Presque Isle Regional Career & Technical Center

Program of Studies
2019-2020
Welcome, and thank you for your interest in the Presque Isle Regional Career and Technical Center. Our center is located on the campus of Presque Isle High School and is available to students from Ashland High School, Easton High School, Caribou High School, Fort Fairfield High School, Central Aroostook High School, Washburn High School and Presque Isle High School. Our current course offerings include AgriScience and Natural Resources, Business Technology, Building Trades, Early Childhood Education, Drafting/Engineering Technology, Cosmetology and Industrial and Farm Mechanics. Career and technical education offers a dynamic hands-on approach to education and career development opportunities as well as a head start on college by offering many dual enrollment opportunities.

We invite you to take a moment to view our informational video that is found on our website (https://sad1.org/pirc.tc) that may help to familiarize you with many aspects of career and technical education.

Our programs run in three period blocks in the morning and in the afternoon. Transportation schedules are determined by each sending school. Students have an opportunity to earn three credits for successful completion of each three period block.

Detailed information concerning all of our programs is available on our website (https://sad1.org/pirc.tc) and more information can be accessed by calling my office at 764-1356. If you would like to visit any of the programs, meet the teachers, and/or learn more about the Presque Isle Regional Career and Technical Center or career and technical education in general, please call (207) 764-1356 and we would be happy to schedule an appointment.

Again, thank you for your interest in the Presque Isle Regional Career and Technical Center and I am looking forward to talking with you soon.

Sincerely,

Timothy Prescott

Timothy Prescott
CTE Director
PIRCTC has instituted an Off-Site Work Experience. This program allows us to do a few different things to benefit students:

- PIRCTC will assist students in finding cooperating worksite opportunities
- Commit to 40 hours outside of the school day which will replace one period of the three period block to make up the 350+ hours required
- This program has flexible hours
- Student will need to commit to only two thirds of the scheduled block time
- Instructors will monitor students involved
- Real-world learning experience
- Able to combine the two worlds of theory and practice

Off-site work experiences are abundantly available to all AgriScience programs through summer employment and harvest break opportunities at the MSAD #1 Educational Farm.
DUAL ENROLLMENT COURSES

Students enrolled in classes at PIRCTC have a unique educational opportunity: they can receive college credits and high school credits at the same time. Students enrolled in Business Technology, Early Childhood Education, Drafting Technology, or Natural Resources Conservation can earn college credit for the following listing of college classes. These credits are transferable to many colleges/universities.

One advantage of taking college courses while enrolled in high school is there is no tuition cost for the college class, just a $30 at NMCC, $112 for UMFK, and $80 for UMO registration fee and possibly a textbook cost. Students also have a full year to finish the course compared to a semester time limit at college.

**AgriScience & Natural Resources:**
- AGR 101  Introduction to Agriculture Sciences – 3 credits
- ENV 110  Introduction to Natural Resources – 3 credits

**Building Trades:**
- TEC 112  Building Science I – 3 credits
- SAE 117  Occupational Safety – 1 credit

**Business Technology:**
- BUS 114  Personal Finance – 3 credits
- BUS 106  Customer Service – 3 credits
- ACC 111  Principles of Accounting – 4 credits
- CIS 113  Introduction to Computer Applications – 3 credits
- BUS 101  Introduction to Business – 3 credits
- BUS 109  Entrepreneurship – 3 credits
- MAT 115  Business Math – 3 credits

**Drafting Technology:**
- PMM104  Machine Trades Print Reading - 1 credit
- PMM102  Intro to CNC Operations - 2 credits
- CIE 101  Engineering Graphics for Civil Engineers
- MEE120  Engineering Graphics and Computer Aided Design – 2 credits

**Early Childhood Education:**
- ECE 101  Healthy Learning Environments for Children – 3 credits
- ECE 105  Advancing Intellect & Social Development in the Young Child – 3 credits
- ECE 192  Field Experience in Early Childhood Education – 3 credits

**All Students:**
- SAE117  Occupational Safety – 1 credit
AGRISCIENCE & NATURAL RESOURCES

PURPOSE OF PROGRAM

AgriScience, at Presque Isle Regional Career & Technical Center, with the emphasis on Science, offers a wide variety of courses combining principles and techniques, science theory and integrated hands-on learning experiences in the classrooms, laboratories, and at the MSAD#1 Educational Farm.

All AgriScience courses contain hands-on instruction with inquiry-based instruction as the goal. Students are presented content and concepts that are carried out in a laboratory, greenhouse, or at the school farm – all extended classrooms – or on field trips. Our classrooms are technology and multi-media driven. PowerPoint lessons via the Internet for live demonstrations display the living color of our agricultural world.

CAREER OPPORTUNITIES

Employment opportunities will continue to increase for those who provide and market an expanding array of food, forest, and veterinary medical consumer products to a growing world population. Demand for food and fiber will increase because of the growth in world populations and the demand for U.S. agricultural exports as developing nations improve their economics and personal incomes. Plant scientists are using new avenues of research in biotechnology to develop plants and food crops that require less fertilizer, fewer pesticides and herbicides, and even less water for growth.

SAMPLE OCCUPATIONS

- Plant Breeder
- Soil & Water Specialist
- Botanist
- Greenhouse Manager
- Biochemist
- Animal Nutritionist
- Veterinarian
- Agricultural Engineer
- Wildlife Manager
- Fisheries Manager
- Agri-Marketing
- Farm Manager
- Livestock Buyer/Seller
- Feed/Farm Supply Manager
- Agricultural Salesperson
- Forest Worker/Logger
- Fish & Game Officer
- Park Manager

Required Science Option

Agricultural Biology/Chemistry (Grades 10 and 11) is a three-period block designed to offer students the opportunity to complete their life and physical science requirements within an agricultural frame of reference.

The biology portion of the course emphasizes problem-solving, decision-making, critical thinking and applied learning utilizing the scientific link with examples from agriculture. Students will explore the principles of biology and apply these concepts and principles to issues in the workplace, in society, and in personal experiences. Areas of study will include: microscopes, cell structure, cell transport, cell reproduction, genetics, biotechnology and GMO’s, evolution and natural selection, classification, various groups of organisms, biodiversity, and ecosystems.

The chemistry portion of the course is designed to convey understanding of the structure, behavior and interactions of matter at the atomic level, and the relationship between matter and energy. Topics of study
include: lab safety and scientific methods; the fundamentals of chemistry, chemical properties and analysis of water; chemistry of foods; organic compounds and their chemistry; plant biochemistry; soil chemical properties and testing; plant nutrition and fertilizers; and, pesticide chemistry.

The agriculture experience component will focus on exposing students to issues directly relating to agriculture while expanding upon topics introduced in biology and chemistry. Students will also become integral participants in the local FFA Chapter and its activities. Learning will be completed through both classroom lecture and hands-on projects. Topics will include, but are not limited to, items such as: GPS and geocaching, long-term research project(s), American agricultural history, and agricultural careers.

**Elective Options**

**Natural Resources Conservation (Grades 11 and 12)** is a two or three-period block designed to prepare students to work in or to pursue further education in the fields of forestry, wildlife, aquatics and soil conservation. (For dual enrollment credit available, see below.)

This is a hands-on approach to the subject matter. Students will be outside for much of the school year learning skills such as GPS navigation, compass and pacing, as well as mapping and water testing. There will be individual learning opportunities that support living in, working with, and enjoying the outdoors. Students will take three major field trips; two to Grand Lake Streams where they will work with fishery biologists to first harvest salmon eggs and then later clip fins; and the third, an all-day study of tree identification, timber-cruising, animal habitats, and a soils pit. Students enrolled for a three-period block will receive enrichment in the area of either animal sciences or aquaculture. (See course descriptions below.)

**Plant Sciences (Grades 11 and 12)** is a two or three-period block designed to introduce and expose students to the field of plant sciences in a variety of ways. The course is divided into a classroom and lab environment.

While this class does have a classroom component, a great deal of time is also spent utilizing both the MSAD#1 School Farm and the smaller greenhouse attached to PIRCTC. Students learn to work cooperatively on group projects and practice problem-solving skills. Topics include greenhouse styles, hydroponics, plant taxonomy, plant anatomy and functions, plant physiology, fertilization plans, plant propagation techniques, integrated pest management, and landscape design. Students enrolled for a three-period block will receive enrichment in the area of either animal sciences or aquaculture. (See course descriptions below.)

**Animal Sciences (Grades 11 and 12)** will prepare students to demonstrate competence in the application of scientific principles and techniques to the management of animal production enterprises.

This course is designed to provide a forum in which students can study large, small and specialty animals. Students will explore the necessary elements—such as nutrition, genetics, habitat, and behavior—to create humane, ecologically and economically sustainable animal production systems. Numerous field trips to various animal enterprises and facilities are an integral part of the course. Opportunities will exist to enhance 4-H and FFA selection and judging skills.

**Aquaculture (Grades 11 and 12)** is designed to introduce the students to the hobby of maintaining and breeding tropical fish under controlled conditions, and to explore issues that directly affect the coast of Maine and its fishing industry and heritage. The course is divided into a classroom and lab environment.

This course utilizes the MSAD #1 fish lab on site at PIRCTC and the numerous classroom tanks to model both marine and freshwater tanks. Students are responsible for the upkeep of the lab and also partake in numerous projects as needed. Classroom work will cover topics such as: all structural components of aquariums and aquarium design, marine ecosystems off the coast of Maine, overfishing, invasive species, and coral reefs.
Field trips include visits to Grand Lake Stream State Fish Hatchery. This class offers an excellent opportunity for students interested in marine biology, outdoor recreation, fish hobbyists, and natural resources.

**School Farm Employment**

Students may apply for summer positions at the MSAD #1 Educational Farm. Each student must apply with an application that includes references. Interviews may be part of this procedure. Students who are enrolled in the three periods will be given first opportunity for these employment opportunities.

**Dual Enrollment Agreements for College Credit**

**University of Maine Presque Isle**

AGR 101 Introduction to Agriculture Sciences (3 credits)
ENV 110 Introduction to Natural Resources (3 credits)
BUILDING TRADES

PURPOSE OF PROGRAM

The Building Trades program is designed to provide students with knowledge, skills and hands-on experience in carpentry, masonry, and cabinetmaking. By providing live work projects, students are able to experience real-life opportunity in the construction field. The skills learned throughout the program will help make the student more marketable in the workplace. The Building Trades program goal is aligned with the Maine Statewide Standards in Building Construction and Carpentry.

CAREER OPPORTUNITIES

Employers in construction literally build our future! These are the people who build and remodel houses, apartments, industrial buildings, warehouses, office buildings, churches, schools and recreational facilities.

Construction is one of the largest industries in the United States. Job opportunities are expected to be excellent in the construction industry, due largely to the need for maintenance on existing building and the continued demand for new construction for both residential living and commercial business. Construction jobs can be found all over the United States making it more versatile for people to find employment. Construction has a very large number of self-employed workers. Earnings in construction are significantly higher than the average for all industries.

SAMPLE OCCUPATIONS

<table>
<thead>
<tr>
<th>Carpenter Helper/Laborer</th>
<th>Hardware Store Clerk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Foreman</td>
<td>Construction Supervisor</td>
</tr>
<tr>
<td>Carpenter Rough/Finish</td>
<td>Mason</td>
</tr>
<tr>
<td>Cabinetmaker</td>
<td>Estimator</td>
</tr>
<tr>
<td>Construction Worker</td>
<td>Construction Inspector</td>
</tr>
<tr>
<td>Mason Tender</td>
<td></td>
</tr>
</tbody>
</table>
**Building Trades I** students receive instruction on the safety of hand and power tools, followed by instruction on foundations, floor, wall and roof framing. Different sidings and types of roofing will be introduced. Students will learn how to layout, fabricate and repair wooden structures. Students will also learn about construction materials, estimating and blueprint reading application. In-class projects include playhouses, storage buildings and other closely related building structures. A six to eight week masonry course will be introduced, covering the art of laying brick and block, and chimney construction.

**Building Trades II** students will receive instruction on interior finishing. This work will include trim work, moldings and interior installation of doors and windows. Sheet rock and other wall finishing will also be covered. A six-to-eight-week cabinetmaking course will be introduced, covering the basic construction of a cabinet. A variety of service projects are constructed in response to local demands and needs. Community service projects may be included to provide on the job training.

Dual Enrollment Agreements for College Credit include:

**Northern Maine Community College:**
- TEC111 Building Science I (3 credits)
- SAE117 Occupational Safety (1 credit)
BUSINESS TECHNOLOGY

PURPOSE OF PROGRAM

Combining academics and applied learning is an integral part of the Business Technology Program at Presque Isle Regional Career and Technical Center. The curriculum prepares students for success in three distinct postsecondary career paths - Business Management, Information Technology and Business Media.

Dual enrollment courses have become an integral part of our program. Our current articulation agreement with NMCC makes it possible for us to offer seven college level courses that count for both high school credit and college credits. NMCC waives the tuition cost. Students only pay a small registration fee and furnish their own book. Students earning a C average or better may be able to transfer the credits to the college that they choose to attend. Most colleges accept the transfer of 100-level courses. Another advantage with this program is that you have a school year to complete a one semester college course. This is a great way to get a head start on your college career.

CAREER OPPORTUNITIES

Certain jobs in the field are expected to increase at a greater average rate. Administrative and information support managers will be needed to coordinate an increasing amount of support work and ensure that technology is applied and running properly. Accountant and auditor job openings will occur from growth within the industry. Job growth will be fueled primarily by the increasing levels of investment in securities and commodities in the global marketplace for anyone interested in the financial industry. People working in finances and investments provide investment analysis and guidance to help businesses and individuals with their investment decisions. People with careers in management and entrepreneurship formulate policies and direct the operations of businesses and corporations.

SAMPLE OCCUPATIONS

Chief Executive Officer  General Manager
Entrepreneur  Public Relations Manager
Human Resources Manager  Store Manager
Account Executive  Bookkeeper
Retail Sales Specialist  Financial Director
Accountant  Customer Service Supervisor

Accounting Principles Individuals and businesses have a lot in common when it comes to money. Both earn it, spend it, save it, invest it and keep track of it. Keeping track of it is the most important choice one can make. Accounting Principles will give students the knowledge and skill to help them make both business and personal decisions.

Business Lab The primary function of the lab is to provide students with another opportunity to fit a business technology course into their schedule. Business Lab provides several different opportunities most of which involve independent study. Business Lab is also a place where a student may, through independent study, take an accounting class or the entrepreneurship class that would not fit into their schedule.

Business Mathematics-BUS 115 (3 College Credits) This course is designed to provide solid, practical and current coverage of the mathematical topics students must master to succeed in life and business today.
Students will develop the computational and vocabulary skills necessary for retailing, marketing, accounting, business management, and finance.

Customer Service-BUS 106 (3 College Credits) 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 and handling conflicts and stress.

Entrepreneurship-BUS 109 (3 College Credits) Do you think that you would like to work for yourself? Are you willing to take the risk? Would you like to learn what it takes to start and operate a business? This course will tell you about the opportunities for small business ownership and help you develop the necessary planning skills. Preparing a business plan will be a course requirement.

Introduction to Business-This course is being offered to Presque Isle High School sophomores that are interested in the business world. See your counselor for more information.

Introduction to Business-BUS 101 (3 College Credits) 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.

Introduction to Micro Computer Applications-CIS 113 (3 College Credits) Provides students with a working knowledge of the operating system, word processing and presentation graphics using Microsoft Office. Coverage of the operating system will include working with and organizing files, personalizing the Windows environment, and managing the Windows 8 operating system.

Marketing 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.

Personal Finance-BUS 114 (3 College Credits) Designed to help individuals analyze and direct their own financial affairs. Students will practice and apply skills to begin a lifelong journey of personal financial planning. This course will provide strategies for managing personal financial resources, buying decisions, insurance, investing, and retirement planning.

Principles of Accounting I-ACC 111 (4 College Credits) This is an introductory course teaching the fundamental principles of accounting. Emphasis is on developing technical procedures of the accounting cycle including journalizing, posting, adjusting entries, closing books and preparing financial statements.

Dual Enrollment Agreements for College Credit include:

Northern Maine Community College:
ACC 111 Principles of Accounting (4 credits)
CIS 113 Introduction to Computer Applications (3 credits)
BUS 101 Introduction to Business (3 credits)
BUS 114 Personal Finance (3 credits)
BUS 109 Entrepreneurship (3 credits)
BUS 115 Business Math (3 credits)
BUS 106 Customer Service (3 credits)
COSMETOLOGY

PURPOSE OF PROGRAM

The primary purpose of the cosmetology program at PIRCTC is to train students in the fundamental practical skills, safety and sanitation procedures, and desirable professional work habits and attitudes necessary to continue with their studies after graduation from high school at an accredited private cosmetology school. Through study of core cosmetology theory and hands-on application, PIRCTC students will have the necessary foundation to create a successful transition to a post-secondary cosmetology program. All PIRCTC students have the potential to achieve clock hours towards the 1500 hours required to be able to sit for their state cosmetology licensing exam.

CAREER OPPORTUNITIES

Today, the professional salon industry continues to offer exciting and rewarding careers to qualified job seekers as hair designers, nail technicians, estheticians, and the like.

SAMPLE OCCUPATIONS

Salon Hairstylist  Beauty and Fashion Consultant
Salon Owner/Manager  Photo Stylist
Skin Care Specialist  Cosmetology School Instructor
Nail Technician  Cosmetology School Owner
Salesperson/Retail Specialist  Manufacturer’s Representative
Makeup Artist
Stage & Film Makeup Artist

The cosmetology curriculum seeks to produce students and workers who will be technologically literate and productive. The student’s talents, interest, and abilities are the major concern(s) in designing and implementing a competency-based course of study. Community resources, technological advancements, and simulation of the work place will be utilized to prepare students for careers in cosmetology and related fields. It is hoped that an understanding of the fundamentals of cosmetology will instill the desire to continue learning as well as the desire for improvement in the quality of life through meaningful work.

Cosmetology I is a well-rounded program covering most phases of cosmetology. The approach to training is based on sound educational methods and teaching fundamentals. This type of program stresses a firm theoretical knowledge of cosmetology for development of a true professional. The first hours of the course include lectures, demonstrations, special projects, role playing, interpretation of reading material, and writing instruction. Some of the subjects included are: nail structure and growth, manicuring/pedicuring, hair design, hairstyling, haircutting, skin structure, hair removal, facials, and makeup application.

Cosmetology II students continue with advanced techniques in the areas of study of Cosmetology I, but add hair texture services (perms and colors) and advanced manicuring techniques. Once the proper number of cumulative clock hours is achieved, qualifying students are introduced to public clientele where they practice the knowledge gained during the previous training. It is only through applied knowledge that the necessary experience and comprehension of cosmetology can develop. For the remainder of the course, students are scheduled for both theory and practical classes, as well as student clinic hours. As students progress through their training, becoming proficient in all procedures, the clinic experiences become more salon-oriented.
This school and its instructors are licensed by the Office of Professional and Occupational Regulation. Anyone may file complaints about the operation of this school to:

Office of Professional and Occupational Regulation
Barbering and Cosmetology Licensing Program
35 State House Station, Augusta ME 04333
Or visit the Office’s website at:

www.maine.gov/professionallicensing
DRAFTING/ENGINEERING

PURPOSE OF PROGRAM

The Drafting/Engineering program at Presque Isle Regional Career & Technical Center is a pre-engineering course offered to young men and women interested in exploring a college education and/or career in the engineering, architecture and design professions.

During this two-year program students will explore an exciting pre-engineering curriculum centered on cutting edge 3D design programs such as SolidWorks, Revit and Fusion 360. Mastery of these programs and associated drafting skills and standards will form a platform to launch deep explorations into the design process, architectural design principles, mechanical engineering, civil engineering, rapid prototyping, (building intergraded modeling BIM), technical writing, engineering math, civil engineering. Students will gain hands-on experience through practical applications and “real world” projects. In addition, second year students will explore rapid prototyping using 3D printing technology and gain hands-on experience using state-of-the art CNC technology. Programs such as Fusion 360 combined with our Tormach PCNC 440 milling machine allow students the opportunity to apply 3D model and mechanical engineering principles to create functional components and mechanical assemblies to develop a working knowledge fit, tolerances and precision machine processes vital to mechanical design.

Students should note that Drafting/Engineering qualifies as a fine art credit. In addition, the course provides students the opportunity to take advantage of PIRCTC’s dual enrollment program which is offered in conjunction with the University of Maine College of Engineering, the Northern Maine Community College and Bridge year allows students an opportunity to earn college credits while earning high school credits.

CAREER OPPORTUNITIES

Engineering and design professionals are in high demand. With the rapid advancement of such technologies as 3D modeling BIM and CAD/CAM, and the wide acceptance of these technologies in the engineering design, and construction professions, there is a heavy interest in seeking individuals with the skills to utilize this technology combined with an understanding of design principles and engineering or architectural focused post-secondary education.

SAMPLE OCCUPATIONS

- Architect
- Mechanical Engineer
- Landscape Architect
- Chemical Engineer
- Environmental Engineer
- Draftsman
- Project Management
- Civil Engineer
- Structural Engineer
- Petroleum Engineer
- Marine Engineer
- Surveyor
- Designer
- Construction Management

Drafting/Engineering I Students will learn basic 2D CAD (Computer-Aided Design) and drafting skills, blueprint reading, basic architectural drafting, and design fundamentals through practical application including developing mechanical and architectural drawings and skills. Students will utilize state-of-the art 3D CAD technology including SolidWorks 2019 and Revit 2019.
Objectives: Provide a basic knowledge of:
- Design industry standards
- Blueprint reading
- Mechanical drafting
- Architectural drafting
- Residential architecture design criteria
- Practical application
- Education paths
- Career paths

Drafting/Engineering II is offered to those students who have successfully completed Drafting/Engineering I and hold an interest in pursuing post-secondary education in engineering or architectural design or are interested in following a career path as a CAD designer.

Building on basic 2D CAD and drafting knowledge and skills, Drafting/Engineering II offers students the opportunity to learn and develop advanced 2D and 3D CAD skills as applied to various engineering disciplines including mechanical, structural architectural and civil design utilizing state-of-the-art programs and methodology through practical application.

Additionally, Drafting/Engineering II provides students the opportunity to explore fundamentals of engineering and design application as well as career and educational paths.

Objectives: Provide knowledge and skill sets including:
- Advanced 3D CAD and modeling skills using cutting industry leading technology and software such as AutoCAD Inventor, AutoCAD Revit Architecture and AutoCAD Civil 3D.
- Engineering & design history
- Design process
- Fundamentals of engineering & design
- 3D BIM technology as applied to architecture
- 3D modeling skills as applied to rapid prototyping & mechanical engineering
- Practical application
- Career paths
- Education paths

Dual Enrollment Agreements for College Credit include:

**Northern Maine Community College:**
PMM104 Machine Trades Print Reading (1 credit)
PMM102 Intro to CNC Operations (2 credits)

**University of Maine College of Engineering:**
MEE120 Engineering Graphics & Computer Aided Design (2 credits)
CIE101 Engineering Graphics for Civil Engineering (3 credits)
EARLY CHILDHOOD EDUCATION

PURPOSE OF PROGRAM

The primary goal of the Early Childhood Education Program is to provide students with knowledge and experiences that will begin to prepare them for a variety of childhood related career opportunities. The program also benefits any potential parents.

Research has shown that the most learning in a child’s life occurs between the ages of one and five. Increased demand for early childhood teachers and childcare workers plus the need to replace workers who leave the occupation are creating many new positions and are expected to create numerous openings in the future. With research stressing how important quality, developmentally appropriate care is in the formative years, more positions will be available and requirements for training will become more intensive. Persons who are interested in this work and suited for it should have little trouble finding employment.

This program provides the background, experiences and encouragement to lead students to choose a career in the area of Early Childhood Education.

CAREER OPPORTUNITIES

People with careers in early childhood development and services nurture and teach children. They provide services in public schools, childcare centers, nursery schools, preschools, private households, family childcare homes and before- and after- school programs. About two out of five childcare workers are self-employed. Pay depends on the educational attainment of the worker and type of establishment.

Students may also use their knowledge of early childhood development as a base for continuing their education in fields such as speech therapy, physical therapy, occupational therapy, social work, and nursing – specializing in working with young children.

SAMPLE OCCUPATIONS

- Public Preschool Teacher
- Head Start Teacher
- Childcare Assistant/Worker
- Teacher’s Assistant/Ed Tech
- Educator for Parents
- Nanny
- Child Psychologist
- Director or Asst. Director, Childcare Facility

- Elementary School Teacher
- Speech Therapist
- Occupational Therapist
- Physical Therapist
- Social Worker
- Pediatric Nurse

Early Childhood Development is designed to begin the process of teaching grades 11 and 12 students the skills required to work with young children. Students study the growth and development of children from birth to age eight and have the opportunity to assist in a nationally accredited childcare facility, in the PIRCTC/ACAP Collaborative Head Start classroom, Pine Street Elementary School, and/or local childcare centers in Head Start, Pre-K, and childcare classrooms for children ranging in age from infants through 4. Students become certified in Pediatric First Aid and CPR/AED and can earn their 10 hour OSHA certificate. This is a clinical-based program, which includes a laboratory experience for applying learning as well as time for observing, assessing, and interacting with children. Students work directly with young children in designated classrooms assisting with arts and crafts, science, motor skills, dramatic play, table manners, reading, story time, music and movement activities and behavior management. Students also assist with daily cleanup duties and classroom maintenance. In addition, students have daily classroom instruction to learn how to
enhance a child’s social, emotional, physical, and intellectual development. Classroom lessons help students gain the knowledge they need to provide children with positive guidance, to observe and assess a child’s development, and to plan and implement a variety of learning activities in a developmentally appropriate manner. Portfolios are used to record and assess the student’s work.

Early Childhood Education/Occupations is a more in-depth study of safety, health, nutrition, child guidance, observations, and program management/professionalism. This class also has a heightened emphasis on the history of child development theories and research. The course is hands-on with students doing a combination of class work and implementation of learning on-site in the PIRCTC/ACAP Collaborative Head Start classroom, Pine Street Elementary School, and/or local childcare centers in Head Start, Pre-K, and childcare classrooms for children ranging in age from infants through 4. For example, students will develop lesson plans and have an opportunity to conduct at least one of their lessons with the children. Students become certified in Pediatric First Aid and CPR/AED and can earn their 10-hour OSHA certificate.

Early Childhood Development, in combination with Early Childhood Education/Occupations, is based on the requirements for the Child Development Associate Credential (CDA) and may also be used by eligible students for dual enrollment at NMCC for 9 college credits.

**Dual Enrollment for College Credit include:**

**Northern Maine Community College:**
- ECE 101 Healthy Learning Environments for Children (3 credits)
- ECE 105 Advancing Intellect & Social Development in the Young Child (3 credits)
- ECE 192 Field Experience in Early Childhood Education (3 credits)
INDUSTRIAL & FARM MECHANICS

PURPOSE OF PROGRAM

The Industrial and Farm Mechanics program at Presque Isle Regional Career and Technical Center offers a challenging opportunity for young men and women interested in learning how to work safely in an industrial setting, complete complex tasks with basic problem-solving methods, and make a good living doing something they like.

There is an overwhelming demand for welders, operators, mechanics, and technicians. With this demand comes an equivalent pay scale – skilled tradesman currently have the potential to make far more than their peers attending a four-year college – without the student loans! The Industrial and Farm Mechanics program provides a solid foundation to pursue any one of the above listed careers.

Students in this program will develop skills in: hand tools identification and application, internal-combustion engine theory, steel cutting methods, steel shaping methods, steel joining methods, professional workplace conduct, electrical systems, hydraulic systems, and precision machining. Production systems ranging from forestry to mining to farming are looked at in detail. Program participants are allowed to put extra effort into related topics they may have personal interest in.

CAREER OPPORTUNITIES

People who work in the industrial/farm mechanics field apply knowledge of engineering, hydraulic, pneumatics, electronics, power, structures and controls. They maintain factories, drinking water systems, power lines, plant machinery and heavy equipment. There is not any consumer good in your home that has not gotten there in part due to someone with mechanical expertise.

Demand for individuals in the power, structural and mechanical field is expected to continue for at least the next two decades. Increasing demand for agricultural products, continued efforts for more efficient agricultural production and increasing emphasis on the conservation of resources should result in good opportunities in the coming years.

SAMPLE OCCUPATIONS

Agricultural Engineer  Fabrication Specialist
Equipment Parts Manager  Forest Engineer
Machinist  Welder
Iron Worker  Heavy Equipment Technician
Diesel Mechanic  Equipment Support Specialist

Industrial and Farm Mechanics I teaches skills to maintain, repair, and overhaul industrial equipment and farm machinery. The fabrication of specialty equipment is also performed quite regularly. Students will evaluate all components of a machine, ranging from electronics to hydraulics to structural components. Though they may not yet possess the skills to correct a malfunction, students will learn how to diagnose machinery to determine whether or not it is operating properly. Some of the skills learned will be welding, metal cutting, metal shaping, small engine repair, project estimation, some automotive repair like brake systems, and oil changes.
**Industrial and Farm Mechanics II** reinforces the fundamental skills learned in Farm Mechanics I and includes the installation and/or repair of wiring systems and other electronic systems found on large farm and forest harvesting equipment. A focus on hydraulic systems will also play a large role in the program. Hands-on operation of heavy equipment also gives students a chance to better understand the equipment they work on.

The best way to understand what happens in the program is to hear from two former students:

“In Farm Mechanics you won’t just be working on “farm” equipment. You will learn how to weld properly, and how to work on electrical problems dealing with the engine, brakes, and lighting. As a student, I loved learning things that in the mechanical world you wouldn’t think of. Another reason the class is amazing is if you have a fascination in welding or small engines, the instructor will allow you to do more of it if you want to.” Bryan

“We get to take engines apart and put them back together. We learn about the parts of an engine, and how it runs. We all get to have fun with the welders and all the tools in the tool room. As you learn about Farm Mechanics and prepare yourself for some hands-on knowledge, you find out things you never knew or may already know. You will get to learn how every tool works, how to do something, or use a tool or a machine in the shop. You get to build things from scratch, like a tractor cab and basic things you never knew you could replace. As you progress in class, you get to work with bigger machines and learn a little bit about them, such as an excavator, bulldozer, snowmobiles, four-wheelers, tractors, and many more of the everyday equipment.” Paul
CTE CLUBS/ORGANIZATIONS

Future Business Leaders of America (Advisor-Mrs. Hemphill)

Imagine building a portfolio of documented accomplishments to your academic experience. When applying for scholarships, you can demonstrate how you served in a leadership position, received awards or participated in projects for the largest business-based student organization in the world through the Business Achievement Awards (BAA), a self-directed, result-based business and leadership program designed to compliment academics while accelerating a student’s leadership skills.

FFA (Advisors-Mrs. Gross & Mrs. McCurry)

“Future Farmers of America” was founded by a group of young farmers back in 1928. Their mission was to prepare future generations for the challenges of feeding a growing population. They taught us that agriculture is more than planting and harvesting - it’s a science, it’s a business and it’s an art. FFA continues to help the next generation to rise up to meet those challenges by helping its members to develop their own unique talents and explore their interests in a broad range of career pathways. So today, we are still the Future Farmers of America. But, we are the Future Biologists, Future Chemists, Future Veterinarians, Future Engineers and Future Entrepreneurs of America, too.

SkillsUSA (Advisor-Mrs. White)

SkillsUSA is a partnership of students, teachers and industry working together to ensure America has a skilled workforce. SkillsUSA helps each student excel. We provide educational programs, events and competitions that support career and technical education (CTE) in the nation’s classrooms. SkillsUSA empowers its members to become world-class workers, leaders and responsible American citizens. SkillsUSA improves the quality of America’s skilled workforce through a structured program of citizenship, leadership, employability, and technical and professional skills training. SkillsUSA enhances the lives and careers of students, instructors and industry representatives as they strive to be champions at work.

Envirothon (Teacher-Mrs. McCurry)

Teams consisting of 3-5 students compete first at a regional level, answering questions and solving hands-on problems at five stations: Wildlife, Water/Aquatics, Forestry, Soils, and a Current Natural Resource Issue. The top four teams from each Regional Envirothon then compete at the State Finals held in May.
NOTICE TO ALL EMPLOYEES, STUDENTS, PARENTS OF STUDENTS, AND PERSONS SEEKING ADMISSION OR EMPLOYMENT:

MSAD #1 does not discriminate in its education and employment programs on the basis of race, age, color, national origin, sex, sexual orientation, disability, religion, and marital or parental status, and complies with Title VI of the Civil Rights of 1964, Title IX Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act (ADA) of 1990. Inquiries regarding Title VI, Title IX, 504, and ADA may be made to:

Tim McCue
Affirmative Action Coordinator
PO Box 1118
Presque Isle, ME 04769
(207) 764-4101

******************************************************************************

A Note to Parents

In accordance with the “Family Educational Rights and Privacy Act of 1974,” MSAD #1 has established a policy and regulations governing the control and release of student records.

The policy and regulations clearly specify the rights of parents to receive their child’s records. A copy of the policy and regulations are available for review in the office of each school principal.

In case of student transfer, all education records must be sent to a school administrative unit to which a student applies for transfer. Prior consent of the parent or guardian is not required.