eligible for the Maine State Motor Vehicle Inspection exam.
• Understand how the laws of the Clean Air Act pertain to the profession.
• Understand heating and air-conditioning principles in vehicles.
• Be eligible for Section 609 certification of the Federal Clean Air Act in the proper use of Motor Vehicle Air Conditioning refrigerant recovery and recycling equipment.
• Understand the safety requirements for hybrid and electric vehicles.
• Understand the principles of hybrid/electric vehicle technology and advanced automotive technologies.
## Associate in Applied Science Degree Program

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<th>First Semester</th>
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<td><strong>PHY 150</strong> Physics</td>
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**TOTAL REQUIRED** 68

## Certificate Program

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**TOTAL REQUIRED** 34

## Program Outcomes

- Work Values, including work ethic, punctuality, motivation, etc.
- Basic Safety, including organizational and ergonomic skills, etc.
- Blueprint Reading, including site/floor plans, materials estimation, etc.
- Power Tool Use, including radial arm saw, jointer, planer, drill press, etc.
- Hand Tool Use, including plane, squares and bevels, saws, hammers, etc.
- Framing, including floor and sill framing, wall and partition framing, etc.
- Roofing, including trusses, flashing, shingling, etc.
- Finishing, including cabinetry, stair assembly, molding, kitchen design, painting/staining, wall covering, tiling, shelving, etc.
- Communication, including both written and oral communication.
- Mathematics, including measurement, conversions, computations, etc.

*Major courses; a minimum grade of "C" or 2.0 required.*
BIOLOGY ADMINISTRATION

Associate in Applied Science Degree Program

First Semester

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<th>Course</th>
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<tr>
<td>ACC 111</td>
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<tr>
<td>BUS 101</td>
<td>Intro. to Business</td>
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Total: 17

Second Semester

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<td>BUS 109</td>
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<td>CIS 108</td>
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<td>COM 212</td>
<td>Business Communications I</td>
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Total: 16

Third Semester

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<td>BUS 117</td>
<td>Business Law I</td>
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<td>BUS 119</td>
<td>Legal Environment of Business</td>
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<td>Business Ethics</td>
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<td>BUS 229</td>
<td>Principles of Management</td>
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<td>ECO 111</td>
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Total: 18

Fourth Semester

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<tr>
<td>BUS 201</td>
<td>Leadership</td>
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<td>BUS 239</td>
<td>Human Resources Mgmt.</td>
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<td>BUS 241</td>
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<tr>
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Total: 15

TOTAL REQUIRED: 66

♦ Major courses; a minimum grade of "C" or 2.0 required.

Program Outcomes

- Comply with Generally Accepted Accounting Principles (GAAP).
- Perform the steps of the accounting cycle.
- Utilize the use of technology to complete business functions.
- Understand the fundamentals of business.
- Effectively create, write, and present a business plan.
- Apply marketing principles and strategies.
- Create a marketing plan and deliver an effective oral marketing presentation.
- Demonstrate the ability to create a human resources recruitment plan.
- Demonstrate knowledge of national and state law.
- Communicate effectively in writing.
- Communicate effectively orally.
- Communicate effectively numerically and statistically.
- Demonstrate quantitative knowledge and skills by successfully completing MAT 115.
- Perform appropriate analyses for quantitative and qualitative data.
- Interpret and analyze financial and managerial information for decision-making purposes.
- Apply appropriate statistical techniques to solve marketing research problems.
- Extract relevant data from complex information, process it appropriately, and draw reasonable conclusions.
- Apply the use of technology to solve business problems.
- Demonstrate the ability to develop solutions to marketing scenarios.
- Communicate effectively and professionally while functioning in groups.
- Proficient in the use of technology.
### COMMUNITY PARAMEDICINE

**Advanced Certificate Program**

<table>
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<th>Course Code</th>
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<td>EMS 243</td>
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**TOTAL REQUIRED**

16

Please note that the Advanced Certificate program is only available for those who already possess, at minimum, an associate degree.

**Certificate Program**

<table>
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**TOTAL REQUIRED**

60

- **Major courses; a minimum grade of “C” or 2.0 required.**
- **Community Paramedicine Major Courses; require a minimum grade of ‘77’ or (C+)**

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**Associate in Science Degree Program**

**First Semester**

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**TOTAL REQUIRED**

22

- **Major courses; a minimum grade of “C” or 2.0 required.**
- **Community Paramedicine Major Courses; require a minimum grade of ‘77’ or (C+)**

**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 application 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.
### Associate in Applied Science Degree Program

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<thead>
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<th>First Semester</th>
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<td><strong>Total</strong></td>
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| Second Semester | | |
|-----------------|---|---|---|
| ♦ DRT 125 Residential Design | 1.5 | 4.5 | 3 |
| ♦ DRT 218 Advanced CAD | 1.5 | 4.5 | 3 |
| MAT 151 College Algebra and Trig | 3 | 0 | 3 |
| TEC 123 Building Science II | 1.5 | 3 | 3 |
| Social Science Elective | 3 | 0 | 3 |
| **Total** | 10.5 | 12 | 15 |

| Third Semester | | |
|----------------|---|---|---|
| ♦ DRT 216 Commercial Design I | 3 | 9 | 6 |
| ♦ DRT 219 Structural Design | 2 | 2 | 3 |
| PHY 150 Physics | 3 | 2 | 4 |
| SUR 213 Construction Surveying | 2 | 2 | 3 |
| **Total** | 10 | 15 | 16 |

| Fourth Semester | | |
|-----------------|---|---|---|
| COM 221 Technical Communications | 3 | 0 | 3 |
| ♦ DRT 226 Commercial Design II | 3 | 9 | 6 |
| PHY 215 Statics/Strength of Materials | 3 | 0 | 3 |
| TEC 221 Construction Management | 3 | 0 | 3 |
| Humanities Elective | 3 | 0 | 3 |
| **Total** | 15 | 9 | 18 |

**TOTAL REQUIRED**

### Certificate Program

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<td>TEC 112 Building Science I</td>
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<td><strong>Total</strong></td>
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</table>

| Second Semester | | |
|-----------------|---|---|---|
| ♦ DRT 125 Residential Design | 1.5 | 4.5 | 3 |
| ♦ DRT 218 Advanced CAD | 1.5 | 4.5 | 3 |
| MAT 151 College Algebra and Trig | 3 | 0 | 3 |
| TEC 123 Building Science II | 1.5 | 3 | 3 |
| Elective | 3 | 0 | 3 |
| **Total** | 10.5 | 12 | 15 |

**TOTAL REQUIRED**

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

### Program Outcomes

- Convert verbal or written ideas into a highly specific form as dictated by industry standards.
- Demonstrate basic computer operations and file management.
- Demonstrate general drafting practices using both hand tools and CAD.
- Use drawing media, related drafting materials and equipment.
- Use basic measurement systems and add correct annotation to drawing.
- Identify line styles and weights.
- Recognize various geometric constructions and the use of the drafting procedures in their construction.
- Create 3D models and customize the CAD software environment.
- Recognize the proper terms of materials used in building construction, their use, and methods of installation.
- Use basic surveying instruments to accurately measure relative positions of existing objects and location of objects for construction.
- Demonstrate an understanding of construction management which includes contracts, specifications, bonding, estimating, and scheduling.
- Participate as a productive member of a team.
- Research, apply, and demonstrate new skills.
- Demonstrate oral, written, and non-verbal communication skills in an organized and coherent manner.
- Apply critical thinking skills to a variety of disciplines.
- Identify relevant details, facts and specifications, analyze and solve problems.
- Recognize and use learning techniques to apply and adapt new knowledge/skills in familiar, unfamiliar and changing situations.
- Break complex problems (or processes or projects) into component parts and consider or organize the parts in a systematic way.
- Acquire accurate information to make appropriate decisions.
- Work with applications in technology to produce the desired results.
- Demonstrate self-directed learning skills.
- Demonstrate oral, written, and non-verbal communication skills in an organized and coherent manner.
- Understand and apply green building technology as it applies to the residential and commercial structure as a whole system.
- Communicate effectively with peers, customers, technical support staff, and supervisors through verbal and written modes.
- Interpret and understand building codes, specifications and drawings.
**Program Outcomes**

- Understand the behavior and principles that govern AC and DC electrical circuits.
- Understand the principles of basic analog electronic components and circuits.
- Properly select and use electronic diagnostic equipment.
- Troubleshoot electronic circuits using available information.
- Read and comprehend electronic schematic diagrams.
- Understand the mathematical relationships that govern electrical circuits.
- Use algebraic and trigonometric formulas to predict and analyze electrical circuits.
- Demonstrate safe and proper use of typical tools for electronic technicians.
- Be eligible for Gain Comp TIA Security+ certification.
- Understand digital logic systems and numbering systems.
- Understand 8-bit microprocessor theory and interfacing.
- Exhibit a high standard of ethics in the workplace.
- Effectively communicate with others using written and oral modes.
- Perform routine troubleshooting and repair of computers.
- Perform routine repair of computer monitors and printers.
- Understand microprocessor architecture and programming.
- Understand advanced microprocessor interfacing.
- Be eligible for Gain Comp TIA A+ certification.
- Be eligible for Gain Comp TIA Network+ certification.
- Write technical reports and interpret technical manuals.
- Understand the natural laws of physics as they pertain to the trade.
- Properly identify and use commercial electronic tools of the trade.
- Plan and install computer networks.
- Manage and administer computer networks.
- Understand a variety of social, economic, and cultural operatives.
- Be eligible for Gain Comp TIA Linux+ certification.
- Be eligible for Gain Comp TIA Healthcare IT Technician certification.

♦ **Major courses; a minimum grade of "C" or 2.0 required.**

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### COMPUTER ELECTRONICS

**Associate in Applied Science Degree Program**

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<tr>
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**Second Semester**

- COE 112 Intro to Linux 2 2 3
- ♦ COE 122 Computer Fundamentals 3 0 3
- ♦ COE 123 Computer Fund. Lab 0 9 3
- COE 125 Comp. Networking Hardware 2 2 3
- ENG 111 English Composition 3 0 3
- Social Science Elective 3 0 3

**Third Semester**

- COE 135 Network Administration 2 2 3
- ♦ COE 214 Implementing & Managing Network Infrastructure 1.5 4.5 3
- ♦ COE 216 Security+ Preparation 1.5 4.5 3
- MCP 211 Microcomputer Software 2 2 3
- PHY 150 Physics 3 2 4
- Humanities Elective 3 0 3

**Fourth Semester**

- COE 220 Intro. to Computer Forensics 2 2 3
- ♦ COE 224 Adv. Computer Electronics 3 0 3
- ♦ COE 225 Adv. Computer Elect. Lab 0 9 3
- COM 221 Technical Communications 3 0 3
- MCP 221 Microcomputer Interfacing 2 2 3
- Elective 2 0 2
- General Education Elective 1 0 1

**TOTAL REQUIRED** 70

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### Certificate Program

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**Second Semester**

- COE 112 Intro to Linux 2 2 3
- ♦ COE 122 Computer Fundamentals 3 0 3
- ♦ COE 123 Computer Fund. Lab 0 9 3
- COE 125 Comp. Networking Hardware 2 2 3
- ENG 111 English Composition 3 0 3
- Elective 2 0 2

**TOTAL REQUIRED** 32
### DIESEL HYDRAULICS TECHNOLOGY

#### Associate in Applied Science Degree Program

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**TOTAL REQUIRED** 68

#### Certificate Program

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**TOTAL REQUIRED** 31

#### Program Outcomes
- Maintain a safe work environment.
- Complete electronic work orders/record keeping functions.
- Perform preventive maintenance inspections.
- Inspect and adjust air brake systems.
- Test diesel fuel systems by pressure test and electronically.
- Service and repair diesel cylinder heads.
- Perform a complete overhead valve/injector adjustment.
- Troubleshoot and repair starting/charging systems.
- Perform diesel fuel systems diagnostic tests.
- Maintain diesel engine EGR systems.
- Maintain truck air systems.
- Troubleshoot repair ABS systems.
- Remove and/or replace truck clutch and adjust.
- Remove and/or install differential inspection repairs as needed.
- Maintain hydraulic systems, test and adjust as needed.
- Perform engine rebuilding operations.
- Perform steering axle alignment.
- Understand the principles of electrical circuits and test equipment.
- Understand heating and air-conditioning principles in vehicles.
- Be eligible for the Maine State Motor Vehicle Inspection exam.
- Be eligible for ASE Student Certification in Medium-Heavy Truck categories.

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

♦ Major courses; a minimum grade of "C" or 2.0 required.
**EARLY CHILDHOOD EDUCATION**

### Associate in Applied Science Degree Program

#### First Semester

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<th>Course</th>
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**TOTAL REQUIRED** 64

### Certificate Program

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**TOTAL REQUIRED** 33

*Major courses; a minimum grade of "C" or 2.0 required.*
### Associate in Applied Science Degree Program

#### First Semester

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**TOTAL REQUIRED** 68

### Certificate Program

#### First Semester

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#### Second Semester

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**TOTAL REQUIRED** 30

### Program Outcomes

- Understand the behavior and principles that govern AC and DC electrical circuits.
- Properly select and use diagnostic equipment.
- Troubleshoot electrical circuits and equipment using available information.
- Read and comprehend electrical blueprints in relation to building construction.
- Understand the general hazards associated with the installation and operation of electrical equipment and wiring systems and identify appropriate PPE.
- Plan and install residential circuits as required by the National Electrical Code.
- Understand electrical motors, including DC, single-phase, and three-phase.
- Read and draw ladder diagrams for motor controls.
- Install motor starters, pushbutton station controls, relays, and overload protection.
- Select circuit conductor sizes and properly select over current protection.
- Understand the mathematical relationships that govern electrical circuits.
- Use algebraic and trigonometric formulas to predict and analyze electrical circuits.
- Properly size a residential service entrance per the National Electrical Code.
- Demonstrate safe and proper use of typical tools for the electrical trade.
- Read, interpret, and explain requirements in the National Electrical Code.
- Exhibit a high standard of workmanship.
- Effectively communicate with others using written and oral modes.
- Interpret and apply safety measures as they pertain to OSHA standards.
- Understand digital logic systems and numbering systems.
- Select and apply motors and their associated controls.
- Install and program a programmable logic controller.
- Write technical reports and interpret technical manuals.
- Understand the natural laws of physics as they pertain to the trade.
- Properly identify and use commercial and industrial tools of the trade.
- Plan and install conduit and cable systems for commercial installations.
- Plan and install lighting systems appropriate for the application.
- Understand, calculate, and predict the use of electrical energy.
- Understand the cost of electrical energy and identify alternative methods.

**Major courses; a minimum grade of "C" or 2.0 required.**
## Associate in Applied Science Degree Program

**Prerequisite:** EMT Certificate

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**TOTAL REQUIRED** 68

♦ Major courses; a minimum grade of "C" or 2.0 required.

♦♦ Major (EMS) courses a minimum grade of “C” (73) or 2.0 required.

### 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.
- Delegate appropriately and work collaboratively and with members of the healthcare team.
- Assume professional and legal responsibility and accountability within defined competency roles in managing and directing care to individuals or groups across the healthcare continuum.
- Provide culturally competent care for patients and groups of various ethnic, socio-economic, and cultural backgrounds.

**Note:** The NMCC curriculum integrates the U.S. Department of Transportation EMS education standards and the Committee on Accreditation of Educational Programs for the Emergency Medical Services (CoAEMSP) guidelines. The EMS program outcomes are dependent and mirror the dozens of outcomes identified by those organizations. Additionally, each of the EMS certificate programs, though capable of standing independently, build upon one another, culminating in the eventual attainment of the Associate Degree credential. For this reason, some of the outcomes identified are similar for all 3 credentials. However, the complexity and depth of the content learned increases based on length of program and scope of practice.

C - class hours

L - lab hours

F - field experience

CL - clinical

CR - credits
ADVANCED EMERGENCY MEDICAL TECHNICIAN (AEMT) Certificate Program

Prerequisite: EMT Certificate

First Semester

<table>
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<tr>
<th>Course Description</th>
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<th>F</th>
<th>CL</th>
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Second Semester

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TOTAL REQUIRED

20

PARAMEDICINE Certificate Program

Prerequisite: AEMT Certificate or equivalent

First Semester

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Second Semester

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Third Semester (Spring)

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TOTAL REQUIRED

36

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

Major (EMS) courses a minimum grade of “C” (73) or 2.0 required.

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.
• Delegate appropriately and work collaboratively and with members of the healthcare team.
• Assume professional and legal responsibility and accountability within defined competency roles in managing and directing care to individuals or groups across the healthcare continuum.
• Provide culturally competent care for patients and groups of various ethnic, socio-economic, and cultural backgrounds.

EMERGENCY MEDICAL SERVICES

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.
• Delegate appropriately and work collaboratively and with members of the healthcare team.
• Assume professional and legal responsibility and accountability within defined competency roles in managing and directing care to individuals or groups across the healthcare continuum.
• Provide culturally competent care for patients and groups of various ethnic, socio-economic, and cultural backgrounds.

C - class hours
L - lab hours
F - field experience
CL - clinical
CR - credits
### ENTREPRENEURSHIP

**Certificate Program**

<table>
<thead>
<tr>
<th>First Semester</th>
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<td>ACC 111 Principles of Accounting I</td>
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<tr>
<td>✦ BUS 101 Intro. to Business</td>
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<tr>
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<tr>
<td>✦ CIS 113 Intro. to Microcomputer Apps.</td>
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**Second Semester**

| ✦ ACC 112 Computerized Accounting | 3 | 0 | 3 |
| ACC 113 Payroll Accounting | 3 | 0 | 3 |
| ✦ BUS 109 Entrepreneurship | 3 | 0 | 3 |
| ✦ BUS 241 Principles of Marketing | 3 | 0 | 3 |
| CIS 108 Spreadsheet Apps. | 3 | 0 | 3 |
| **TOTAL REQUIRED** | 15 | 0 | 15 |

• Major courses; a minimum grade of "C" or 2.0 required.

**Program Outcomes**

- Calculate, compile and analyze financial records to make practical business decisions.
- Develop knowledge of general business concepts necessary for the development of an effective business plan.
- Develop critical thinking skills to identify and evaluate entrepreneurial opportunities.
- Distinguish among the various forms of business ownership and various ways of getting a business started.
- Develop an understanding of the concept of risk and how its effect on new ventures can be reduced or minimized.
- Demonstrate the capacity to identify and acquire the resources needed for the creation and implementation of a new venture.
- Understand the process that enables entrepreneurs with limited resources to transform a simple idea into a sustainable success.
- Apply effective written and oral communication skills to business situations.
- Select and integrate appropriate current and emerging technologies to support business functions.
- Utilize computer skills consisting of the Internet and the most common business software applications.

### GENERAL TECHNOLOGY

**Associate Degree Program**

<table>
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<th>Career/Vocational/Technical</th>
<th>Minimum of 24 credits</th>
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<tr>
<td>General Education</td>
<td>Minimum of 21 credits</td>
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<tr>
<td>Electives</td>
<td>Minimum of 24 credits</td>
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**TOTAL MINIMUM REQUIRED** 69
### Associate in Applied Science Degree Program

#### First Semester

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<td>3</td>
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<td>CIS 113</td>
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<tr>
<td>ENG 111</td>
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<td>Medical Terminology</td>
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#### Second Semester

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#### Third Semester

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<td>Clinical Classification Systems II</td>
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#### Fourth Semester

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<td>Integrated Quality Improvement</td>
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**TOTAL REQUIRED** 66

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

### Program Outcomes

- Maintain the standards of information security and preserve personal health information in any form or medium.
- Interpret the legal and regulatory requirements and processes that govern the healthcare industry.
- Describe the significance of statutes, administrative laws, and regulatory agencies, with regard to the maintenance, use and disclosure of health information.
- Apply diagnoses and procedure codes according to current nomenclature from the health record.
- Apply licensing and regulatory issues related to coded data, payment, and reimbursement systems and professional ethics in coding.
- Analyze and report data for facility-wide revenue cycle management, quality management and performance improvement programs.
- Evaluate statistical information utilized in health information management and management information systems.
- Summarize reimbursement systems and how they affect providers, payers, consumers, policy makers, and the development of classification and information technology systems.
- Analyze health information systems technology including EHR, PHR, and patient registration applications.
- Describe the principles and mechanics of the electronic health record (EHR).
Associate in Arts Degree Program

General Education Core Requirements: CR

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<td>ENG 120</td>
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<td>HPR 110</td>
<td>Lifelong Wellness</td>
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Communications Requirement:
(Minimum 3 Credit Hours Required)

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<td>COM 212</td>
<td>Business Communications I</td>
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<td>COM 221</td>
<td>Technical Communications</td>
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Science Requirement:
(Minimum 7 Credit Hours Required)

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<td>BIO 130</td>
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<td>BIO 218</td>
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<td>PHY 110</td>
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<tr>
<td>PHY 215</td>
<td>Statics &amp; Strength of Materials</td>
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Mathematics Requirement:
(Minimum 6 Credit Hours Required)

<table>
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<th>Course</th>
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<tbody>
<tr>
<td>MAT 125</td>
<td>College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MAT 151</td>
<td>College Algebra &amp; Trigonometry</td>
<td>3</td>
</tr>
<tr>
<td>MAT 210</td>
<td>Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MAT 227</td>
<td>Calculus</td>
<td>4</td>
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Computer Proficiency Requirement:
(Minimum 3 Credit Hours Required)

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<tbody>
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<td>CIS 105</td>
<td>Intro. PC Operating Systems</td>
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<td>CIS 108</td>
<td>Spreadsheet Applications</td>
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<tr>
<td>CIS 109</td>
<td>Visual Basic</td>
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<tr>
<td>CIS 112</td>
<td>Fund. of Computer Concepts</td>
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</tr>
<tr>
<td>CIS 113</td>
<td>Intro. to Microcomputer Apps.</td>
<td>3</td>
</tr>
<tr>
<td>CIS 118</td>
<td>Office Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>CIS 129</td>
<td>Database Applications</td>
<td>3</td>
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History Requirement:
(Completion of one sequence required - 6 Credit Hours)

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<thead>
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<tbody>
<tr>
<td>HIS 117</td>
<td>World Civilization to 1715</td>
<td>3</td>
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<tr>
<td>HIS 119</td>
<td>World Civilization, 1715 to Present</td>
<td>3</td>
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<tr>
<td>HIS 123</td>
<td>US History, 1500-1865</td>
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<td>HIS 125</td>
<td>US History, 1865 to Present</td>
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Humanities Requirement:
(Minimum 6 Credit Hours Required)

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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>ART 101</td>
<td>Fundamentals of Art</td>
<td>3</td>
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<tr>
<td>ART 122</td>
<td>Architectural History</td>
<td>3</td>
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<tr>
<td>COM 210</td>
<td>Mass Communications: Media &amp; Culture</td>
<td>3</td>
</tr>
<tr>
<td>ENG 113</td>
<td>Working in America</td>
<td>3</td>
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<tr>
<td>ENG 224</td>
<td>American Literature I</td>
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<tr>
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<tr>
<td>ENG 231</td>
<td>Women in Literature</td>
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</tr>
<tr>
<td>ENG 234</td>
<td>American Literature II</td>
<td>3</td>
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<tr>
<td>ENG 239</td>
<td>Intro. to Creative Writing</td>
<td>3</td>
</tr>
<tr>
<td>HIS 203</td>
<td>Religion in America</td>
<td>3</td>
</tr>
<tr>
<td>HIS 207</td>
<td>Maine History</td>
<td>3</td>
</tr>
<tr>
<td>PHI 111</td>
<td>Everyday Ethics</td>
<td>3</td>
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<tr>
<td>PHI 121</td>
<td>Intro Philosophy</td>
<td>3</td>
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<tr>
<td>PHI 201</td>
<td>Ethics</td>
<td>3</td>
</tr>
<tr>
<td>PHI 206</td>
<td>World Religions</td>
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<tr>
<td>SPA 101</td>
<td>Elementary Spanish I</td>
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</tr>
<tr>
<td>SPA 102</td>
<td>Elementary Spanish II</td>
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Social Science Requirement:
(Minimum 6 Credit Hours Required)

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<thead>
<tr>
<th>Course</th>
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</thead>
<tbody>
<tr>
<td>ECO 111</td>
<td>Principles of Economics</td>
<td>3</td>
</tr>
<tr>
<td>POL 101</td>
<td>American Government</td>
<td>3</td>
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<tr>
<td>PSY 101</td>
<td>General Psychology</td>
<td>3</td>
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<tr>
<td>PSY 207</td>
<td>Developmental Psychology</td>
<td>3</td>
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<tr>
<td>PSY 209</td>
<td>Abnormal Psychology</td>
<td>3</td>
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<tr>
<td>SOC 111</td>
<td>Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 215</td>
<td>Social Issues and Problems</td>
<td>3</td>
</tr>
</tbody>
</table>

General Electives
(Minimum 13 Credit Hours Required)

A minimum of 21 credits must be completed at the 200 level.

MINIMUM TOTAL REQUIRED 60

Students are advised to select courses that provide a depth of knowledge when fulfilling the various program requirements. Prerequisites 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.

Program Outcomes

• Students will develop a firm understanding of scientific and mathematical content.
• Students will develop a global perspective.
• Students will develop a strong sense of the past and its role in shaping the present.
• Students will communicate effectively, both orally and in writing.
• Students will reason scientifically and quantitatively.
• Students will think critically.
• Students will develop a logical system of values.
• Students will be able to apply those values and principles to “real world” problems.
• 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.
## MEDICAL ASSISTING

### Associate in Applied Science Degree Program

**First Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>CR</th>
<th>C</th>
<th>L</th>
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<tbody>
<tr>
<td>♦ ALH 124 Health &amp; Safety Compliance</td>
<td>1</td>
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<td>1</td>
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<tr>
<td>♦ BIO 120 Anatomy &amp; Physiology I</td>
<td>3</td>
<td>2</td>
<td>4</td>
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<tr>
<td>CIS 105 Intro. to PC Operating Systems</td>
<td>1</td>
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<td>1</td>
</tr>
<tr>
<td>CIS 113 Into. to Micro. Applications</td>
<td>3</td>
<td>0</td>
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<tr>
<td>ENG 111 English Composition</td>
<td>3</td>
<td>0</td>
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<tr>
<td>♦ MDA 110 Medical Assisting Office Procedures</td>
<td>3</td>
<td>0</td>
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<tr>
<td>SES 220 Medical Terminology</td>
<td>3</td>
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<td><strong>Total</strong></td>
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**Second Semester**

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>♦ BIO 130 Anatomy &amp; Physiology II</td>
<td>3</td>
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<tr>
<td>♦ HIT 115 Clinical App. Pathopharmacology</td>
<td>3</td>
<td>0</td>
<td>3</td>
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<tr>
<td>♦ MDA 111 Medical Assisting Procedures with Lab I</td>
<td>2</td>
<td>2</td>
<td>4</td>
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<tr>
<td>SES 101 Keyboarding Fundamentals</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>♦ SES 108 Medical Office Law &amp; Ethics</td>
<td>3</td>
<td>0</td>
<td>3</td>
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<tr>
<td>SES 124 Medical Insurance Procedures</td>
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<td>0</td>
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<td><strong>Total</strong></td>
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**Third Semester**

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<tr>
<td>MAT 125 College Algebra</td>
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<td>♦ MDA 211 Medical Assisting Procedures with Lab II</td>
<td>2</td>
<td>2</td>
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<tr>
<td>PSY 101 General Psychology</td>
<td>3</td>
<td>0</td>
<td>3</td>
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<tr>
<td>♦ SES 224 Electronic Health Records</td>
<td>3</td>
<td>0</td>
<td>3</td>
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<tr>
<td>♦ SES 239 Medical Coding</td>
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<td><strong>Total</strong></td>
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**Fourth Semester**

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<tbody>
<tr>
<td>♦ MDA 223 Medical Assisting Externship</td>
<td>1</td>
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<td>5</td>
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<tr>
<td>PSY 207 Developmental Psychology</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Communications Elective</td>
<td>3</td>
<td>0</td>
<td>3</td>
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<tr>
<td>Humanities Elective</td>
<td>3</td>
<td>0</td>
<td>3</td>
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<td><strong>Total</strong></td>
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**TOTAL REQUIRED**

66

♦ Major courses; a minimum grade of "C" or 2.0 required.

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

## Program Outcomes

- Demonstrate an understanding of anatomical structure and normal physiological function in the human body and of medical terms descriptive of 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 health care 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, records management, coding and insurance processing.
- Demonstrate clinical competency, to include but not limited to, specimen collection, processing and analysis, obtaining vital signs, preparing patients for 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

Certificate Program

<table>
<thead>
<tr>
<th>First Semester</th>
<th>C</th>
<th>L</th>
<th>CR</th>
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<tbody>
<tr>
<td>BIO 120 Anatomy &amp; Physiology I</td>
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<tr>
<td>CIS 113 Intro. to Microcomputer Apps.</td>
<td>3</td>
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<tr>
<td>ENG 111 English Composition</td>
<td>3</td>
<td>0</td>
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</tr>
<tr>
<td>• HIT 101 Intro. to Health Info. Tech.</td>
<td>3</td>
<td>0</td>
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<td>• SES 220 Medical Terminology</td>
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<tbody>
<tr>
<td>BIO 130 Anatomy &amp; Physiology II</td>
<td>3</td>
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<tr>
<td>• HIT 111 Medical Law &amp; Ethics</td>
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<tr>
<td>• HIT 113 Clinical Classification Systems I</td>
<td>3</td>
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<td>• HIT 115 Clinical App. Pathopharmacology</td>
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<tbody>
<tr>
<td>• HIT 213 Clinical Classification Systems II</td>
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<td>• HIT 223 Health Information Systems</td>
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**TOTAL REQUIRED** 35

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

*Class and lab hours vary, but all are 3 credits.

Program Outcomes

- Demonstrate the ability to translate information from the medical record into standardized numerical codes accurately and in an efficient manner.
- Demonstrate professional behavior in the work place including patient confidentiality and professional ethics.
- Recognize factors that affect third-party reimbursement.
- Demonstrate entry level skills in coding with ICD-9-CM, ICD-10-CM/PCS and CPT.
- Describe the relationship between coding and reimbursement in healthcare.
- Demonstrate clear and effective communication skills, critical thinking, and problem solving within their scope of practice.
- Demonstrate theory, technology, and interpersonal skills that may be applied 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.
Associate in Science Degree Program

*Prerequisites: Current American Heart Association BLS Certification (Health Care Provider); HS level Biology and Chemistry with labs or BIO 114 (completed in the last 10 years); HS level Algebra; Pre-Admissions Skills Testing

First Semester

<table>
<thead>
<tr>
<th>Course</th>
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<tr>
<td>♦*ALH 124 Health &amp; Safety Compliance</td>
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<td>♦ BIO 120 Anatomy &amp; Physiology I</td>
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<td>w/Lab</td>
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<tr>
<td>ENG 111 English Composition</td>
<td>3</td>
<td>0</td>
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<tr>
<td>♦♦*NUR 115 Pharmacology for Nurses</td>
<td>3</td>
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<td>3</td>
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<tr>
<td>♦♦NUR 125 Foundation of Nursing/</td>
<td>4</td>
<td>9</td>
<td>7</td>
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<tr>
<td>Nursing Care of Adults</td>
<td></td>
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<td>**MAT 125 College Algebra</td>
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Second Semester

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<td>♦ BIO 130 Anatomy &amp; Physiology II</td>
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<tr>
<td>w/Lab</td>
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<tr>
<td>♦♦*NUR 117 Nutrition</td>
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<tr>
<td>♦♦NUR 127 Nursing Across the Life Span I</td>
<td>4</td>
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<td>PSY 101 General Psychology</td>
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Summer Session

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<tr>
<td>NUR 124 Role Transition</td>
<td>15</td>
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<tr>
<td>(This course is required only for LPNs entering the program in Semester III)</td>
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Third Semester

<table>
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<th>CR</th>
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<tbody>
<tr>
<td>♦ BIO 218 Microbiology Lecture &amp; Lab</td>
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<td>2</td>
<td>4</td>
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<tr>
<td>♦♦NUR 226 Nursing Across the Life Span II</td>
<td>5</td>
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<td>PSY 207 Developmental Psychology</td>
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Fourth Semester

<table>
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<th>Course</th>
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<tbody>
<tr>
<td>COM 111 Speech</td>
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<tr>
<td>♦♦NUR 229 Nursing Across the Life Span III</td>
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<tr>
<td>Humanities Elective</td>
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<td></td>
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<td>12</td>
<td>15</td>
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</table>

TOTAL REQUIRED 69

♦ Major courses; a minimum grade of “C” (73) or 2.0 required.
♦♦ Major nursing (NUR) courses: a minimum grade of “C+” (77) required

* ALH 124 must be passed within 12 months of enrollment into NUR 125; NUR 115 can be taken within 24 months of enrollment into NUR 125 and must be successfully completed prior to progression to the next semester; NUR 117 may also be taken within 24 months of enrollment into NUR 127.

**MAT 125 may be completed any time prior to the start of the fourth semester. It must be successfully completed before enrolling in NUR 229.

Student Learning Outcomes

• Assume legal and ethical responsibility and accountability consistent with the Maine state nurse practice act, Maine Board of Nursing rules and regulations, and professional standards of practice.
• Demonstrate efficiency as manager of care through prioritization, delegation, and resource utilization in caring for individuals and groups.
• Utilize effective therapeutic and professional communication skills in the practice of nursing.
• Demonstrate safe and effective clinical judgments using critical thinking skills when providing nursing care for individuals and groups.
• Systematically apply the nursing process with individuals and groups to promote and maintain health, prevent illness and facilitate adaptation to stressors.
• Demonstrate professional nursing care that incorporates sensitivity and caring behaviors to culturally diverse clients and groups across the lifespan.
• Collaborate with health care team members, individual clients and groups, utilizing best practice standards to achieve positive client outcomes.
• Incorporate teaching/learning principles into the provision of care to individuals and groups.
• Develop plans for continued personal and professional growth.

The Maine State Board of Nursing may refuse to grant a license on the basis of the criminal history record information relating to convictions denominated in Title V Chapter 341 Section 5301 Subsection II of the Maine Revised Statutes Annotated.
PLUMBING AND HEATING

Associate in Applied Science Degree Program

<table>
<thead>
<tr>
<th>First Semester</th>
<th>C</th>
<th>L</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 111 English Composition</td>
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<td>3</td>
</tr>
<tr>
<td>♦ PLH 108 Plumbing Technology</td>
<td>2</td>
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<td>♦ PLH 109 Plumbing Lab I</td>
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<tr>
<td>♦ PLH 113 Pipefitting Calculations</td>
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TOTAL REQUIRED 66

♦ Major courses; a minimum grade of "C" or 2.0 required.

Program Outcomes

- Communicate effectively with peers, customers, technical support staff, and supervisors through verbal and written modes.
- Perform required mathematical calculations for the trade, including pipefitting calculations.
- Perform required work safely in accordance with federal and state regulations.
- Understand the natural physical laws that govern the plumbing and heating trades.
- Read and interpret the blueprints of the plumbing and heating trades as well as other related trades.
- Recognize, troubleshoot, and install safe electrical wiring for the associated heating and plumbing appliances, lighting, receptacles, and supply circuits from the electrical service panel.
- Perform pipe joining procedures for all major piping systems, including PVC, copper, iron, and plastic (PEX).
- Demonstrate the safe use of hand and power tools.
- Demonstrate correct installation and servicing of jet and submersible pumps.
- Install plumbing pipes and fixtures according to the Maine Plumbing Code.
- Demonstrate correct and safe implementation of routine plumbing service procedures.
- Demonstrate proper welding and soldering techniques for copper and iron pipe installations.
- Demonstrate the safe/correct procedure for wiring heating appliances, such as warm air furnaces and boilers.
- Install oil or gas supply lines in a building.
- Estimate heating loads for a building.
- Design a warm air duct system.
- Size and install piping systems for hot water boilers according to the Maine codes.
- Install control systems for various types of heating systems.
- Perform routine service and troubleshooting on #1 and #2 fuel oil and gas fired heating equipment.
- Be eligible for National Propane Gas Association CETP certifications.
- Understand the fundamentals of refrigeration and air conditioning and be eligible for EPA 608 certification.
- Understand the fundamental concepts of solar thermal technology.

PLUMBING Certificate Program

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TOTAL REQUIRED 25

HEATING - Certificate Program

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TOTAL REQUIRED 34
### PRECISION MACHINING TECHNOLOGY

#### Associate in Applied Science Degree Program

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**Program Outcomes**

- Apply occupational safety and health (OSHA) standards related to the machine tool industry.
- Communicate using proper technical terms and descriptions.
- Demonstrate a commitment to life-long learning through formal education, on-the-job in-service or independent participation in other trade/technical resources.
- Demonstrate setup and operation of conventional machine tools.
- Develop CNC programs with the assistance of CAM software.
- Develop entry level CNC programs without the assistance of programming software.

#### Certificate Program

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**TOTAL REQUIRED** 31

- **Major courses; a minimum grade of "C" or 2.0 required.**
  - Develop written inspection plans for first article and final inspection tasks.
  - Develop written setup instructions for CNC Vertical Milling Machine Tools.
  - Develop written setup instructions for CNC Turning Machine Tools.
  - Evaluate machined components utilizing current ASME standards.
  - Evaluate machined components utilizing On-Machine-Verification (OMV) probe applications.
  - Evaluate machined components utilizing precision measurement tools found in a modern machine shop.
  - Exhibit a high standard of workmanship.
  - Integrate learning experiences gained from the general education courses to the practice of the machine tool trade.
  - Interpret engineering drawings utilizing current ASME standards.
  - Perform algebraic and trigonometric calculations to establish machining conditions.
  - Read and comprehend technical manuals.
  - Read and comprehend written work instructions.
  - Select and use proper cutting tools in a conventional machine shop setting.
  - Select and use the proper measurement tools found in a conventional machine shop setting.
  - Understand the natural laws of physics as they pertain to the trade.
  - Work cooperatively and collaboratively on projects.
**Certificate Program**

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<td>♦ WEI 133 Electric Welding</td>
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TOTAL REQUIRED 31

♦ Major courses; a minimum grade of "C" or 2.0 required.

*NOTE: WEI courses less than 15 weeks are offered sequentially, not concurrently.*

**Program Outcomes**

- Maintain a safe working environment.
- Work cooperatively with others.
- Work independently with minimal supervision.
- 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.
- Be able to weld in all positions with all welding equipment.
- Understand how each of the major welding processes work.
- Be eligible for the American Welding Society (AWS) structural certification.

**TRADE AND TECHNICAL OCCUPATIONS**

**Associate Degree Program**

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<td>Minimum of 12 credits (Minimum of 6 credits in Communications)</td>
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<tr>
<td>Natural Sciences/ Business</td>
<td>Minimum of 9 credits (Minimum of 3 credits in Math)</td>
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<td>Related Courses</td>
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### Certificate Program

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<tr>
<td><strong>Second Semester</strong></td>
<td>13</td>
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<td>DRR 118 Ductwork Calculations</td>
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<td>♦ SHM 121 Sheet Metal II</td>
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<td>WEI 133 Electric Welding</td>
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<td>WEI 136 Gas Metal Arc Gas Tungsten Arc Welding</td>
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<tr>
<td><strong>TOTAL REQUIRED</strong></td>
<td>34</td>
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</tbody>
</table>

♦ *Major courses; a minimum grade of "C" or 2.0 required.*

### Program Outcomes

- Maintain a safe working environment for themselves and others.
- Select/use the appropriate pattern layout drafting tools.
- Perform required mathematical calculations for the layout, fabrication, and blueprint reading for the fabrication trade.
- Work cooperatively/collaboratively on larger projects.
- Work independently with minimal supervision.
- Demonstrate safe and proper use of typical fabrication hand tools and typical fabrication machines.
- Demonstrate the use of straight line development to layout and fabricate fittings.
- Demonstrate the use of parallel line, radial line, and triangulation development to layout and fabricate fittings.
- Use the computerized fitting layout system’s functions and software application to fabricate fittings.
- Layout and fabrication of edges, seams, clips, locks, fasteners, and connectors.
- Identify sheet metal materials and identify the gauge of metal materials.
- Read and interpret the blueprints for the sheet metal trade as well other related trades.
- Demonstrate knowledge of safety requirements of the welding fields and to recognize unsafe acts.
- List the factors that must be considered before a welding process is selected.
- Explain how each of the major welding processes works.
- Demonstrate each of the major welding processes oxyacetylene, arc, mig, tig, and plasma cutting.
- Be able to weld in all positions with all welding equipment.
Associate in Applied Science Degree Program

**First Semester**

- **ELS 115** Basic Elec./Electronics  
  C 0 3
- **ELS 116** Basic Elec./Electronics Lab  
  0 6 2
- **ENG 111** English Composition  
  3 0 3
- **MAT 118** Electrical Math  
  4 0 4
- **WPT 113** Safety Fundamentals for Wind Technicians  
  2 2 3
- **WPT 114** Intro to Wind Power Industry  
  2 3 3

**Second Semester**

- **DIB 113** Intro. to Digital Systems  
  2 2 3
- **ELS 124** Industrial Electronics  
  2 3 3
- **ELS 125** Motors & Controls  
  2 3 3
- **PHY 150** Physics  
  3 2 4
- **WPT 115** Concepts of Wind Power Technology  
  2 3 3
- **General Education Elective**  
  1 0 1

**Third Semester**

- **COE 125** Computer Networking  
  Hardware  
  2 2 3
- **EET 221** Control Systems and PLCs  
  2 3 3
- **ELC 110** National Electrical Code  
  3 0 3
- **IFP 110** Industrial Fluid Power Technology  
  2 3 3
- **SAE 117** Occupational Safety  
  1 0 1
- **WPT 210** Wind Turbine Mechanical System  
  2 3 3

**Fourth Semester**

- **COM 221** Technical Communications  
  3 0 3
- **WPT 213** Wind Power Control Systems  
  2 3 3
- **WPT 214** Wind Power Delivery Systems  
  2 3 3
- **WPT 224** Wind Turbine Management  
  Social Science Elective  
  3 0 3
- **Humanities Elective**  
  3 0 3

**TOTAL REQUIRED**  
  69

- **Major courses; a minimum grade of "C" or 2.0 required.**

**Program Outcomes**

- Function successfully as technicians on wind farms and/or in other energy production settings.
- Demonstrate an understanding of conceptual foundations of wind energy and the terminology used within the energy industry.
- Demonstrate an understanding of the requirements for proper siting of wind turbines including physical, environmental, and public policy issues.
- Demonstrate an understanding of how power generation equipment functions and requirements for it to connect safely to the utility grid.
- Demonstrate an understanding of wind farm site development.
- Demonstrate an understanding of typical wind turbine construction methods and related safety considerations.
- Demonstrate good math, writing, verbal, and interpersonal skills.
- Demonstrate the skills associated with quality workmanship.
- Demonstrate specific and in depth understanding of electricity, electronics, mechanical systems, and fluid power systems utilized in modern wind turbines.
- Demonstrate an understanding of the National Electrical Code requirements for industrial electrical applications.
- Demonstrate an understanding of NFPA 70E, ANSI, and other industrial standards with respect to electrical safety requirements, HRC, PPE, and LOTO.
- Demonstrate an understanding of OSHA regulations as they apply to best working practices for industrial hygiene, workplace hazards, PPE, confined space, hazardous materials, working at heights, and fall protection.
- Demonstrate an understanding of troubleshooting techniques utilizing SCADA information, electrical, mechanical, fluid power schematics, technical manuals, and other available company resources.
- Demonstrate skills necessary to troubleshoot and repair electrical, electronic, mechanical, and hydraulic systems.
- Demonstrate an understanding of LAN applications, communication architectures, hardware, software, protocols, and troubleshooting skills related to SCADA system function.
- Demonstrate an understanding of communication links such as Ethernet, serial, Optical Fiber, and wireless.
- Demonstrate a working knowledge of PC software applications used for communication activities such as email, data entry, spreadsheets, word processing, and internet searches.
- Demonstrate the safe handling and proper use of hand tools, power tools, and rigging equipment.
- Demonstrate skills necessary to select and use diagnostic equipment safely.
- Demonstrate safety skills necessary when working with or around high voltage systems, high angle work sites, and tower rescue procedures.
- Demonstrate an understanding of the role SCADA plays in wind farm management and the use of system data for process monitoring and improvement activities.
- Understand the role cost plays in proper maintenance practices and service activities.
- Demonstrate skills necessary to plan and execute maintenance or service activities.
Course Descriptions
COURSE DESCRIPTIONS

ACC 110  College Accounting  3 credits
3 class hours
Designed to meet the needs of students who are not
accounting majors. Emphasis is on manually applying the
process of the accounting cycle. Students will be 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.

ACC 111  Principles of Accounting I  4 credits
4 class hours
This introductory course covers fundamental principles of
accounting as related to service and merchandising sole
proprietorships. Emphasis is on developing technical
procedures of the accounting cycle including journalizing,
posting, adjusting entries, closing books and preparing
financial statements. Exposes the specific areas of
deferrals and accruals, inventories, payroll, receivables,
payables and accounting systems. Practical application
will be through the use of a computerized homework
system and projects.

ACC 112  Computerized Accounting  3 credits
3 class hours
This course covers small business accounting using
computerized accounting software. 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. Prerequisite: ACC
110 or ACC 111; or permission of instructor.

ACC 113  Payroll Accounting  3 credits
3 class hours
This 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. Prerequisite: ACC 110 or ACC 111; or
permission of instructor.

ACC 121  Principles of Accounting II  4 credits
4 class hours
The first part of the course continues to address topics in
financial accounting that began in ACC 111. Emphasis
is on the corporate form of ownership. Topics include
accounting for bonds, investments in stocks and bonds,
business combinations, financial statement analysis
and the statement of cash flows. Students will apply
concepts learned by the completion of a computerized
homework system and an investment project.
Prerequisite: ACC 111

ACC 125  Managerial Accounting  4 credits
4 class hours
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. Prerequisite: ACC 111

ACC 211  Intermediate Accounting I  4 credits
4 class hours
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 the foundations of financial
accounting and routine activities of a business.
Students will prepare comprehensive balance sheets,
income statements, and statement of cash flows. Other
topics include inventory costing; accounts and notes
receivables; the allowance method of accounting for
bad debts; plant and equipment; investments; and other
issues. Prerequisite: ACC 121

ACC 214  Federal Taxation I  3 credits
3 class hours
Study of the U.S. Federal Income Tax laws to provide
training in preparation of individual tax returns. Special
emphasis is on recognition of taxable income, non-
taxable income, personal deductions, gain or loss
recognition basis, capital gains, monetary conversion,
business expenses and itemized deductions.
Prerequisite: ACC 121 or ACC 125

ACC 221  Intermediate Accounting II  4 credits
4 class hours
Continuation of ACC 211. Additional activities of
a business are covered. Emphasis is placed on
special problems which may include debt and equity
financing, leases, investments, income taxes and
employee compensation. Other dimensions of financial
reporting, such as earnings per share, accounting
changes and error corrections, are also covered. Upon
completion, students should be able to demonstrate an understanding of the principles involved and display an analytical problem-solving ability for the topics covered. Prerequisite: ACC 211

**ACC 225  Federal Taxation II  3 credits  3 class hours**
A study of the current tax code as it relates to corporations, partnerships, estates and trusts, along with other selected topics related to 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 hours**
This course covers the functions of an accounting information system within an organization and examines topics in internal controls and system documentation. The course emphasizes a commercial software package integrated with accounting projects. These projects explore systems in banking, customers and sales, vendor purchases and inventory, payroll, budgets, reports, and graphics. Prerequisites: ACC 121 or ACC 125

**ACC 242  Accounting Information Systems II  3 credits  3 class hours**
The student will develop an understanding of the differences between database accounting information systems and manual systems; learn theory and practice of relational database management systems; and learn to identify the business activities that comprise the four main transaction cycles. With that foundation, the student will build the elements of an accounting information system using database management systems software, as well as apply database theory and tools to build accounting system elements for each of the four main transaction cycles: sales, purchases, payroll and production. Prerequisite: ACC 234

**ACR 111  Non-Structural Repairs  6 credits  3 class hours, 9 lab hours**
Covers shop safety and regulations as they pertain to the collision repair industry. Theory as well as hands-on experience with the removal, replacement and service of complete interior, glass (moveable and stationary), exterior trim and components. Proper metalworking and straightening techniques as well as pre-paint preparation is also covered. Prerequisite: ACR 111

**ACR 121  Structural Analysis/Plastics  6 credits  3 class hours, 9 lab hours**
Covers intermediate body repairs with measuring systems being used. Hydraulic equipment is introduced with hands-on training in structural alignment of the vehicle body. Welded panel replacement and proper sectioning techniques are applied. Theory and hands-on training are provided in the identification and repair of plastics, composite materials and fiberglass. Prerequisite: ACR 111

**ACR 209  Auto Collision Blueprinting & Estimating  3 credits  3 class hours, 3 lab hours**
Provides instruction and hands-on training in the blue printing and estimating of collision damage. Course will also cover topics such as insurance coverage, working with appraisers and customers. Prerequisite: ACR 121

**ACR 211  Painting/Refinishing  6 credits  3 class hours, 9 lab hours**
Covers all of the 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 as well as 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 hours, 2 lab hours**
Course focuses on fundamental techniques 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  4 class hours, 6 lab hours**
Covers 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, proper handling of the repaired vehicle as well as component identification is emphasized. Prerequisite: ACR 209, ACR 211

**ALH 115  Introduction to the Healthcare Professions  3 credits  3 class hours**
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 to be 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 hour**
In the past several years, regulatory agencies have significantly increased the life and environmental safety requirements for health care 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.
ART 101  Fundamentals of Art      3 credits
3 class hours
This course will provide the student with an understanding of the fundamental principles of the visual arts. Lectures and slide presentations will introduce students to the formal elements of the visual arts (line, shape, value, texture, color and space) and the organizing principles used by artists to create works of art. The course will also include a comprehensive overview of the stylistic and technical developments throughout the history of art up until the present moment, with emphasis on the key figures and movements of the 19th and 20th centuries. This course will benefit both practicing artists at any level as well as anyone wishing to gain a better appreciation and understanding of the arts.

ART 110  Introductory Drawing  3 credits
3 class hours
Drawing is the underlying structure for all of the visual arts, including painting, sculpture, graphic design and architecture. Whether used as a preliminary study for more formal work or as a means of making art in and of itself, drawing is a direct means of finding personal expression. Students in this introductory studio course will gain exposure to the drawing experience via a variety of approaches and media while being encouraged to find a personal approach. Working from still lifes, interiors, and models, we will explore line, value, texture, space and composition. Studio work will be supplemented with slide presentations and discussions of the graphic work of established artists and group critiques.

ART 116  Digital Photography & Imaging  3 credits
3 class hours
This course is an introduction to digital photography and imaging. Topics include the basic operation of a digital camera, camera controls, file formats, composition, lighting and exposure, and basic image enhancement for creative use with imaging software (digital darkroom).

ART 122  Architectural History  3 credits
3 class hours
Introduces students to significant features of ancient to modern architecture. The student will recognize when certain types of structures were constructed, how those structures were built, and relate building features of the past to the present (i.e. why we build as we do today).

AUT 109  Introduction to Auto Technology  1 credit
.5 class hours, 1.5 lab hours
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.

AUT 113  Suspension/Steering/Brakes  6 credits
3 class hours, 9 lab hours
Exposes students to the underside of cars and light trucks. Tires, tire pressure monitoring systems, wheel balancing techniques, brake systems, ABS, steering and suspension systems are covered in detail. Emphasis is placed on inspection, diagnosing of problems and proper repair. Wheel alignment is also covered. Theory of vehicle geometry including purpose of caster, camber, steering-axis inclination, turning radius and toe. Techniques of thrust and four wheel alignments are performed on operational vehicles.

AUT 115  Automotive Electricity  3 credits
2 class hours, 2 lab hours
A series of activities allow the student to learn the basic concepts of electricity as they apply to the automotive service and repair field. Theory of electricity covered will include volts, ohms, amps, and the proper use of a digital multi-meter. Types of electrical components used in series, parallel and combination circuits are also covered. Students are asked to take information and show their understanding of the material by completing worksheets, on-trainer activities, on-trainer troubleshooting and vehicle application. The voltage drop test will be discussed and performed with the activities, along with electrical schematic reading and troubleshooting techniques.

AUT 123  Electrical Systems  6 credits
3 class hours, 9 lab hours
Includes theory of electricity and magnetism as it applies to batteries, starters (conventional and computer controlled), charging systems and ignition systems. Students will then be introduced to the operation and diagnoses of the accessories of a vehicle such as wipers, lights, cruise control, theft deterrent, radio systems, heated and power seats, navigation systems and Bluetooth. Scan tools and diagnostic equipment will be used to diagnose these systems and run function tests for inputs and outputs, as well as read and interpret data from various components. Prerequisite: AUT 113 and AUT 115

AUT 125  Automotive Electronics  3 credits
2 class hours, 2 lab hours
A continuation of AUT 115, activities in this course allow students to learn and understand the concepts of electronics as they apply to automotive repair. An introduction to electronics will include how transistor circuits compare to relay circuits. Transistor circuits will include the amplifier, transistor troubleshooting, combining transistors, the capacitor and the photo resistor. Semiconductors/diodes will include diode behavior, troubleshooting diodes, light emitting diodes, clamping and zener diodes. Electronic system diagnostics will include the importance of using a digital multi-meter and logic probe to prevent meter loading in circuits. Engine controls, supplemental air bag systems, oscilloscope and scan tool diagnostics. Introduction to hybrid/EV technology and safety will also be covered. Prerequisite: AUT 115 or instructor’s permission.
### AUT 207  Field Trip in Automaking  
1 credit  
Structured field trip under the direction of transportation trades instructors. Enables students to see and understand the complete assembly process of a vehicle and its power train. Course requires travel to Detroit, Michigan and Windsor, Ontario for tours of a variety of industries. Students must enroll in this course to be eligible for the Detroit trip. Prerequisite: ACR 211 or AUT 214, or DIM 213 or instructor approval

### AUT 214  Engine Performance  
6 credits  
3 class hours, 9 lab hours  
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 123 or instructor permission

### AUT 216  Motor Vehicle Inspection Regulations  
2 credits  
2 class hours  
Laws and requirements of the state motor vehicle inspection system are studied. Emphasized are safety related components for all classes of vehicle inspection. Specific tools and required materials to perform inspections are also discussed. The course develops diagnostic skills in checking vehicles for safety inspection. The student will be eligible to take the Maine State Motor Vehicle Inspection Exam. Prerequisites: ACR 121, AUT 123 or DIM 125 or instructor permission

### AUT 217  Advanced Electronic Systems  
3 credits  
2 class hours, 2 lab hours  
The course is designed to enhance students’ troubleshooting skills. Students will use their troubleshooting skills developed from previous courses to verify, understand and analyze the fault(s) using schematics, laptop based scan tools, vehicle service information, technical service bulletins and special service information to pinpoint the cause of the drivability concern. Students at times will use original equipment manufacturer (OEM) information to repair the vehicle when other sources of information are not available or are insufficient. The course will emphasize the safety of working on hybrid vehicles. Technicians need to understand hybrid safety and the different procedures and components involved with hybrids today, whether they are full, medium or mild hybrids. Students will learn the proper techniques of powering down a hybrid prior to performing any service work, using the proper tools and personal protective equipment. Manufacturer specific scan tools will be used to troubleshoot and diagnose hybrid fault codes and troubleshoot when diagnostic trouble codes are not present in the computer system, using the data from parameter identification (PIDS). Various components will be disassembled, inspected and tested, such as the high voltage battery and high voltage cables. After successful completion of this course, students will have a greater knowledge of hybrid vehicle systems and hybrid vehicle safety. Prerequisite: AUT 125 and AUT 214 or instructor’s permission

### AUT 218  Engine/Transmissions  
6 credits  
3 class hours, 9 lab hours  
Major Engine Service: 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.

Automatic Transmissions: History of the automatic transmission, along with construction and operation of the torque convertor; planetary gears, clutches, bands and their application. Emphasis on problems, diagnosis and adjustments of the automatic transmission.

Power Trains: Consists of diagnosis, removal, repair and replacement of clutch, manual shift transmissions (conventional and transaxle), drive line and final drive assembly. Components supplied by the school. Live work is done when available. Prerequisite: AUT 214 or instructor permission

### BIO 114  Human Biology w/Lab  
4 credits  
3 class hours, 2 lab hours  
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 120  Anatomy & Physiology w/Lab  4 credits
3 class hours, 2 lab hours
Designed for first year students preparing for a career in the medical field. Topics include: 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. The concepts covered in the lecture course are explored in greater detail in lab. Models, prepared slides and preserved specimens will all be used to supply the student with a detailed view of the anatomy of the body. Those who have not successfully completed a high school or college lab-based chemistry and biology course are recommended to take BIO 114 prior to this course. An introductory knowledge of both chemistry and biology is essential for course success.

BIO 130  Anatomy & Physiology II w/Lab  4 credits
3 class hours, 2 lab hours
Continuation of BIO 120. Topics include: sensory, circulatory, urinary, lymphatic, digestive, endocrine, reproduction systems and fluids, electrolytes and acid-base control, as well as nutrition and metabolism. 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. The concepts covered in the lecture course are explored in greater detail in lab. Models, prepared slides and preserved specimens will all be used to supply the student with a detailed view of the anatomy of the body. Prerequisite: BIO 120

BIO 218  Microbiology Lecture & Lab  4 credits
3 class hours, 2 lab hours
A basic introduction to the science of microbiology. Students develop a broad understanding of theoretical and laboratory aspects of the science. Topics include general characteristics of bacteria, viruses, protozoa and fungi; disease transmission; immunology; epidemiology; and microbial control. Students will have the opportunity to practice techniques for specimen collection, culturing, staining and microscope observation of representative species. Prerequisite: BIO 130 or BIO 114

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 clock hours must be completed for 1 credit. To qualify for an internship, a student 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 for this course, students must meet with the course instructor to determine internship site and 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 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 for this course, students must meet with the course instructor to determine internship site and 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 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 for this course, students must meet with the course instructor to determine internship site and process paperwork.

BTE 254  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 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 for this course, students must meet with the course instructor to determine internship site and process paperwork.

BUS 101  Introduction to Business  3 credits
3 class hours
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 hours
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 hours
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 and customer service, cash flow, managing employees, and growing a business. Recommended for all students who aspire to business ownership and management.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Class Hours</th>
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<tbody>
<tr>
<td>BUS 113</td>
<td>Sales Fundamentals</td>
<td>3</td>
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<td>Assist students to analyze the importance of</td>
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<td>personal preparation for selling effectively,</td>
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<td>by understanding of self, the product or service,</td>
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<td>and the customer.</td>
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<td>BUS 114</td>
<td>Personal Finance</td>
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<td>Designed to help individuals analyze and direct</td>
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<td>their own financial affairs. Students will</td>
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<td>practice and apply skills to begin a lifelong</td>
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<td>journey of personal financial planning. This</td>
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<td>course will provide strategies for managing</td>
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<td>personal financial resources, buying decisions,</td>
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<td>insurance, investing, and retirement planning.</td>
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<td></td>
<td>Open to all students.</td>
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<tr>
<td>BUS 117</td>
<td>Business Law I</td>
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<td>Provides a background in the sources of American</td>
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<td>law and the global legal environment. Provides</td>
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<td>a basic knowledge of courts and procedures,</td>
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<td>ethics, torts and crimes, contracts, property</td>
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<td>and its protection, and debtor-creditor</td>
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<td></td>
<td>relationship.</td>
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<td>BUS 119</td>
<td>Legal Environment of Business</td>
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<td></td>
<td>A survey of the law applicable to business and its</td>
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<td>environment. The course will help students gain</td>
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<td></td>
<td>a greater understanding of the standards and</td>
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<td></td>
<td>methods of reasoning that are used to answer</td>
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<td></td>
<td>questions about the legal environment in which</td>
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<td>businesses function. It also covers the legal</td>
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<td>issues that commonly confront businesses and the</td>
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<td>way in which our legal system is organized and</td>
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<td>operates.</td>
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<td>BUS 150</td>
<td>Special Topics in Business Technology</td>
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<td>This survey course is intended to provide the</td>
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<td>opportunity to offer courses of variable content</td>
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<td>on emerging issues or technology of special interest</td>
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<td>to the college community that would not normally</td>
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<td></td>
<td>be part of the NMCC curriculum. Topics and</td>
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<td>content will vary from semester to semester.</td>
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<td>This course will increase the awareness of</td>
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<td>current issues and technology surrounding the</td>
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<td>student.</td>
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<td>BUS 201</td>
<td>Leadership</td>
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<td></td>
<td>Designed to expose senior level students to</td>
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<td>areas of competence and knowledge that are</td>
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<td>fundamental to the practice of leadership in a</td>
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<td></td>
<td>variety of business and life settings. Students</td>
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<td></td>
<td>will examine the prominent leadership theories,</td>
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<td>acquire skills common to successful leaders,</td>
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<td>and listen to opinions of leaders of our own</td>
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<td>community from business, government, and social</td>
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<td>service organizations. Course requires significant</td>
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<td>written and oral communication, project</td>
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<td>management and critical thinking skills.</td>
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<td>Prerequisite: Senior standing.</td>
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<td>BUS 210</td>
<td>Principles of Insurance</td>
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<td></td>
<td>Covers basic ideas, problems and principles found</td>
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<td>in all types of modern insurance and other</td>
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<td>methods of handling risk. Personal and business</td>
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<td>risk management will be included.</td>
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<td>BUS 214</td>
<td>Project Management</td>
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<td></td>
<td>Topics include project management life cycle and</td>
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<td>process; identifying and selecting projects;</td>
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<td>developing a project proposal; techniques for</td>
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<td>planning, scheduling, resource assignment,</td>
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<td>budgeting and controlling project performance;</td>
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<td>project risks; project manager responsibilities</td>
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<td>and skills; project team development and</td>
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<td>effectiveness; project communication and</td>
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<td>documentation; and project management</td>
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<td>organizational structures. The concepts in the</td>
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<td>course support the project management knowledge</td>
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<td>areas of the Project Management Institute's A</td>
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<td>Guide to the Project Management Body of Knowledge</td>
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<td>(PMBOK®Guide).</td>
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<td>BUS 215</td>
<td>Business Ethics</td>
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<td></td>
<td>Introduces contemporary and controversial ethical</td>
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<td>issues that face the business community. Case</td>
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<td>studies are utilized to study the competing</td>
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<td>values and interests involved in ethical</td>
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<td>situations. Upon completion, students should</td>
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<td>be able to demonstrate an understanding of their</td>
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<td>moral responsibilities and obligations as</td>
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<td>members of the workforce and society. Prerequisite: ENG 111, second-year associate degree standing, or permission of instructor.</td>
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<td>BUS 226</td>
<td>Medical Office Management</td>
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<td>Includes topics such as the working relationship</td>
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<td>between hospitals and physicians, bylaws,</td>
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<td>licensure, medical law, military date/time,</td>
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<td>notary public, etc. Field trips to two local</td>
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<td>medical centers are planned as well as keynote</td>
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<td>speakers from the medical field. Each student</td>
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<td>will compile a professional project. Highlight</td>
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<td>is the senior seminar.</td>
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<td>BUS 229</td>
<td>Principles of Management</td>
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<td>Enlivens management principles through its</td>
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<td>emphasis of real-world management practices. The</td>
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<td>experiences of people and businesses used in</td>
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<td>class illustrate the relevance of each</td>
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<td>theoretical management concept and how those</td>
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<td>concepts apply to actual business situations.</td>
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<td>Due to constantly changing management practices,</td>
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<td>leadership and change management concepts are</td>
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<td>integrated in the issues and applications</td>
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<td>throughout the course.</td>
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BUS 233 Supervisory Management 3 credits

3 class hours

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 team work and interaction among students.

BUS 239 Human Resources 3 credits

Management 3 class hours

An organization’s human resources 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. Prerequisite: ENG 111

BUS 241 Principles of Marketing 3 credits

3 class hours

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. Prerequisite: ENG 111

BUS 242 Small Business 3 credits

Management 3 class hours

Covers the concepts of starting and operating a small business. The application of marketing, accounting, human resources management and general management courses is essential for the completion of the required business plan. Prerequisites: BUS 241, senior standing

BUS 250 Advanced Seminar in Business Technology 3 credits

3 class hours

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. Prerequisites: varies according to the course requirements

CAP 111 Carpentry I 6 credits

3 class hours, 9 lab hours

Provides students with knowledge and skills necessary for the safe use of hand and power tools utilized in the building construction industry. Students will practice building floor, exterior walls and roof framing systems using various building products based on the floor plans. Students are introduced to bending aluminum coil stock. Students prepare sketches to scale of wall and floor systems and develop material lists.

CAP 121 Carpentry II 6 credits

3 class hours, 9 lab hours

This course continues the student experience with carpentry tools and framing techniques. Students will learn about various insulation products and practice the proper installation. Emphasis is on roof framing; eave, rake and soffit construction; asphalt shingles; interior partitions; insulation, vapor barrier and attic venting; installation of gypsum panels and finishes. Prerequisite: CAP 111 or instructor’s permission

CAP 211 Carpentry III 6 credits

3 class hours, 9 lab hours

This course provides students with the continued application of basic carpentry skills coupled with more detailed work related to box cornice (returns) construction; aluminum cladding of returns, window and door extension jambs and casings; stairway dimensions and stair construction. Laser levels are used to set elevations and calculate excavation depths. Prerequisite: CAP 121 or instructor’s permission

CAP 221 Carpentry IV 6 credits

3 class hours, 9 lab hours

Course provides students with the continued application of the basic carpentry skills coupled with an emphasis on finish carpentry related to window and door installation with jambs and casings; application of various moldings; sanding and painting/clear finish applications; drywall application. Students construct and install kitchen cabinets and countertops. The semester ends with a senior project. Prerequisite: CAP 211 or instructor’s permission

CIS 105 Introduction to PC Operating Systems 1 credit

1 class hour

Provides an introductory overview of the most commonly used operating systems for personal computers.

CIS 108 Spreadsheet Applications for Business 3 credits

3 class hours

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 109 Visual Basic 3 credits
2 class hours, 2 lab hours
Introduces the latest .NET framework technology to students who have no programming experience. The course includes the essential concepts for logic and design, including variables, input, assignment, output, conditions, loops, procedures, functions, arrays, and files. Introduces VB.NET syntax, with an emphasis on designing and developing graphical user interface, and event-driven programming with an emphasis on applied business solutions. Problem-solving skills and program documentation are also taught. Lab sessions reinforce learning. Previous familiarity with the Windows operating system is a plus.

CIS 112 Fundamentals of Computer Concepts 3 credits
2 class hours, 2 lab hours
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 hours
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 129 Database Applications for Business 3 credits
3 class hours
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, managing and securing a database.

COE 112 Introduction to Linux 3 credits
2 class hours, 2 lab hours
Through lectures, discussions, demonstrations, textbook exercises, and classroom labs, this course teaches students the skills and knowledge necessary to understand core concepts of Linux. The course helps prepare students for the Linux+ Certification exam administered by the Computing Technology Industry Association (CompTIA). CompTIA Linux+ is a vendor-neutral certification, generic across distributions, targeted to individuals with a minimum of six to twelve months of practical Linux experience. The CompTIA Linux+ exam covers functional management of Linux systems from the command line, user administration, file permissions, software configuration and management of Linux-based clients. Oracle and Novell recognize CompTIA Linux+ in certain certification tracks, and it is recommended for Hitachi Electronics and Fujitsu Japan employees. The Linux+ certification exam is the final exam for the course. Two exams are required at a cost of $144 each (2014 academic pricing).

COE 117 Operating Systems 3 credits
2 class hours, 2 lab hours
Through lectures, discussions, demonstrations, textbook exercises and classroom labs, this course teaches students the skills and knowledge necessary to understand core concepts of DOS, Windows XP, and Windows 7 & 8 operating systems. The course offers a study of the functions of installing, configuring and maintaining operating systems. Students will work with many commands used with DOS, Windows XP and Windows 7 & 8. File systems such as FAT, FAT32 and NTFS will be covered.

COE 122 Computer Fundamentals 3 credits
3 class hours
Introduction to diodes, transistors, DC power supplies, amplifiers, oscillators and the 6800 microprocessor. Experiments and tests use the above devices. Examines block diagram of a computer, machine language, interfacing and number systems. Prerequisite: ELS 115, ELS 116; Corequisite: COE 123

COE 123 Computer Fundamentals Lab 3 credits
9 lab hours
This course is the laboratory component of COE 122. Corequisite: COE 122
COE 125  Computer Networking  3 credits  2 class hours, 2 lab hours

Provides the student with 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 operating systems (Windows 2008 Server and Windows 7); 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. The Network+ exam is the final exam for the course. The cost of the exam is approximately $133 (2014 academic pricing). Includes considerable hands-on experience.

COE 135  Network Administration  3 credits  2 class hours, 2 lab hours

Using Microsoft Windows Server 2012 the course provides students with information covering the basics of network administration. Deploying & managing server images, implementing patch management, monitoring servers, configuring distributed file systems, configuring file server resource manager, configuring file services & disk encryption, configuring advanced audit policies, configuring DNS zones, configuring DNS records, configuring VPN & routing, configuring direct access, configuring a network policy server, configuring NPS policies, configuring network access protection, configuring server authentication, configuring domain controllers, maintaining active directory, configuring account policies, configuring group policy processing, configuring group policy settings, managing group policy objects, and configuring group policy preferences. The course is done on-line using virtual labs. Students will need to meet, on-site, the first class and the last class. The course prepares students for the Microsoft Administering Windows Server 2012 exam (70-411). Students are encouraged to take the 70-411 Microsoft certification exam upon course completion.

COE 214  Implementing & Managing Network Infrastructure  3 credits  1.5 class hours, 4.5 lab hours

This course teaches students the skills and knowledge necessary to configure, manage and troubleshoot a Windows Server 2008 network infrastructure through lectures, discussions, demonstrations, textbook exercises, and classroom labs. Key concepts of Windows Server 2008 network management, such as DHCP, DNS, Routing and Remote Access are covered. Students will need to meet, on-site, the first class and the last class, and remaining class time will be on-line. Students are encouraged to take the 70-642 Microsoft certification exam upon course completion. Exam price is $90 (2014 academic pricing). Prerequisite: COE 125

COE 216  Computer Security+ Prep.  3 credits  1.5 class hours, 4.5 lab hours

Teaches students the skills and knowledge necessary to understand core concepts of computer security. Explained are key security concepts, including understanding encryption technologies, securing communications and applications, and responding to incidents. The course helps prepare students for the Security+ Certification exam administered by the Computing Technology Industry Association (CompTIA). Those who successfully pass the Security+ Certification exam are certified as possessing the basic knowledge and skills needed to work in computer security. The Security+ Certification exam is the final exam for the course. The cost of the exam is approximately $185 (2014 academic pricing). Prerequisite: COE 125, Network+ Certification, or permission of instructor

COE 220  Intro. to Computer Forensics  3 credits  2 class hours, 2 lab hours

The course will guide the student toward becoming a skilled computer forensics investigator. Topics include: history of computer forensics, understanding computer investigations, requirements and equipment for a forensics lab, data acquisition, current forensic tools, Linux boot process, recovering graphics files, e-mail investigations, report writing, and ethics for the expert witness. Guidance software EnCase will be used in the course. A networking background is necessary for the student to understand how computers operate in a networked environment. Prerequisite: COE 125 or instructor permission

COE 224  Advanced Computer Electronics  3 credits  3 class hours

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, drives, and printers, including laser. Considerable hands-on time is spent gaining troubleshooting skills using test equipment and software diagnostics. The A+ exam is the final exam for this course; the cost is approximately $86 per exam (2014 academic pricing). One exam covers core technology, and the other covers operating systems. Prerequisite: COE 214; Corequisite: COE 225

COE 225  Computer Electronics II Lab  3 credits  9 lab hours

This course is the laboratory component of COE 224. Corequisite: COE 224

COE 231  CompTIA Healthcare IT Technician Preparation  2 credits  2 class hours

The CompTIA Healthcare IT Technician specialty certification is a vendor and technology neutral exam designed to ensure IT professionals have the operational, regulatory and security knowledge necessary to provide hardware and software support in
medical environments where Electronic Health Record systems are being deployed or maintained. The final exam for the course is the CompTIA Healthcare IT Technician exam. Corequisite: COE 224 or instructor approval

**COL 103 College Success**  
**1 credit**  
**1 class hour**

College Success is designed to help students feel comfortable with the experience of being a college student. As a class, we 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 hours**

An oral communication course offering experience in 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 210 Mass Communications: Media & Culture**  
**3 credits**  
**3 class hours**

Introduces the field and the study of mass media/communication and its impact on society. Students will explore, observe, discuss and analyze media, using a cultural perspective as a basis for communication and media studies. Special attention is paid to understanding aspects of media and mass communication in the context of comparative cultural studies with special attention to: “texts” of culture, media, and communication, including print, the internet, television, film, music, and radio. Corequisite: ENG 111

**COM 212 Business Communications I**  
**3 credits**  
**3 class hours**

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 hours**

Designed to strengthen oral and written skills. It focuses on the elements of technical writing, report writing and business correspondence. Particular emphasis is given to utilizing visual aides effectively, writing several types of job-related technical reports, and giving oral presentations. Prerequisite: ENG 111

**DIB 113 Intro. to Digital Systems**  
**3 credits**  
**2 class hours, 2 lab hours**

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. Pre/Corequisite: ELS 115, ELS 116

**DIM 112 Intro. to Diesel Hydraulics**  
**3 credits**  
**3 class hours, 9 lab hours**

Introduces the diesel technician to the field and shop practices and personal and tool safety. Covered in detail are: heavy equipment operation; preventive maintenance for equipment used in the transportation industry; details of construction and theory of operation of two cycle and four cycle engines. Disassembly and rebuilding for service and study of component parts is done on small diesel engines. Specialized units include fuel, coolant, oil, air and controls.

*For the full time program this course meets for eight weeks.*

**DIM 114 Engine Diagnosis & Tune-up**  
**3 credits**  
**3 class hours, 9 lab hours**

Troubleshooting and correcting engine faults, diesel fuel systems faults, and setting static and dynamic timing are covered in detail. Engine tune-up and governor settings are practiced for competency and accuracy. Diesel injection systems are covered in detail including pumps, injectors, pump pressures, pop off pressures and glow plug systems.

*For the full time program this course meets for eight weeks.*

**DIM 122 Electrical Systems (Heavy Equipment)**  
**3 credits**  
**3 class hours, 9 lab hours**

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. Prerequisite: AUT 115, DIM 112, DIM 114

*For the full time program this course meets for eight weeks.*
DIM 123*  Brake Systems  
1.5* credits  
3 class hours, 9 lab hours  
Includes hydraulic brake systems on all types of vehicles, including disc, drum, valving and powerboosters. Introduction, theory and lab work on air brake systems, including the “121” system, are also covered. Prerequisite: DIM 112, DIM 114  
*For the full time program this course meets for four weeks.

DIM 125*  Suspension & Steering  
1.5 credits  
3 class hours, 9 lab hours  
Covers suspension systems, conventional and McPherson Strut components and service; diagnosis of steering problems, steering gears, power-steering, front wheel drive and four wheel drive. Prerequisite: DIM 112, DIM 114  
*For the full time program this course meets for four weeks.

DIM 211*  Hydraulics Technology  
3 credits  
3 class hours, 9 lab hours  
Introduces fluid forces and their application to power transfer. Emphasis is on troubleshooting and repair of hydraulic systems. Includes schematic terminology, construction, circuit analysis and testing of the hydraulic system. Prerequisite: DIM 122, DIM 123, DIM 125  
*For the full time program this course meets for eight weeks.

DIM 213*  Diesel Engine Rebuilding Technology  
3 credits  
3 class hours, 9 lab hours  
Includes diagnosis of diesel engine problems. Analysis disassembly, precision measuring and repair, including machining replacement and reassembly of internal combustion engines are also covered. Prerequisite: DIM 122, DIM 123, DIM 125  
*For the full time program this course meets for eight weeks.

DIM 221*  Drive Train Systems  
3 credits  
3 class hours, 9 lab hours  
Includes diagnosis, removal, repair and replacement of components from engine to drive axles. Includes clutches, manual transmissions, axles, differentials, propeller shafts and axle suspension systems. Prerequisite: DIM 211, DIM 213  
*For the full time program this course meets for eight weeks.

DIM 222*  Air Conditioning Systems/Transport Refrigeration  
3 credits  
3 class hours, 9 lab hours  
Introduces 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 211, DIM 213  
*For the full time program this course meets for eight weeks.

DRR 109  Print Reading for Welders  
3 credits  
2 class hours, 2 lab hours  
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 hours, 2 lab hours  
Focuses on developing skills in basic sketching techniques and interpretation of blue prints. Students will practice sketching in several perspectives and practice interpreting actual prints for pertinent construction information related to their respective trades.

DRR 118  Ductwork Calculations  
4 credits  
4 class hours  
Provides students with the mathematical processes and functions necessary to lay out, measure, and estimate sheet metal projects. The student will focus on mathematical skills using fractions, decimals, angular measuring, algebraic expressions to calculating surface areas and figuring material cost. Through the use of mathematical and mechanical drawing skills, the student will develop plans that impact the sheet metal work for efficient fabrication and installation.

DRR 212  Architectural Drafting I  
3 credits  
2 class hours, 3 lab hours  
This course covers residential design and development and introduces computer aided drafting basics as it applies to residential architectural drafting. Course topics include residential building codes, space planning and design. Green building technology standards are incorporated into all aspects of the design. Students will begin an individual residential design project and will develop floor plans, exterior elevations and site plans.

DRR 220  Architectural Drafting II  
2 credits  
1 class hour, 3 lab hours  
Students continue residential design development on their individual houses. Topics include foundations, floor framing, roof framing, stairs, kitchen design and perspective drawing. Green building technology is incorporated into the designs. Working drawings will be prepared using computer drafting software. Prerequisite: DRR 212

DRT 109  Mechanical Drafting & Design  
3 credits  
1.5 class hours, 4.5 lab hours  
Mechanical Drafting and Design is a basic computer drafting and design course. Students will learn the proper use of software, drafting and design techniques and the graphic presentation of mechanical components. Students will be able to understand dimensioning, orthographic projection and isometric drawing. Students
will use computer software to develop manufacturing drawings for mechanical parts.

DRT 117 Basic Computer-Aided Drafting  3 credits
Basics through intermediate instruction of current AutoCad software, primarily focused on preparing mechanical and other technical drawings. Students develop CAD skills through the preparation of increasingly complex drawings. AutoCad topics include drawing, editing, text, dimensions, hatch, layers, isometric and layouts.

DRT 125 Residential Design  3 credits
Residential design will develop the students’ engineering and architectural design practices pertaining to residential buildings. Drawings will be completed with an Autodesk CAD software. Drawings will include site plans, foundation plans, framing plans, residential floor plans, exterior elevations, wall sections, mechanical, electrical, presentation drawings and details. Prerequisite: DRT 117

DRT 216 Commercial Design I  6 credits
Commercial Design I will develop the students’ basic civil engineering and architectural design practices pertaining to commercial sites & buildings. The students will complete various drawings utilizing an Autodesk CAD software. Topics will include the development of site layout plans, site grading/contours, site profile/sections, site details, site cut/fill quantities, foundation plans, floor plans, building exterior and interior evaluations, details, sections and details. During the development of the drawings the students will be introduced to various building codes, planning and zoning requirements, green building fundamentals and design best practices. Prerequisite: DRT 125

DRT 218 Adv. Computer-Aided Drafting  3 credits
An advanced level course where students increase their CAD skills by preparing three-dimensional drawings of complex objects. Students will develop an understanding of 3D drawing by creating and editing solid models, rendering, and materials. Three dimensional designs will be printed using a 3-D printer to verify accuracy of the CAD drawing. A capstone project results in the creation of 3D assembly drawings. Prerequisite: DRT 117 or instructor approval

DRT 219 Structural Design  3 credits
Structural Design is an introductory engineering design course that focuses on structural building systems. Students will investigate loads, forces and reactions on structural members and will primarily use the Allowable Stress Design Method. Dimension lumber, engineered lumber, timber, steel bar joists and structural steel are the materials that are covered to select appropriate beams, columns, joists, rafters and purlins. Reinforced concrete will be reviewed to design footings and shallow building foundations. There will be a final design project that requires a thorough evaluation of a building’s structural systems including design alternatives. This is a comprehensive basic engineering design course that focuses on visualization of loads on a structure and selecting the proper structural materials to resist those loads. Prerequisite: MAT 151

DRT 226 Commercial Design II  6 credits
Commercial Design II continues to expand and develop the student’s civil engineering and architectural design practices pertaining to commercial roadways, sites & buildings. The students will produce construction documents and drawings that will be completed utilizing an Autodesk CAD software. Drawings will include roadway design, profiles, sections, site plans, foundation plans, framing plans, masonry and steel details, commercial floor plans, wall sections & details. During the development of the drawings the student will understand the phasing and development of a project. A final project will be developed and presented by the student. The project will begin with conceptual planning to the final design development phase of a project. Prerequisite: DRT 216

ECE 101 Healthy Learning Environments for Children  3 credits
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 the Young Child  3 credits
Covers the intellectual (cognitive) and social development of children and the ways that teachers support development in their daily interactions with young children. Topics will 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 and Professional Development in the Child Care Field  3 credits
Covers topics including: techniques for establishing positive and productive relationships with the families of
child care/development program participants; program management skills such as planning, record keeping, 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
Provides students with the opportunity to actively experience work in the child care/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 200 Child Growth and Development 3 credits
Provides students with practical experience in working with and observing young children in a variety of community-based child care settings; allows students to actively experience work in the child care 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 205 Children's Literature 3 credits
Emphasis is placed on the creation of an environment that supports development of emergent literacy and encourages young children's exploration and enjoyment of literature. Experiences will include development of reading centers; storytelling; creative dramas; 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
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. Prerequisite: PSY 101, ECE 105 or ECE 200 or commensurate experience.

ECE 220 Education of Young Children with Special Needs 3 credits
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  3 credits
Education (Birth-3 years)  3 class hours
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. Prerequisites: ECE 200 or commensurate experience.

ECE 235  Curriculum in Early Childhood  3 credits
Education - (Ages 3-8)  3 class hours
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. Prerequisite: ECE 105 and ECE 200 or commensurate experience.

EDU 115  Essentials for Coaching  3 credits
Youth Sports  3 class hours
Introduces the art and science of coaching at the youth level. The intent is to inspire the prospective coach with a positive coaching philosophy by utilizing theories and practices for a variety of fields: sport psychology, sport pedagogy, and sport physiology. The course will be a comprehensive breakdown of coaching today's youth in a variety of team and individual sports. The student will hear and see a variety of coaches and coaching styles both in practice and game situations. The student will gain an understanding of the importance a coach has with shaping the ideas of today's young people. This course will also meet the Maine Principals Association Section 3D Coaches' Eligibility requirement for high school level coaches.

EET 221  Control Systems & PLCs  3 credits
2 class hours, 3 lab hours
Programmable Logic Controllers are used extensively in process control as well as 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 PLC are used in industry. Theory will be reinforced by applying the basics concepts from hardwired circuits to the Koyo, DL05 and DL105 training equipment. Students will also gain experience on Allen Bradley SLC5/03, PLC5 and ControlLogix hardware and programming software. Prerequisites: DIB 113, ELS 124, ELS 125.

ELC 110  National Electrical Code  3 credits
3 class hours
Presents the fundamentals of the current National Electrical Code. 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  3 credits
for Industry  3 class hours
Presents the fundamentals of the current National Electrical Code. 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 hours, 2 lab hours
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 117  Heating & Cooling Controls  3 credits
2 class hours, 3 lab hours
An introductory course for beginning technicians in the Heating, Air Conditioning and Refrigeration disciplines. This course will begin with the basic principles of electron flow and the generation of electrical current. The major focus will be the installation and troubleshooting of controls typically used in the heating and cooling of residential and light commercial buildings. A comprehensive study along with hands-on applications of basic electrical circuits will progress into the use of thermostats, relay, pressure and manual switches, temperature controls, low voltage controls, electric motors, and new technologies in the field.
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<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ELE 210</td>
<td>Electrical Construction &amp; Maintenance I</td>
<td>3 credits</td>
<td>3 class hours</td>
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<tr>
<td>ELE 212</td>
<td>Electrical Construction &amp; Maintenance I Lab</td>
<td>3 credits</td>
<td>9 lab hours</td>
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<tr>
<td>ELE 222</td>
<td>Electrical Construction &amp; Maintenance II</td>
<td>3 credits</td>
<td>3 class hours</td>
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<tr>
<td>ELE 223</td>
<td>Electrical Construction &amp; Maintenance II Lab</td>
<td>3 credits</td>
<td>9 lab hours</td>
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<tr>
<td>ELS 115</td>
<td>Basic Electricity/Electronics</td>
<td>3 credits</td>
<td>3 class hours</td>
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<tr>
<td>ELS 116</td>
<td>Basic Electricity/Electronics Lab</td>
<td>2 credits</td>
<td>6 lab hours</td>
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<tr>
<td>ELS 124</td>
<td>Industrial Electronics</td>
<td>3 credits</td>
<td>2 class hours, 3 lab hours</td>
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<tr>
<td>ELS 125</td>
<td>Motors and Controls</td>
<td>3 credits</td>
<td>2 class hours, 3 lab hours</td>
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<tr>
<td>EMS 109</td>
<td>Emergency Medical Responder</td>
<td>3 credits</td>
<td>30 class hours, 45 lab hours</td>
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<tr>
<td>EMS 111</td>
<td>Emergency Medical Technician</td>
<td>5 credits</td>
<td>45 class hours, 90 lab hours</td>
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<tr>
<td>EMS 112</td>
<td>Respiratory Emergencies</td>
<td>2 credits</td>
<td>23 class hours, 22 lab hours</td>
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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 chest pain. Students will demonstrate use of the ECG monitor/defibrillator including defibrillation, non-invasive pacing, and cardioversion. Topics will include a review of the anatomy and physiology of the heart and circulatory system, electrophysiology, and assessment of the cardiac patient. Co-requisites: EMS 112, EMS 114 & EMS 115

EMS 114  AEMT Lab  1 credit  45 lab hours
This laboratory course is designed to enhance students 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. Co-requisites: EMS 112, EMS 113, EMS 115

EMS 115  Fundamentals of EMS  3 credits  38 class hours, 22 lab hours
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. Students will also learn 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 Co-requisites: EMS 112, EMS 113, & EMS 114

EMS 122  Intermediate Clinical Externship I  2 credits  30 class hours
This clinical course provides students with the opportunity to apply in the hospital setting, skills and knowledge learned in the classroom and lab. Students partner with assigned preceptors at local hospitals to develop skills in critical decision making, ECG interpretation, physical assessment, and advanced airway management. Hospital rotations include ER, ICU, OR, IV therapy, and others. Students must complete the minimum number of hours and skills established by MEMS and the program to be eligible for certification exams. This is one of two required clinical courses for the AEMT program. Prerequisites: EMS 112, EMS 113, EMS 114 & EMS 115 Co-requisites: ALH 124, EMS 126, & EMS 130

EMS 126  Intermediate Clinical Externship II  2 credits  100 clinical hours
Building on skills learned in lab and the hospital setting, students will apply their knowledge to actual patient situations in prehospital settings. Students are partnered with preceptors who will assist the student into the role of an advanced level EMS professional. Students must complete the minimum number of hours and skills established by MEMS and the program to be eligible for certification exams. This is one of two required clinical courses for the AEMT program. Prerequisites: EMS 112, EMS 113, EMS 114 & EMS 115 Co-requisites: ALH 124, EMS 122, & EMS 130

EMS 130  EMT-Intermediate Skills Seminar  1 credit  45 lab hours
This course can serve as a refresher course for those who are currently licensed Advanced EMTs or Critical Care EMTs wishing to become Paramedics, as well for 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. Prerequisites: EMS 112, EMS 113, EMS 114 & EMS 115 Co-requisites: ALH 124, EMS 122 & EMS 126

EMS 205  Medical Emergencies  3 credits  45 class hours
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 112, EMS 113, EMS 114 & EMS 115

EMS 213  Advanced Emergency Cardiovascular Care  4 credits  45 class hours, 45 lab hours
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). There is an additional cost for this certification. Prerequisites: EMS 130 –or- matriculation into the Paramedic Certificate Program
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<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Hours</th>
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<tbody>
<tr>
<td>EMS 214</td>
<td>Adv. Emergency Pharmacology</td>
<td>3</td>
<td>38 class, 8 lab</td>
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<td>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 as well as review of major drug categories. 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. Prerequisites: EMS 112, EMS 113, EMS 114 &amp; EMS 115</td>
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<td>EMS 216</td>
<td>Paramedic Clinical</td>
<td>5</td>
<td>225 clinical</td>
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<td>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, ambulance services, to name a few. Students must complete the minimum number of skills and hours established by MEMS and this program to be eligible for certification exams. This is one of three required clinical courses at the paramedic level. Prerequisites: EMS 213, EMS 214</td>
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<td>Co-requisites: ALH 124, EMS 205, EMS 220, &amp; EMS 222</td>
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<tr>
<td>EMS 220</td>
<td>Pediatric Emergencies</td>
<td>2</td>
<td>23 class, 22 lab</td>
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<td>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 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 Neonatal Resuscitation certifications (these certifications require additional fees). Prerequisites: EMS 213 &amp; EMS 214</td>
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<td>EMS 222</td>
<td>Trauma Management</td>
<td>3</td>
<td>31 class, 37 lab</td>
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<td>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 Prehospital Trauma Life Support (PHTLS) course. There is an additional cost for this certification. Prerequisites: EMS 112, EMS 113, EMS 114 &amp; EMS 115</td>
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<tr>
<td>EMS 226</td>
<td>Paramedic Clinical</td>
<td>4</td>
<td>170 clinical</td>
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<td>Externship II</td>
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<td>Building on the skills and knowledge presented in previous courses, this externship will allow students to assume the role of paramedic. Participants 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 assume the role of “crew chief” where they are responsible for developing leadership skills while partnered with an experienced EMS preceptor. Students must complete the minimum number of skills and hours established by MEMS and this program to be eligible for certification exams. This is one of three required clinical courses at the paramedic level. Prerequisites: EMS 216</td>
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<td>Co-requisites: EMS 229 &amp; EMS 230</td>
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<td>EMS 229</td>
<td>Paramedic Skills Seminar</td>
<td>1</td>
<td>45 lab</td>
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<td>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 simulates 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. The course concludes with students taking the National Registry Certification Examination. Prerequisites: EMS 205, EMS 213, EMS 214, EMS 220 &amp; EMS 222</td>
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<td>Co-requisite: EMS 226, EMS 230, EMS 231 &amp; EMS 233</td>
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<tr>
<td>EMS 230</td>
<td>Urban Field Externship</td>
<td>1</td>
<td>45 clinical</td>
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<td>Designed as the capstone clinical course for the paramedic education program, students apply the skills learned throughout the program to an intense urban externship as they work alongside experienced paramedics. Students serve as team leaders at selected urban ambulance services, and perfect clinical skills at high volume urban centers. The focus of the experience is to broaden the paramedic’s cultural knowledge, provide high volume clinical experiences, and participate in a system that is perhaps different than what is encountered in rural Maine. This externship generally occurs outside the local areas, and additional fees are required to cover room, board, liability insurance, and travel expenses. This is one of three required clinical courses at the paramedic level. Prerequisites: EMS 205, EMS 213, EMS 214, EMS 216, EMS 220 &amp; EMS 222</td>
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<td>Co-requisites: EMS 226, EMS 229, EMS 231, EMS 233</td>
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EMS 231  Special Populations  1 credit  
15 class hours
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 the patient with special 
needs. Topics will include age/condition specific 
assessment and management of respiratory, cardiac, 
trauma, neurological, and behavioral emergencies. 
Prerequisites: EMS 112, EMS 113, EMS 114 & EMS 115

EMS 233  EMS Operations  1 credit  
45 lab hours
Upon completion of this course students will be able to 
utilize knowledge and skills gained to safely manage 
multi-casually incidents and rescue situations; utilize 
air medical resources; identify hazardous materials 
and other specialized incidents. Some portions of this 
course may take place off campus for a better student 
experience. 
Prerequisites: EMS 112, EMS 113, EMS 114 & EMS 115

EMS 243  Community Paramedicine  8 credits  
90 class hours, 30 lab hours
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. 
Prerequisite: Matriculation in the (Community 
Paramedicine) program

EMS 244  Community Paramedicine  1 credit  
Skills Lab  45 lab hours
This course serves to provide the Community Paramedic 
student with the opportunity to learn and expand upon 
specialized skills discussed in EMS 243. This course will 
provide the student with the opportunities to demonstrate 
a skills set, determined by national model and this 
program, and show competency prior to moving into the 
clinical setting. 
Prerequisite: EMS 243  Co-requisite: EMS 245

EMS 245  Community Paramedicine  3 credits  
Clinical  90 clinical hours
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. 
Co-requisite: ALH 124 & EMS 244

EMS 246  Leadership in EMS  2 credits  
30 class hours
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. The student will develop 
a comprehensive understanding of public relations, 
education, and Medical Direction; and their roles in the 
advancement of a stronger EMS system. 
Prerequisite: Must be a licensed EMS provider or hold a 
NREMT certification

EMS 247  Community Paramedic  1 credit  
Seminar  45 lab hours
Designed as a capstone course the seminar will 
provide the student with an intense lab experience that 
simulates professional practice, as well as 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

ENG 015  Basic Grammar Review  1 credit*  
1 class hour
This self-paced online course will provide a quick 
and efficient review of the grammar necessary when 
preparing to take any high school and college test. This 
graham course concentrates on basic usage and a 
general review of grammatical problem areas. The 
course is ideal for all types of self-motivated students 
who want to get an edge on taking a high school, 
college, or a job related English exam and anyone 
wishing to update their grammar skills. This is a pass/ 
fail course. 
*Credit from this course is not applicable towards graduation.

ENG 017  Reading & Writing Fundamentals  4 credits*  
4 class hours
Designed to help students improve their reading 
vocabulary; writing skills, including paragraph and essay 
development; comprehension; and study and test- 
taking abilities. This course will cover critical reading 
and writing skills, main ideas, vocabulary development, 
supporting details, organizational patterns and inference. 
A large variety of resources, such as the textbooks, 
a novel, newspapers, magazines, internet websites 
blogs and books, will be used to help the student 
strengthen and build reading and writing skills, as well as 
background knowledge, at the same time. *Credit from 
this course is not applicable towards graduation. 
*Credit from this course is not applicable towards graduation.
ENG 018  Reading Basics Review     1 credit* 1 class hour
This self-paced online course will provide a quick and efficient review of the basic reading skills necessary when preparing to take any high school and college test. This reading comprehension course concentrates on fundamental skills such as using the dictionary, understanding prefixes and suffixes, and using reading strategies to figure out meaning. Learners will be able to study at their own level and move at their own pace. Integrated audio allows the reading tutors embedded in the activities to describe how they use their reading strategies in a naturalistic way. This is a pass/fail course.

*Credit from this course is not applicable towards graduation.

ENG 111  English Composition        3 credits 3 class hours
Basic writing course intended to strengthen the student’s ability to 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 113  Working in America       3 credits 3 class hours
A thematic study of the world of work through readings of poetry, literature, and essays to better understand the role of work in our lives.

ENG 120  Introduction to Literature    3 credits 3 class hours
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 224  American Literature I     3 credits 3 class hours
An historic survey of American literature from colonial times to the Civil War. Prerequisite: ENG 111

ENG 227  Advanced Composition       3 credits 3 class hours
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 hours
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 hours
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, region 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 234  American Literature II   3 credits 3 class hours
An historic survey of American literature from the Civil War to the present. Prerequisite: ENG 111

ENG 239  Intro. to Creative Writing   3 credits 3 class hours
The course is portfolio based and broken into two eight-week units, fiction and poetry. In each section, students will read a great deal, up to three short stories or several works by multiple poets each week. Class time will be used to write and discuss exercises, workshops and analyze texts. Prerequisite: ENG 111

HIS 117  World Civilization to 1715     3 credits 3 class hours
Emphasis will be placed on the ideas, institutions and cultural heritage of civilization, as well as political events. Key themes are: the political, philosophical and cultural legacies of ancient Greece and Rome; the origins and beliefs of Judaism and Christianity; Medieval society and institutions; the Renaissance and Reformation; European exploration and colonization; the emergence of capitalism; the English Revolution; Constitutionalism and Absolutism; the Scientific Revolution; and the Enlightenment.

HIS 119  World Civilization 1715 to Present   3 credits 3 class hours
Within this time frame particular emphasis will be placed on the ideas, institutions and cultural heritage of the West as well as a more traditional focus on political events. Key themes are: the legacy and meaning of the American and French Revolutions; the Industrial Revolution; the ideologies of the 19th and 20th century
Europe; imperialism and decolonization; the origin and impacts of the two world wars; and postwar superpower relations.

HIS 123 U.S. History, 1500-1865 3 credits 3 class hours
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 hours
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 203 Religion in America 3 credits 3 class hours
A study of the key movements, events and people in history of religion in America from the colonial era to the present.

HIS 207 Maine History 3 credits 3 class hours
A survey of Maine history from the age of discovery to the present.

HIT 101 Introduction to Health Information Technology 3 credits 3 class hours
Introduces the principles, functions and standards of the health information management profession. Course content includes the body of knowledge, competencies, legal and ethical principles that constitute the core of the health information management profession’s contribution to the healthcare industry. The course focuses on the role and responsibilities of the HIM professional. Students will learn about legal and ethical issues, HIPAA privacy standards, clinical classifications and vocabularies, and healthcare delivery systems, as well as garner an understanding of reimbursement methodologies. Corequisites: ENG 111

HIT 111 Medical Law & Ethics 3 credits 3 class hours
Provides the student with a study of law and legal concepts as they apply to the practice of health information management. Emphasis is on HIPAA Privacy/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. Prerequisites: CIS 113, HIT 101, SES 220. Corequisites: BIO 130, HIT 113, HIT 115, MAT 115

HIT 113 Clinical Classification Systems I 3 credits 3 class hours
Emphasizes the principles and conventions of clinical classification systems used in today’s healthcare settings. Emphasis is placed on ICD-9-CM. A history of nomenclatures and classifications systems is covered, as well as the relationship between coding and health care 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. There will also be emphasis on ICD-10-CM and ICD-10-PCS in preparation of implementation on the compliance date. Prequisites: BIO 120, CIS 113, HIT 101, SES 220. Corequisites: BIO 130, HIT 111, HIT 115

HIT 115 Clinical Applications of Pathophysiology & Pharmacology 3 credits 3 class hours
Designed to educate HIM students on the study of pathophysiology and general health management of disease and injuries across the human life span. 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. Corequisites: BIO 130. Prequisites: BIO 120, SES 220.

HIT 213 Clinical Classification Systems II 3 credits 3 class hours
Emphasizes the principles and conventions of the HCPCS/CPT clinical classification systems used in today’s health care settings. 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, 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-9/ICD-10 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. Corequisites: BUS 229, HIT 215, HIT 217. Prerequisites: BIO 130, HIT 111, HIT 115.

HIT 215 Healthcare Statistics 3 credits 3 class hours
Teaches the principles of data collection, preparation, analysis, and interpretation of healthcare statistics. Topics include statistical formulas, creation and maintenance of indices, healthcare data sets and registers and their correlation when compiling statistics. Also included will be an introduction to payment and reimbursement systems, interpretation and application of Prospective Payment Systems rules and regulations. Statistics used in performance improvement activities will also be highlighted during the course as well as the knowledge and ability to use health care data collected from online databases in comparative statistical reports. Corequisites: BUS 229, HIT 213, HIT 217. Prerequisite: BIO 130, HIT 111, HIT 113, HIT 115, MAT 115.

HIT 217 Reimbursement Systems & Revenue Cycle Mgt. 3 credits 3 class hours
Emphasizes the principles and techniques of clinical classification and reimbursement systems in health care settings. This course will test the students' coding competency and skills; identify and analyze revenue cycle monitors, explain organizational plans and budgets; apply resource allocation and revenue cycle monitors; review quality control and compliance issues of the coding function and federal government compliance institutions. Other topics will include reimbursement software applications, data definitions, accreditation standards, compliance and regulatory requirements, professional ethics, interpersonal skills development, and content of the clinical information as it relates to coded data. Corequisites: BUS 229, HIT 213, HIT 217. Prerequisites: BIO 130, HIT 111, HIT 113, HIT 115.

HIT 221 Integrated Quality Improvement 3 credits 3 class hours
Provides a study of the history, principles and techniques of quality assessment and performance improvement programs; review of utilization of healthcare and other cost containment programs; risk management and the application of evaluation techniques in different healthcare settings. Other topics include computer software applications related to performance improvement, data retrieval and report design, accreditation standards, licensing and regulatory agencies, legal aspects of healthcare related to patient safety and risk management, professional ethics, organizational assessment and benchmarking, and quality improvement methods. Corequisites: ALH 124, HIT 223, HIT 225, HIT 227, PSY 101. Prerequisites: BUS 229, HIT 213, HIT 215, HIT 217.

HIT 223 Health Information Systems 3 credits 3 class hours
The course is a study of computer applications in the management of systems to collect, store, process, retrieve, analyze, disseminate, and communicate health related information. It is intended to educate health information managers in understanding the principles of analysis, design, evaluation, selection, acquisition and utilization of information systems in their organization. Corequisites: ALH 124, HIT 221, HIT 225, HIT 227, PSY 101. Prerequisites: BUS 229, HIT 213, HIT 215, HIT 217.

HIT 225 Internship in HIT 4 credits 12 lab hours
Provides an individualized, supervised practice experience in a clinical setting. Students practice health information management functions as well as being introduced to health information records systems and processes. The student will also assist the Clinical Supervisor with managerial functions. Students will practice functions in the area of records collection, storage and retrieval of health information, qualitative and quantitative analysis of health records, review of legal issues and release of information. The student will be introduced to paper-based and electronic health record systems and processes (the degree of the electronic health record will vary depending upon the facility). Students will also practice health statistics, classification and indexing systems, quality assurance, utilization review, and risk management. They will be required to complete 120 hours in a hospital/acute care setting and 48 hours in alternative care setting(s). Corequisites: ALH 124, HIT 221, HIT 223, HIT 227, PSY 101. Prerequisites: BUS 229, HIT 213, HIT 215, HIT 217.

HIT 227 Seminar in HIT 2 credits 1 class hour, 3 lab hours
This capstone course is designed as a review of the student's professional and practical skills. The student will apply the knowledge they have learned throughout their program in an independent project of their choosing. The student is expected to develop a project plan; establish goals and objectives; collect and analyze information; and prepare their project in a formal written report which they will also have to deliver in an oral presentation. In addition, students will be required to draw conclusions and make recommendations based upon their findings. The course will also include preparation activities for the national RHIT certification exam and career planning. Corequisites: ALH 124, HIT 221, HIT 223, HIT 225, PSY 101. Prerequisites: BUS 229, HIT 213, HIT 215, HIT 217.
HPB 110  High Pressure Boiler Operator       3 credits
            3 class hours
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.

HPR 110  Lifelong Wellness                    3 credits
            3 class hours
Provides students with the tools to be an active participant in their own health and wellness. Since knowledge by itself rarely results in change, the course will actively engage the student in assessing how the various topics presented in the course can affect their own lifestyle. Wellness is an all-encompassing term and the purpose of the course is to allow the student to gain the knowledge necessary to result in positive behavior changes that will result in habits, beliefs and attitudes that will result in a high level of health. This course will also discuss ergonomic issues that can result in a healthy and safe work environment for the individual.

IFP 110  Industrial Fluid Power Technology     3 credits
            3 class hours
Studies fundamental fluid power concepts as they apply to industrial hydraulic systems. Hands-on lab exercises reinforce key principles necessary for a practical understanding of industrial fluid power technology. Emphasis is placed on recognizing and understanding schematic symbols as well as interconnecting hydraulic components to form a working system using schematic diagrams. Design, construction and maintenance of fluid power devices and systems are also covered.

LIB 251  Internship                            1 credit
            1 class hour
Provides the student with on-the-job training at an approved worksite in a field related to the student's major. At least 45 clock hours must be completed for 1 credit. To qualify, a student 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, students must meet with the instructor to determine internship site and process paperwork.

LIB 252  Internship                            2 credits
            2 class hours
Provides the student with on-the-job training at an approved worksite in a field related to the student's major. At least 90 clock hours must be completed for 2 credits. To qualify, a student 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, students must meet with the instructor to determine internship site and process paperwork.

LIB 253  Internship                            3 credits
            3 class hours
Provides the student with on-the-job training at an approved worksite in a field related to the student's major. At least 135 clock hours must be completed for 3 credits. To qualify, a student 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, students must meet with the instructor to determine internship site and process paperwork.

LIB 254  Internship                            3 credits
            3 class hours
Provides the student with on-the-job training at an approved worksite in a field related to the student's major. At least 135 clock hours must be completed for 3 credits. To qualify, a student 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, students must meet with the instructor to determine internship site and process paperwork.

MAT 012  Basic Mathematics Review              1 credit*
            1 class hour
This self-paced online course provides a quick review of the basic math skills necessary when preparing to take any high school and college test. This course concentrates on basic computation, measurement, and problem solving strategies, giving students exposure to real-life problems and solutions. The course is ideal for all types of self-motivated students who want to get an edge on taking a high school, college, or a job related math exam and anyone wishing to update their mathematical skills. This is a pass/fail course.

*Credit from this course is not applicable toward graduation.

MAT 016  Basic Algebra Review                  1 credit*
            1 class hour
This self-paced online course provides a quick and efficient review of the basic algebra skills necessary when preparing to take any high school and college test. Basic Algebra Review concentrates on basic number ideas, linear equations, monomials, graphing, conversion of percents, decimals and fractions, other special topics. Problem solving strategies are embedded across the curriculum, giving students exposure to real-life problems and solutions. The course is ideal for all types of self-motivated students who want to get an edge on taking a high school, college, or a job related algebra exam and anyone wishing to update their mathematical skills. This is a pass/fail course.

*Credit from this course is not applicable toward graduation.

MAT 064  Elementary Algebra                     3 credits*
            3 class hours
Designed so each student can begin at a level of proficiency corresponding to that individual’s background in math and algebra. This course prepares the student for upper-level math courses and fulfills the basics for a good background in elementary algebra.

*Credit from this course is not applicable toward graduation.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
<th>Class Hours</th>
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<tbody>
<tr>
<td>MAT 115</td>
<td>Business Mathematics</td>
<td>3</td>
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<td>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. It includes expanded discussion of key business topics in an algebra-based context.</td>
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<tr>
<td>MAT 118</td>
<td>Electrical Math</td>
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<td>Students learn to use numeric, algebraic and trigonometric methods to analyze DC and AC circuits and systems. Topics include measurement; series, parallel and series-parallel circuits; capacitance; inductance; transformers power; resistance of wire and the AWG; line drops; and three-phase systems.</td>
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<tr>
<td>MAT 119</td>
<td>Applied Mathematics</td>
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<td>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.</td>
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<td>MAT 125</td>
<td>College Algebra</td>
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<td>Includes the number system, operations with algebraic expressions, factoring, linear equations, exponents, radicals, quadratic equations, fractions and graphs.</td>
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<tr>
<td>MAT 151</td>
<td>College Algebra &amp; Trigonometry</td>
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<td>Fundamental concepts and operations, trigonometric functions, systems of linear equations, factoring and fractions, quadratic equations, vectors and oblique triangles, exponents and radicals. Prerequisite: MAT 125 or permission of advisor.</td>
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<tr>
<td>MAT 210</td>
<td>Statistics</td>
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<td></td>
<td>Develops techniques for organizing, evaluating and analyzing data. Includes frequency distributions, measures of central tendency, variation, probability, the normal and binomial distributions and hypothesis testing. Prerequisite: MAT 125 or instructor's permission.</td>
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<tr>
<td>MAT 227</td>
<td>Calculus</td>
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<td>Calculus focuses on differential and integral calculus. Topics include basic concepts of differentiation and integration and their applications. Prerequisite: MAT 151.</td>
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<tr>
<td>MCP 211</td>
<td>Microcomputer Software</td>
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<td>Provides an in-depth study of 16 bit microprocessors. Includes terms, architecture and programming, assembly language, program writing, addressing modes, memory, logic, control lines, dynamic and static ram. Lab experiments required. Prerequisite: DIB 113</td>
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<tr>
<td>MCP 221</td>
<td>Microcomputer Interfacing</td>
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<td>Continuation of MCP 211 which places into practice many of the programming and interfacing concepts. Special integrated circuits such as RAM, ROM, and PPIs are used to interface to the microprocessor trainer. Lab experiments are required. Prerequisite: MCP 211</td>
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<tr>
<td>MDA 110</td>
<td>Medical Assisting Office Procedures</td>
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<td>Introduces the student to the healthcare industry and the medical assisting profession. It will assist the student to develop skills necessary to perform effectively within the medical office, to include: interpersonal skills, professional behavior, computer and telephone techniques, patient processing, office operations, health information management, financial and practice management. Corequisite: BIO 120</td>
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<tr>
<td>MDA 111</td>
<td>Medical Assisting Procedures</td>
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<td>with Lab I</td>
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<td>Provides the groundwork for the fundamentals of medical assisting to include infection control, patient assessment, patient education, nutrition and health promotion, and vital signs. It will also cover assisting with the physical exam, emergency preparedness, venipuncture, and clinical laboratory and tests. In the lab, students practice skills introduced in the classroom. Prerequisite: MDA 110; Corequisite: BIO 130, HIT 115</td>
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<tr>
<td>MDA 211</td>
<td>Medical Assisting Procedures</td>
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<td>with Lab II</td>
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<td>Building on the content and skills of Medical Assisting Clinical Procedures with Lab I, this course examines the intricacies of care of the client in specialty offices. Obstetrics and gynecology, pediatrics, geriatrics, cardiovascular, urological, neurological, psychiatric, rehabilitative and surgical office practice skills are introduced. Lab skills include performance of specialized diagnostic tests, pharmacology and medication administration, electrocardiography and assisting with minor procedures. Prerequisite: HIT 115, MDA 111, SES 108; Corequisites: ALH 124, PSY 101, SES 224 and SES 239</td>
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<td>MDA 223</td>
<td>Medical Assisting Externship</td>
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<td>Allows students to gain practical experience in performing administrative and clinical tasks that occur in a medical office. Students are given the opportunity to apply skills under professional supervision and to gain</td>
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</table>
proficiency in all domains. Upon completion, students should be able to function as an entry-level health care professional. Prerequisite: ALH 124, MDA 211, program director approval and current first aid and CPR certification (American Heart Association Health Care Provider level); Corequisite: PSY 207

MTT 113 Machine Tool Technology I 6 credits 3 class hours, 9 lab hours
This course provides the student with an introductory experience in manual machine tool operations. The training introduces the student to precision measuring, layout, cutting tools, project planning, manual drilling, manual turning, machining formulas and work-holding. An integral part of the instruction will include safe work practices and material handling. Students will machine several projects to develop skills utilizing the various machining techniques. Corequisites: MTT 115

MTT 115 NIMS Lab I 1 credit 3 lab hours
This course provides additional shop time to develop basic competency on milling machines, lathes, and precision measuring methods and instruments. This course will prepare students for NIMS Level I or other industry certification by completing a NIMS Performance Part(s) and other assigned projects. Corequisite: MTT 113

MTT 119 NIMS Lab II 1 credit 3 lab hours
This course provides additional shop time to develop basic competency in milling machines, lathes, and precision measuring methods and instruments. This course will prepare students for NIMS Level I/II or other industry certification by completing a NIMS Performance Part(s) and other assigned projects. Corequisite: MTT 115

MTT 125 Machine Tool Technology II 6 credits 3 class hours, 9 lab hours
This course focuses on developing intermediate skills in manual milling and turning of machine components to industry standards of tolerance and finish. Training at this level will prepare students for NIMS Machine Level I & II Certification. An integral part of the instruction will include safe work practices and material handling. Prerequisite: MTT 113. Corequisites: MTT 119, PMM 210

NUR 115 Pharmacology for Nurses 3 credits 3 class hours
This course provides nursing students with knowledge about the general principles of pharmacology. It includes an overview of the bodily effects of drugs as well as a review of major drug categories. Pharmacologic classifications, mechanisms of drug actions, pharmacogenomics, key adverse effects, and drug interactions will be discussed. This course provides students with knowledge about nursing 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. There is no clinical component to NUR 115. Prerequisite: None

NUR 117 Nutrition 3 credits 3 class hours
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. Prerequisites: None

NUR 125 Foundations of Nursing 7 credits 4 class hours, 9 lab/clinical hours
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, and the role of the nurse which addresses ethical and legal responsibilities. Clinical learning experiences provide an opportunity for students to develop, practice and refine basic nursing skills in both lab and clinical settings. Prerequisites: Current American Heart Association BLS (Health Care Provider) certification; nursing major; Corequisites: ALH 124, BIO 120, ENG 111, NUR 115

NUR 127 Nursing Across Life Span I 7 credits 4 class hours, 9 lab/clinical hours
Provides students with continuing opportunity to assess the biopsychosocial aspects of individuals throughout the life span. Includes: an introduction to the biopsychosocial aspects of the childbearing/childrearing family through a family-centered approach; exploration of the normal prenatal period and progresses throughout adulthood; common well-defined health problems and developmental needs of persons of all age groups; and common alterations of basic human needs from prenatal through death. Through the use of the nursing process, students further develop the necessary knowledge and skills to provide nursing care to the childbearing/childrearing family and to individuals experiencing alterations in meeting basic human needs. Selected clinical learning experiences utilize the nursing process in the development and provision of nursing care in structured health settings. Prerequisites: ALH 124, BIO 120, ENG 111, NUR 115, NUR 125. Corequisites: NUR 117, BIO 130, PSY 101
NUR 124  Role Transition       1 credit
15 class hours (1 week)
Designed for LPNs who are entering the nursing program for semester three. 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, biopsychosocial needs of individuals throughout the life span. Prerequisites: State of Maine LPN licensure, one or more years work experience as practical nurse

NUR 195  Clinical Externship      3 credits
135 clinical hours
Provides nursing students with an opportunity to develop and further refine nursing skills acquired in NUR 125 and NUR 127. This course is an elective for nursing students planning to progress directly to NUR 226 or by permission of the instructor. Clinical learning experiences utilize the nursing process to provide nursing care to clients in structured health care settings. Prerequisite: NUR 117, NUR 127, BIO 130, PSY 101

NUR 226  Nursing Across the Life Span II     9 credits
5 class hours, 12 lab clinical hours
Emphasis is placed on a holistic approach to providing nursing care to an individual throughout the life span 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 maintenance of an individual’s biopsychosocial needs. Clinical learning experiences occur in structured health care settings and are correlated with classroom instruction. Prerequisites: BIO 130, NUR 117, NUR 127, NUR 124*, PSY 101. Corequisites: BIO 218, PSY 207, MAT 125
*For LPNs, this prerequisite must have been successfully completed within three years prior to acceptance into NUR 226.

NUR 229  Nursing Across the Life Span III     9 credits
5 class hours, 12 lab clinical hours
Focuses on a holistic approach to the care of the individual or groups of individuals throughout the life span 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. Clinical learning experiences occur in structured health care settings and are correlated with classroom instruction. Prerequisites: BIO 218, NUR 226, MAT 125, PSY 207. Corequisites: COM 111, humanities elective

NUT 101  Intro to Nutrition      3 credits
3 class hours
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. Prerequisites: None

PHI 111  Everyday Ethics       3 credits
3 class hours
An introduction to virtue ethics and how the virtues apply to the dilemmas of everyday life.

PHI 121  Intro to Philosophy     3 credits
3 class hours
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 hours
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 hours
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 110  Introduction to Astronomy      3 credits
3 class hours
Designed to acquaint the student with the fundamentals of astronomy, as well as the basic precepts of science. Although helpful, no significant science and/or math background is required, only a spirit of discovery. While building a foundation in astronomy, the student will battle common misconceptions, witness recent breakthroughs, conduct his/her own observations, exercise critical thinking, explore interactive technology and thrill to spectacular images.

PHY 150  Physics       4 credits
3 class hours, 2 lab hours
Physics is the most basic of sciences. It deals with the behavior and structure of matter. This algebra/trigonometry-based course is designed to acquaint
the student with basic physical concepts relating to measurement, the interaction of forces, work and energy, properties of fluids, vibrations and waves, and heat and thermodynamics. Employing a systems approach, unifying principles are applied to four major energy systems: mechanical, fluid, electric, and thermal. The student will read, attend lectures, view demonstrations, participate in class discussions, complete homework exercises in the text, and complete laboratory activities. Prerequisite: MAT 118 or MAT 119

PHY 215 Statics and Strength of Materials 3 credits 3 class hours
Covers the topics of statics, the study of stationary structures, and strength of materials, the study of stresses and deformations in a body which must support loads. The student will analyze trusses and frames by applying basic principles in algebra and trigonometry as well as determine the internal reactions, shear forces and bending moments of the members in a structure. Prerequisite: MAT 151

PLH 108 Plumbing Technology 2 credits 3 class hours/10 weeks
Introduces students to the fundamental principles of plumbing technology. Stresses quality plumbing installations along with basic knowledge of how plumbing systems function. The course begins with the very fundamentals of the plumbing trap, venting the plumbing system, potable water pipe installation, pipe and fitting identification, and other basic principles of the field of plumbing. Corequisite: PLH 109

PLH 109 Plumbing Lab 1 3 credits 3 class hours/9 lab hours
Provides hands-on training in three major areas associated with the plumbing career: pipefitting, water pumps and plumbing. The first five weeks begin with the assembly of the common piping systems including copper, IPS, PEX and PVC. The next five weeks are dedicated to the set-up, service and repair of submersible and jet water pumps. The last six weeks will lead the student through installation of basic plumbing systems. Corequisite: PLH 108

PLH 113 Pipefitting Calculations 3 credits 3 class hours
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 journeymen or master license examination. Corequisite: PLH 108

PLH 115 Water Pump Basics 1 credit 3 class hour/5 weeks
Introduces students to the fundamentals of residential water pumps. Review of well types, the hydrological cycle, basic operation of jet and submersible pumps, tank and pump accessories, troubleshooting, system sizing and a review of Maine laws that apply to installation of water pumps will be the major study.

PLH 122 Plumbing Code Review 3 credits 3 class hours
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 water piping systems. This course is designed to be a preparation for the Maine Journeymen’s exam. Prerequisites: PLH 108, PLH 109, PLH 113, PLH 115 Corequisites: PLH 123

PLH 123 Plumbing Lab II 3 credits 3 class hours
This is a skills based course which gives the student hands on training in many areas of the plumbing and pipe fitting 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 108, PLH 109, PLH 113, PLH 115 Corequisites: PLH 122

PLH 128 Solar Thermal 2 credits 1 class hour, 3 lab hours
This course will introduce students to fundamental concepts in various applications of thermal solar technologies such as solar panel locations and direction, shading analysis, domestic hot water, space heating and pool heating. The students will be taught the methods of installation, troubleshooting and adjustment of solar equipment and controls.

PLH 201 Refrigeration & Air Conditioning I 2 credits 1 class hour, 3 lab hours
Introduces students to the fundamentals of refrigeration and air conditioning. This course begins with how the basic refrigeration cycle works. The student will be trained to safely use the tools required for this trade. Major topics discussed will be: refrigeration, heat pumps, compressors, controls, refrigerants, and hermetic systems. Corequisite: ELE 117

PLH 211 Heating I 6 credits 3 class hours, 9 lab hours
Introduces the career of a heating technician. Students will gain knowledge of the fundamental process of supplying heat for comfort. The major focus is heating fundamentals, warm air systems, hydronic systems including radiant floor, system sizing and computer software for heat load calculations. Prerequisite: PLH 122, PLH 123 or instructor’s permission

PLH 213 Solid Fuel Equipment 2 credits 1 class hour, 3 lab hours
This course focuses on the different solid fuel appliances and the proper sizing, installation and service of the equipment for central heating of buildings.
PLH 216  Propane & Natural Gas I  3 credits  
2 class hours, 2 lab hours 
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 consist of a combination of lectures, demonstrations, homework and tests. 

PLH 219  Propane & Natural Gas II  3 credits  
2 class hours, 2 lab hours 
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 220  Refrigeration & Air Conditioning II  2 credits  
1 class hour, 3 lab hours 
Continues the training covered in PLH 210. This course begins with commercial refrigeration system in theory and in application in the lab. Students will be taught how to correctly evacuate refrigerants and to re-fill systems. Air conditioning fundamentals such as system sizing and design will also be covered, as well as heat pumps and the servicing of these systems. Prerequisite: PLH 210 

PLH 222  Heating II  5 credits  
2 class hours, 9 lab hours 
A continuation of PLH 211, 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. Prerequisite: PLH 211 

PLH 225  Maine Oil & Solid Fuel Code  1 credit  
1 class hour 
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. Prerequisite: PLH 211 or instructor’s permission 

PMM 104  Machine Trades Print Reading  1 credit  
1 class hour 
This is 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. This course will focus on print reading skills, specifically, views, lines, symbols, dimensions & tolerances, and notes. This course will reinforce use of the Machinery’s Handbook to reference data and formulas. 

PMM 120  Intro. to CNC Setup, Programming & Operations  3 credits  
1.5 class hours, 4.5 lab hours 
This course focuses on computer numerical control (CNC) milling machines. This course provides the fundamental technical information in machining systems, programming, program procedures and basic setup and operation of CNC vertical milling machines. Students will write simple programs to perform contouring and hole-making operations for typical CNC milling machines and perform the required setup and operation to produce parts to print specifications in the college’s state-of-the-art CNC lab. Emphasis is placed on developing an understanding of typical G and M codes used in modern CNC controls. Students will be required to perform calculations for speeds and feeds for various tooling. Safe work practices and materials handling will be an integral aspect of the classroom and work environment. Prerequisite: MTT 113, MTT 115 

PMM 122  CAM Level I - Milling  3 credits  
2 class hours, 2 lab hours 
This course is designed to provide students with an introduction to CAM software. Emphasis will be on 2.5-axis milling and 2-axis turning toolpath generation for manufacturing process development and improvement. Prerequisite: PMM 120 

PMM 210  Intro. to CNC Setup, Programming & Operations  3 credits  
1.5 class hours, 4.5 lab hours 
This course focuses on computer numerical control (CNC) milling machines. This course provides the fundamental technical information in machining systems, programming, program procedures and basic setup and operation of CNC vertical milling machines. Students will write simple programs to perform contouring and hole-making operations for typical CNC milling machines and perform the required setup and operation to produce parts to print specifications in the college’s state-of-the-art CNC lab. Emphasis is placed on developing an understanding of typical G and M codes used in modern CNC controls. Students will be required to perform calculations for speeds and feeds for various tooling. Safe work practices and materials handling will be an integral aspect of the classroom and work environment. Prerequisite: MTT 113, MTT 115 and PMM 104 

PMM 220  Intro. to Precision Metals Mfg.  6 credits  
3 class hours, 9 lab hours 
This course offers hands-on experience under work-like conditions and in-depth “live” CNC projects that build on skills acquired in MTT 113, MTT 125, and PMM 120. Set-up of CNC machine tools including the selection of
tooling, developing custom work-holding fixtures, manual programming techniques, troubleshooting, calculation and input of offsets, and maintaining quality through a production run are developed beyond the introductory level of PMM 120. An integral part of the instruction will include safe work practices and material handling. Prerequisite: MTT 125, PMM 120; Corequisite: PMM 122, PMM 227

PMM 227 NIMS Lab III 1 credit 3 lab hours
This course provides additional shop time to develop intermediate competency in programming, setup and operation of CNC mills and lathes, as well as precision measuring methods through the use of a coordinate measuring machine (CMM). Corequisite: PMM 223

PMM 231 Advanced Precision Metals 6 credits Manufacturing 3 class hours, 9 lab hours
This course offers the student intermediate to advanced hands-on experience, under work-like conditions and in-depth “live” CNC projects including 3 and 4 axis operations. Manual programming and CAM software will be used to prepare CNC programs for both mills and lathes. Training in manufacturing process improvement will focus on the methods used by leading firms to eliminate non-value added activities from their manufacturing processes. Machine tool probes will be used to establish machine set-ups, inspect cutting tools and measure machined components. An integral part of the instruction will include safe work practices and material handling. Prerequisite: PMM 223; Corequisite: PMM 233

PMM 233 NIMS Lab IV 2 credits 6 lab hours
This course provides additional shop time to develop intermediate competency in programming, setup and operation of CNC mills and lathes, as well as precision measuring methods through the use of a coordinate measuring machine (CMM). This course will prepare students for NIMS Level II (CNC) or other industry certification by completing a NIMS Performance Part(s) or other assigned project(s). Corequisite: PMM 231

POL 101 American Government 3 credits 3 class hours
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 100 Applied Human Relations 3 credits 3 class hours
Techniques and processes that lead to effective human interaction both at home and at work are examined through in class discussions and experiential exercises that enable the student to become more aware of the various aspects of human interactions that occur in their daily lives. Classroom focus is on the student's understanding of intrapersonal and interpersonal effectiveness with emphasis on communications, motivation, leadership, personal attitude, and conflict and stress management skills.

PSY 101 General Psychology 3 credits 3 class hours
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 hours
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 life span 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 hours
Students will demonstrate mastery of past and current theoretical perspectives on 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 hour
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 119  Construction Safety  
3 credits  
3 class hours
This course is intended to provide construction supervisors and workers information about a variety of construction safety and health hazards, which a worker may encounter at a construction site as well as the responsibilities for safety, and how to contact OSHA. The program will provide information on how to identify, abate, avoid and prevent job related hazards on a construction site. Training will emphasize the “Focus Four Hazards” and will provide students knowledge on hazard identification, avoidance, control and prevention. Students successfully completing all of the requirements will be eligible for the 30-hour Outreach Program Certification card.

SAE 121  Industrial Safety  
3 credits  
3 class hours
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 as lockout/tagout, 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 101  Keyboarding Fundamentals  
1 credit  
1 class hour
Introduces touch operation keyboarding skills, correct keyboarding techniques, and theory. Speed and accuracy are developed through drills and timings. The emphasis will be on accuracy through touch operation.

SES 107  Word Processing I  
3 credits  
3 class hours
Introduces touch operation keyboarding skills, correct keyboarding techniques, and theory. Speed and accuracy are developed through drills and timings. The emphasis will be on accuracy through touch operation.

SES 108  Medical Office Law & Ethics  
3 credits  
3 class hours
This course provides an overview of the laws and ethics pertinent to the medical office. Relevant legal cases, anecdotes, sidebars, and acceptable legal and ethical boundaries will be presented.

SES 109  Medical Procedural Coding (CPT)  
3 credits  
3 class hours
Explains the use of the codes and the application of the guidelines, making it broad enough to educate the beginning coder, while still serving those with more experience. A detailed discussion of the CPT surgical concept, code families and individual codes, and instructions on how to code from an operative report are included. Pre/corequisite: SES 220

SES 116  Speed/Accuracy I  
0.5 credit  
1 lab hour
Speed is increased and accuracy is maintained through out-of-class work and in-class timed writings. The speed and accuracy requirement is one 3-minute writing at 30 words per minute with three or fewer errors. Pre/Corequisite: SES 107

SES 117  Information & Records Management  
3 credits  
3 class hours
The course provides an introduction to communication skills (spelling, grammar, word choice and punctuation) used frequently in business, offers essential records management applications, and includes organizational tasks required through a professional project.

SES 119  Speed/Accuracy II  
0.5 credit  
1 lab hour
Speed is increased and accuracy is maintained through out-of-class work and in-class timed writings. The speed and accuracy requirement is one 3-minute writing at 40 words per minute with three or fewer errors. Prerequisite: SES 116

SES 121  Medical Diagnostic Coding (ICD-9)  
3 credits  
3 class hours
Introduces coding and classification schemes for hospital patients. The course offers a comprehensive review of the entire range of International Classification of Disease – 9th – Clinical Modification (ICD-9-CM) codes. From an introduction to the content, format and coding process to an in-depth analysis for identifying and locating the most appropriate codes. Pre/corequisite: SES 109

SES 124  Medical Insurance Processing  
3 credits  
3 class hours
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. Provides a forum in which students strive for accuracy in completing medical insurance forms. Pre/Corequisite: SES 220

SES 127  Word Processing II  
3 credits  
3 class hours
Fundamentals are reviewed; and emphasis is placed on the basics of document and word processing formats which include letters, memos, reports, tables, and basic graphics. Prerequisite: SES 107, SES 116; Corequisite: SES 119

SES 210  Word Processing III  
3 credits  
3 class hours
Fundamentals are reviewed and emphasis placed on document mastery and advanced word processing functions, such as business correspondence, tables, reports, macros, mail merge, and graphic applications. Prerequisite: SES 127, SES 119; Corequisite: SES 216
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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Hours</th>
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<tbody>
<tr>
<td>SES 216</td>
<td>Speed/Accuracy III</td>
<td>0.5</td>
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<td>Speed is increased and accuracy is maintained</td>
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<td>is one 3-minute writing at 50 words per minute</td>
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<td>three or fewer errors. Prerequisite: SES 119</td>
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<td>SES 220</td>
<td>Medical Terminology</td>
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<td>medical terminology analysis through the</td>
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<td>knowledge of prefixes, suffixes, and root</td>
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<td>words. The study also includes vocabulary that</td>
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<td>cannot be analyzed, verbal pronunciation,</td>
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<td>medical abbreviations, spelling, and</td>
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<td>medical vignettes.</td>
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<td>SES 224</td>
<td>Electronic Health Records</td>
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<td>3 class hours</td>
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<td>This course is designed to prepare the student</td>
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<td>to more efficiently use the computer software</td>
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<td>of an electronic health record. The course</td>
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<td>emphasizes that thorough documentation is</td>
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<td>essential for the highest reimbursement</td>
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<td>possible. Hands-on activities will provide</td>
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<td>students with transferable skills that will</td>
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<td>prepare them for success in the medical</td>
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<td>office, regardless of what software their</td>
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<td>SES 225</td>
<td>Office Communications</td>
<td>3</td>
<td>3 class hours</td>
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<td>Includes lecture, discussion, and/or experience</td>
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<td>concerning office-support topics; technical</td>
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<td>skills and knowledge; communication,</td>
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<td>problem-solving, compilation, office-support,</td>
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<td>employment, and critical-thinking skills.</td>
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<td>A training/teaching presentation and</td>
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<td>a program-specific application project are</td>
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<td>included. Prerequisite: CIS 113 or SES 210</td>
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<td>SES 239</td>
<td>Medical Coding</td>
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<td>3 class hours</td>
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<td>Emphasizes the principles and conventions of</td>
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<td>diagnosis and procedural coding systems used</td>
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<td>in today’s healthcare setting. Emphasis is</td>
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<td>placed on ICD-9-CM/ICD-10-CM and CPT/HCPCS</td>
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<td>Classification Systems. Other topics in the</td>
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<td>course include: professional ethics, content</td>
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<td>of the medical record, data validity and</td>
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<td>integrity, legal standards related to</td>
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<td>reimbursement, and retrieval of information.</td>
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<td>Prerequisite: SES 220</td>
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<td>SES 246</td>
<td>Medical Transcription</td>
<td>3</td>
<td>3 class hours</td>
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<td>Course utilizes transcription media to improve</td>
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<td>accuracy and speed in transcribing; increases</td>
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<td>familiarity with medical reports, knowledge</td>
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<td>of medical terms/drugs/instruments, acceptible</td>
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<td>medical abbreviations, and exposure to</td>
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<td>medical reference research tools; encourages</td>
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<td>respect for and adherence to ethical</td>
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<td>conduct. Emphasis is on transcribing,</td>
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<td>proofreading, and editing. Prerequisite: SES</td>
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<td>119, SES 127</td>
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<td>SHM 111</td>
<td>Sheet Metal I</td>
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<td>3 class hours, 9 lab hours</td>
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<td>Develops the student’s ability to safely use</td>
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<td>sheet metal hand tools and machines. Topics</td>
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<td>include: materials of the trade; straight,</td>
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<td></td>
<td>parallel, and radial line methods of</td>
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<td></td>
<td>pattern layout; the fabrication of edges,</td>
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<td></td>
<td>seams, clips, locks and fasteners, their</td>
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<td>selection and different uses. Prerequisite:</td>
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<td></td>
<td>SHM 111</td>
<td></td>
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<tr>
<td>SHM 121</td>
<td>Sheet Metal II</td>
<td>6</td>
<td>3 class hours, 9 lab hours</td>
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<td></td>
<td>Provides knowledge of the more difficult</td>
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<td></td>
<td>parallel line methods of pattern development.</td>
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<td>The course covers the radial line, introduces</td>
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<td></td>
<td>the triangulation methods of layout, and</td>
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<td></td>
<td>acquaints the student with the fabrication of</td>
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<td>projects employing these methods. Prerequisite:</td>
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<td>SHM 111</td>
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<td>SOC 111</td>
<td>Sociology</td>
<td>3</td>
<td>3 class hours</td>
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<tr>
<td></td>
<td>Introduces students to sociology, the &quot;science</td>
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<td></td>
<td>of society,&quot; and its approach to human social</td>
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<td></td>
<td>life. The course shows students how</td>
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<td></td>
<td>sociologists conduct research, and it describes</td>
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<td>the basic concepts and theories sociologists</td>
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<td></td>
<td>use to explain the social world.</td>
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<tr>
<td>SOC 215</td>
<td>Social Issues and Problems</td>
<td>3</td>
<td>3 class hours</td>
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<tr>
<td></td>
<td>An analytical introduction to contemporary</td>
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<td></td>
<td>social issues and problems in the United</td>
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<td></td>
<td>States, with emphasis on the underlying</td>
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<td>causes of and competing solutions to each</td>
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<td>issue. Issues to be discussed include</td>
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<td></td>
<td>abortion, aging, crime and violence, race</td>
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<td></td>
<td>and ethnic relations, medical care, family</td>
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<td>dysfunction and overpopulation. Prerequisite:</td>
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<td>SOC 111 or permission of the instructor.</td>
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<tr>
<td>SPA 101</td>
<td>Elementary Spanish I</td>
<td>3</td>
<td>3 class hours</td>
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<tr>
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<td>By using five aspects of language learning...</td>
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<td></td>
<td>speaking, listening, reading, writing and</td>
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<td></td>
<td>culture...the student will begin to attain an</td>
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<td></td>
<td>understanding of and ability to use the</td>
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<td></td>
<td>Spanish language.</td>
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<td>SPA 102</td>
<td>Elementary Spanish II</td>
<td>3</td>
<td>3 class hours</td>
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<td>Builds upon the skills learned in SPA 101,</td>
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<td>allowing students to attain a greater</td>
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<td></td>
<td>understanding of and ability to use the</td>
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<td></td>
<td>Spanish language.</td>
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<td></td>
<td>Prerequisite: SPA 101 or instructor’s</td>
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<td></td>
<td>permission</td>
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<td>SUR 213</td>
<td>Construction Surveying</td>
<td>3</td>
<td>2 class hours, 2 lab hours</td>
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<td></td>
<td>Introduces basic topographical survey</td>
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<td>techniques, building layout, grades and</td>
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<td>distance measuring using builder’s level and</td>
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<td>digital theodolites. Students will participate</td>
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<td>in field work consisting of construction</td>
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<tr>
<td></td>
<td>layout and collecting topographical data.</td>
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<td>Plans will be developed from the field data</td>
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<td>to further enhance the understanding of</td>
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<td></td>
<td>construction surveying. Prerequisite: MAT 119</td>
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<td>or MAT 151</td>
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TEC 109  Energy Auditing             2 credits
This course will introduce students to the concepts of residential and multifamily building energy auditing. The students will be taught the procedure and basis for determining a buildings’ ability to conserve thermal and electrical energy. Topics that will be covered; principles of energy and energy conservation methods, building construction methods, air leakage and sealing methods, blower door testing, insulation characteristics, windows and doors, heating plant basics and electrical consumption.

TEC 112  Building Science I            3 credits
Introduces students to appropriate materials and methods as found on 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
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

TEC 221  Construction Management     3 credits
Introduces construction specifications, project manuals, contract management, quantity take-off, cost estimating, construction procedures and scheduling. Prerequisite: TEC 123

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 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 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 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.

WEI 101  Intro to Welding             3 credits
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 113  Thin Metals Welding          3 credits
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 GMAW welding equipment for welding on the metals used in the manufacturing of automobiles. Students will perform GMAW 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.

WEI 133  Electric Welding             3 credits
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 WEI 113 or permission of instructor

**WEI 136**  Gas Metal Arc Welding and Gas Tungsten Arc Welding  3 Credits  
2 class hours, 2 lab hours
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 101. Pre/corequisite: WEI 133

**WEI 137**  Structural Welding I  3 credits  
1.5 class hours, 4.5 lab hours
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 hours, 4.5 lab hours
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 the 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 hours, 4.5 lab hours
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 is strongly emphasized. Prerequisite: WEI 138

**WPT 113**  Safety Fundamentals for Wind Technicians  3 credits  
2 class hours, 2 lab hours
Focuses on understanding of safety and risk assessment related to working on wind turbine systems. Course includes tower rescue systems and procedures. The course also includes evaluation of personal protective equipment related to working with wind turbine systems and safety procedures for working with cranes, rigging, and bolting equipment. Prerequisite: Basic First Aid, CPR and AED certifications; WPT medical clearance.

**WPT 114**  Intro to Wind Power Industry  3 credits  
2 class hours, 3 lab hours
Introduces the power generation industry through discussions on generation equipment, technician skill requirements, career opportunities, latest industry trends, and challenges. This course will also provide an overview of traditional electrical generation systems as well as renewable systems, introduction to National Electrical Code (NEC), and basic drafting techniques. Lab activities will include basic wiring techniques, industrial wiring techniques, hands-on exercises with power generation, energy storage systems, power conversion systems, development of mechanical and electrical drawings, along with schematic and print reading exercises.

**WPT 115**  Concepts of Wind Power Technology  3 credits  
2 class hours, 3 lab hours
Focuses on basic understanding of wind industry concepts. Subjects include principles of weather science, converting wind energy to an electrical output, systems in utility size equipment, grid interconnection technology, related public policy topics, wind project economics, and environmental impact of wind turbine placement. Prerequisite: MAT 118 or instructor's permission

**WPT 210**  Wind Turbine Mechanical Systems  3 credits  
2 class hours, 3 lab hours
Considers mechanical systems utilized in wind turbine technology. Lectures include analysis of power transfer, fasteners, shafts, bearings, gear systems, and brakes. Course will also provide an overview of lubricant selection criteria, sealing technology, alignment practices, and use of engineering specifications and drawings. Lab exercises provide hands-on activities with mechanical system assembly, alignment practices, troubleshooting, maintenance, and proper component selection. Prerequisites: ELS 124, PHY 150, WPT 113, WPT 115
WPT 213  Wind Power Control Systems       3 credits
2 class hours, 3 lab hours
Considers electrical and electronic systems utilized
to control wind turbines, wind farm infrastructure,
and remote access and operations. Topics include:
Introduction to SCADA, control system architecture,
hardware, software and protocols, network
fundamentals, troubleshooting and maintenance, along
with farm management tools. Course also includes
optical fiber communication fundamentals, optical
fiber construction, cable designs, connector assembly,
network applications, installation practices, and test
equipment. Lab exercises provide hands-on activities
with control system hardware, network connections,
data storage and analysis, along with component
troubleshooting. Optical fiber activities include network
hardware, cable installation, comparison of single mode
and multi mode fiber applications, fiber terminations
using connectors along with mechanical and fusion
spliced. Other optical fiber activities include network
signal loss troubleshooting with an OTDR and power
meter set. Prerequisite: WPT 210. Corequisite: WPT
214

WPT 214  Wind Power Delivery       3 credits
Systems       2 class hours, 3 lab hours
This course considers the elements fundamental to
generate electricity through wind and then move that
electricity to the end-user. Subjects include: generators;
converters; collection, transmission and distribution
of energy; and the architecture of power electronics
along with transformer selection and maintenance.
Prerequisites: WPT 210. Corequisite: WPT 213

WPT 224  Wind Turbine Management       3 credits
2 class hours, 3 lab hours
This is the capstone course for the Wind Power
Technology program. Students will demonstrate an
understanding of electrical, mechanical, fluid power,
heating, cooling, communication, and control systems
utilized in wind turbines. Each student will be responsible
to develop a wind turbine preventive maintenance plan
and deliver a presentation on their plan. Select project
management topics and tools will be discussed and
industry related applications will be provided for practice.
Lab exercises presented will further develop trouble
shooting skills that are needed by wind technicians.
Prerequisites: WPT 210
Faculty & Professional Staff/ Governance
FACULTY AND PROFESSIONAL STAFF

FULL-TIME FACULTY

Dennis Albert, Welding & Metal Fabrication.  

Carl Allen, Occupational/Industrial Safety.  
AAS, 1974, Southern Maine Vocational Technical Institute; OSHA certified instructor; Hazardous Material Specialist and Confined Spaces Specialist.

Heidi Broad-Smith, Early Childhood Education.  
BS, 1987, University of Maine Presque Isle; MEd, 1995, University of Maine Orono.

Pamela Buck, Trade and Technical Occupations Department Chair.  AAS, 1982, Vermont Technical College; Licensed Professional Engineer, 2000; BUS, 2008, University of Maine; MS, 2013, University of Southern Maine.

Ryan Bugbee, Automotive Technology.  
Diploma, 2003, Northern Maine Technical College; ASE Master Certified Technician; ASE A9; ASE G1; ASE L1; State of Maine Vehicle Inspection Certified.


Robert Collins, Automotive Collision Repair.  

Mary Cornelio, RN, Nursing.  ASN, 1979, Central Maine Medical Center School of Nursing; BSN, 1991, University of Maine Fort Kent; MSN, 1998, University of Texas at El Paso.


Susan Dugal, RN, Nursing.  Diploma, 1978, St. Mary's School of Nursing; BSN, 2009, St. Joseph's College; MSN, 2012, Saint Joseph's College; Certified Critical Care Nurse (CCRN).


Janet Lee Durgin, RN, Nursing.  AAS, 1976, Sinclair Community College; BSN, 1981, University of Southern Maine; MSN, 2003, Saint Joseph's College; Certified Nurse Executive-BC, ANCC.

Kimberly Esquibel, RN, Nursing & Allied Health Department Chair.  BSN, 1984, Auburn University at Montgomery; MPA, 1988, Auburn University; MSN, 2003, Saint Joseph's College; PhD, 2009, Capella University.

Deborah Folsom, RN, Nursing.  AAS, 1982, SUNY - Rockland Community College; BSN, 1988, Dominican College of Blauvelt; MSN, 1998, College of New Rochelle; Certified in Advanced Holistic Nursing (AHN-BC).

George Gartley, RN, Nursing.  BS, 1976, University of Maine Orono; BSN, 1986, University of Maine Orono.


Charles H. Kelley, Related Electrical. AAS, 1984, Northern Maine Technical College; BS, 2000, University of Southern Maine; ISA Level III Certified Control System Technician (CCST); Certified Electronic Technician (CET); Licensed Master Electrician; Certified Energy Manager (CEM).


Paul LaJoie, Automotive Technology. AAS, 1991, Northern Maine Technical College; ASE Certified Master Automotive Technician; ASE G1; ASE L1; ASE X1; Hybrid/Electric Vehicle Specialist; Certified Inspection Technician.


Shelli Lunney, Psychology. BA, 2002, University of Maine Presque Isle; MS, 2010, Husson University.


Eileen R. McDougal, RN, Nursing. AS/Diploma, 1979, Pine Manor College/NEBH School of Nursing; BSN, 1980, Coe College; MS, 1988, Texas Woman’s University; Certified in General Nursing Practice, 1998, ANCC.


Penny Mints, CCMA, RDMS (OB/OBGYN), MT (ASCP), Medical Assisting. BA, 1995, University of Maine Orono; MSB, 2004, Husson College.


Eric Pelkey, English. BA, 2001, University of Maine Presque Isle; MA, 2003, University of Rhode Island.

Frank Pytlak, Residential Construction. BA, 1985, University of Maine Presque Isle.

David Raymond, Arts & Sciences Department Chair. BA, 1980, University of Maine Presque Isle; MA 1985, University of Maine Orono; MA, 2001, California State University - Dominquez Hills.

Robert A. Rice, Diesel Hydraulics Technology. ASE Master Certified.


Rodney Wood, Plumbing and Heating Instructor. Medical Gas License; Universal Refrigerant License; Propane & Natural Gas License; Masters Plumbing License; Solid Fuel License; Master 1 and 2 Oils up to 15 GPH; AAS, 2014, Northern Maine Community College.


Karen Campbell-Sawyer, Arts & Sciences. BA, 1982, University of Maine at Presque Isle; MS, 2000, Wheelock College.

Beth Collamore, MD, Emergency Medical Services. BS, 1991, University of Massachusetts; MD, 1997, University of Massachusetts Medical School.


Paula B. Cyr, Arts & Sciences. BS, 1988, University of Maine Fort Kent; MS, 2005, University of New England.


Nancy Escobar, RN Nursing. AAS, 1977, Rockland Community College; BSN, 1996, Florida International University; MSN, 2000, University of Miami.


Paula Flora, RN, Nursing. BSN, 1978, University of Southern Maine; MSN, 1982, Boston University.

Helena Ford, RN, Nursing. BA, 1983, University of Stony Brook; AS, 1993, Nassau Community College; BS, 2012, Western Governors University; MSN, 2013, Western Governors University.

Miriam Gregg, Arts & Sciences. BA, 1971, University of Maine; MEd, 1994 Antioch University.

Donald Hanson, Trade & Technical Occupations. AAS, 2002, Northern Maine Technical College; BS, 2004, University of Southern Maine.


Stephanie Jacobs, Arts & Sciences. BS, 1995, Utah State University.


Brian McDougal, Trade & Technical Occupations. BSEE, 1972, University of Maine; Master Electrician, 1976; Registered Professional Engineer, 1978; MEd, 1994, Antioch University.


Ellen Michalowski, Arts & Sciences. BS, 1980, University of Arizona; MD, 1985, University of Arizona College of Medicine.


Janice Scott, RN, Nursing. BSN, 2011, University of Maine Fort Kent.


Alan St. Peter, Trade & Technical Occupations. Diploma, 1976, Northern Maine Vocational Technical Institute; Maine Master Plumbing License; Maine Master Oil Burner License.

Pamela Sweetser, Arts & Sciences. BA, 1970, University of Maine Orono; MA, 1988, University of Maine Orono; ABD, University of Maine Orono.


Betty White, Arts & Sciences. BS, 1968, University of Maine Orono; MA, 1999, Lewis University.


PROFESSIONAL STAFF


Carole Belanger-Bittle, Maine is IT Project/Student Navigator. BS, 2009, University of Maine Presque Isle; MA, 2014, Ashford University.

Sue Bernard, Director of Development & College Relations. BA, 1979, Curry College.


Leah Buck, Assistant Dean of Continuing Education. AA, 1988, University of Maine Presque Isle; BA, 1992, University of Maine Presque Isle; MSB, 2002, Husson College.

Bobbie-Jo Caron, Foundation & Institutional Advancement Coordinator.


Timothy D. Crowley, President. BA, 1975, University of Southern Maine; MEd, 1977, University of Southern Maine.

Dennis Dyer Jr, Commercial Driving Academy Program Coordinator. State of Maine Class A Driver Education Instructor license with Commercial Vehicle Endorsement.


Kimberly Ferguson, Librarian II. AA, 1987, University of Maine Presque Isle.

Nancy Gagnon, Senior Administrative Secretary, Academic Dean’s Office. AAS, 2003, Northern Maine Technical College.

Brian Hall, Financial Aid Representative. BA, 2013, University of Maine Presque Isle.


Leslie Jackson, Associate Director of Development & College Relations. AAS, 2002, Northern Maine Technical College.


Rachel Law, Admissions Specialist, MS, 2010, Radford University.


Dorothy Martin, Academic Dean. BS, 1976, Louisiana College; MEd, 1981, Northwestern State University; EdS, 1987, Northwestern State University; PhD, 1996, University of Mississippi.


Tammy L. Nelson, Director of Counseling. BA, 1985, University of Maine; MATL, 1996, University of Southern Mississippi; MEd, 2007, University of Maine Orono.


Gail Roy, Assistant Dean of Learning Resources. BA, 1985, University of Texas at Austin; MLS, 2002, Southern Connecticut State University.

Lori Smith, Student Support/Career Specialist. BA, 2006, University of Maine Presque Isle; MS, 2010, Husson University.


Michael Williams, Director of Finance. BS, 1989, University of Maine Orono; Certified Public Accountant, Certified Internal Auditor.
GOVERNANCE

The college is governed by the Maine Community College System Board of Trustees. The president of the Maine Community College System is John Fitzsimmons. Members of the board, their business affiliation and their location are:

Robert Clark, Executive Director  
Northern Maine Development Commission  
Caribou

William Cassidy  
Standish

Patricia Duran, Superintendent of Schools  
Hermon School District  
Hermon

Jean Ginn Marvin, Innkeeper  
Nonantum Resort  
Cape Elizabeth

Laurence Grondin, Partner, Aggregate Manager  
R.J. Grondin & Sons  
Scarborough

Steven Howe, Manager - PR/Communications  
Pratt & Whitney  
Ogunquit

Joanna Jones, VP of Human Resources  
Education Development Center, Inc.  
Waldoboro

Kaitlyn Kinsey, student  
Fort Fairfield

Beth Ann Lorigan, Superintendent of Schools  
Greenville School District  
Brewer

David MacMahon  
Poland

Christopher McCormick, President/CEO  
L.L. Bean, Inc.  
Cumberland Foreside

Shawn Moody, President  
Moody's Collision Centers  
Gorham

Jane Sexton  
Gorham

Ex-Officio Members, Augusta:

Commissioner Jim Rier  
Maine Department of Education

Commissioner Jeanne Paquette  
Maine Department of Labor

The Maine Community College System office is located at 323 State Street, Augusta, Maine 04330. The telephone number is (207) 287-1070.
Academic Calendar
NORTHERN MAINE COMMUNITY COLLEGE
ACADEMIC CALENDAR 2014 - 2015

FALL SEMESTER 2014

September  1  Campus Housing Opens at 1:00 p.m.
           2  First Day of Classes, Add/Drop Begins
           6  End of Add/Drop*, Last Day to Change Meal Plan
October    13 - 14 Columbus Day (No Classes, Offices Closed Oct. 13)
            24  Mid-Semester
November   11  Veteran’s Day (No Classes, Offices Closed)
           21  Last Day to Drop Class Without Academic Penalty
           26 - 28  Thanksgiving Break (No Classes, Housing Closed, Offices Closed Nov. 27 & 28)
December  19  Last Day of Classes, Day & Evening Classes End at Noon, Campus Housing
              Closes at Noon
           22  Grades Due at Noon

SPRING SEMESTER 2015

January    11  Campus Housing Reopens at 1:00 p.m.
           12  First Day of Classes
           16  End of Add/Drop*, Last Day to Change Meal Plan
           19  Martin Luther King Jr Day (No Classes, Offices Closed)
February   16 - 20  Winter Break (No Classes, Housing Closed)
March      13  Mid-semester
            30 - 31  Spring Break (No Classes, Housing closed)
April      1 - 3  Spring Break (No Classes, Housing closed)
           18  Last Day to Drop Class Without Academic Penalty
           20  Patriot’s Day (No Day Classes – Monday Evening Classes Will Meet Unless
               Noted on Syllabus, Offices Closed)
May       13  Last Day of Classes, Campus Housing Closes at Noon
              (Seniors by permission only.)
           15  Grades Due at Noon
           16  Graduation

All day and evening classes will meet on all scheduled days unless designated a No Class day.

* If you drop a class after the end of the add/drop period, you will be charged tuition and fees for that
class.  See your academic advisor if you have questions.
NORTHERN MAINE COMMUNITY COLLEGE
ACADEMIC CALENDAR 2015 - 2016

FALL SEMESTER 2015

August
30 Campus Housing Opens at 1:00 p.m.
31 First Day of Classes, Add/Drop Begins

September
5 End of Add/Drop*, Last Day to Change Meal Plan
7 Labor Day (No Classes, Offices Closed)

October
12 - 13 Columbus Day (No Classes, Offices Closed Oct. 12)
23 Mid-Semester

November
11 Veteran’s Day (No Classes, Offices Closed)
20 Last Day to Drop Class Without Academic Penalty
25 - 27 Thanksgiving Break (No Classes, Housing Closed, Offices Closed Nov. 26 & 27)

December
18 Last Day of Classes, Day & Evening Classes End at Noon, Campus Housing Closes at Noon
21 Grades Due at Noon

SPRING SEMESTER 2016

January
10 Campus Housing Reopens at 1:00 p.m.
11 First Day of Classes
16 End of Add/Drop*, Last Day to Change Meal Plan
18 Martin Luther King, Jr Day (No Classes, Offices Closed)

February
15 - 19 Winter Break (No Classes, Housing Closed)

March
11 Mid-Semester
28 - 31 Spring Break (No Classes, Housing Closed)

April
1 Spring Break (No Classes, Housing Closed)
15 Last Day to Drop Class Without Academic Penalty
18 Patriot’s Day (No Day Classes – Monday Evening Classes Will Meet Unless Noted on Syllabus, Offices Closed)

May
11 Last Day of Classes, Campus Housing Closes at Noon
(Seniors by permission only.)
13 Grades Due at Noon
14 Graduation

All day and evening classes will meet on all scheduled days unless designated a No Class day.

* If you drop a class after the end of the add/drop period, you will be charged tuition and fees for that class. See your academic advisor if you have questions.
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### FOR MORE INFORMATION

<table>
<thead>
<tr>
<th>Main Number</th>
<th>(207) 768-2700</th>
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<tbody>
<tr>
<td>President</td>
<td>Timothy Crowley 768-2807</td>
</tr>
<tr>
<td>Administrative Assistant</td>
<td>Diane Peters 768-2807</td>
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<tr>
<td>Academic Dean</td>
<td>Dottie Martin 768-2812</td>
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<tr>
<td>Administrative Secretary</td>
<td>Nancy Gagnon 768-2812</td>
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<tr>
<td>Dean of Students</td>
<td>William Egeler 768-2792</td>
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<tr>
<td>Dir. of Development/Public Information</td>
<td>Sue Bernard 768-2808</td>
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<tr>
<td>Associate Director</td>
<td>Leslie Jackson 768-2809</td>
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<tr>
<td>Foundation/Inst'l Advancement Asst.</td>
<td>Bobbie-Jo Caron 760-1188</td>
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<tr>
<td>Director of Finance</td>
<td>Michael Williams 768-2712</td>
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<tr>
<td>Asst. Dean of Continuing Ed.</td>
<td>Leah Buck 768-2768</td>
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<tr>
<td>Director of Admissions</td>
<td>Gene McCluskey 768-2786</td>
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<tr>
<td>Asst. Director of Admissions</td>
<td>Andre Anderson 768-2789</td>
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<tr>
<td>Admissions Specialist</td>
<td>Rachel Law 768-2785</td>
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<tr>
<td>Asst. Dir. of Financial Aid</td>
<td>Norma Smith 768-2790</td>
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<td>Financial Aid Counselor</td>
<td>Shannon Cook 768-2711</td>
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<td>Financial Aid Representative</td>
<td>Brian Hall 768-2707</td>
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<tr>
<td>Registration/Placement Clerk</td>
<td>Gayle Dickinson 768-2787</td>
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<td>Registrar/Affirmative Action Officer</td>
<td>Betsy Harris 768-2791</td>
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<tr>
<td>Director of Residential Life</td>
<td>Thomas Richard 768-2795</td>
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<tr>
<td>Bookstore Annex/College Store</td>
<td>Becky Maynard 768-2715</td>
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<tr>
<td>Asst. Dean of Learning Resources</td>
<td>Gail Roy 768-2734</td>
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<tr>
<td>Librarian II</td>
<td>Kim Ferguson 768-2735</td>
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<td>Library Circulation Desk</td>
<td>768-2718</td>
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<tr>
<td>Director of Physical Plant &amp; Technology</td>
<td>Barry Ingraham 768-2706</td>
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<td>Info. Support Specialist</td>
<td>Robert Smith 768-2851</td>
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<tr>
<td>Computer Programmer</td>
<td>David Wyman 768-2705</td>
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<td>Business Manager</td>
<td>Chuck Brown 768-2708</td>
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<td>Maintenance</td>
<td>Fred Doody 768-2702</td>
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<td>Safety &amp; Security</td>
<td>Carl Allen 760-1108</td>
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<td>Food Service Director</td>
<td>Rob Ottaviano 768-2716</td>
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<td>Arts &amp; Sciences Dept.</td>
<td>David Raymond 768-2773</td>
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<td>Dwight Clayton 768-2738</td>
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<td>Pam Buck 768-2759</td>
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<td>Athletics</td>
<td>Bill Casavant 760-1166</td>
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<td>Linda Mastro 768-2803</td>
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<td>Counseling Office/TRIO</td>
<td>Tammy Nelson 768-2747</td>
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<tr>
<td>Counselor</td>
<td>Johna Lovely 768-2829</td>
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<tr>
<td>Student Advisor</td>
<td>Lori Smith 768-2793</td>
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<td>Staff Assistant</td>
<td>Cindy Albert 768-2839</td>
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<tr>
<td>Early College for ME</td>
<td>Ruth White 768-2856</td>
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<tr>
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<td>Elizabeth Crawford 768-2771</td>
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<tr>
<td>Off-Campus Courses</td>
<td>Houlton 521-3100</td>
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<td>Madawaska/Frenchville 728-6314</td>
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<td>Van Buren 868-5758</td>
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<td>Fort Kent 834-4546</td>
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For a more complete listing of employee phone numbers, including faculty, please see your Student Handbook.