

The Mifflin County Academy of Science & Technology

Welcome to





Our Mission:

Prepare each student for success in tomorrow's careers.

Our Vision:

For all students to excel in a technical career pathway with the confidence to face all challenges and opportunities



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Agriculture Electives

The mission of Agricultural Education is to prepare students for successful careers and a lifetime of informed choices in the global agriculture, food, fiber and natural resources system. Through agricultural education, students are provided opportunities for leadership development, personal growth and career success. Today, over 800,000 students participate in formal agricultural education instructional programs offering a thorough knowledge in the growing and producing of plants and livestock, marketing, management, finance, and production skills.

Grow your knowledge in these areas:

- Agri-Science
- Animal & Vet Science
- Plant & Soil Science
- Agricultural Mechanics
- Wildlife & Fishery Science
- SAE & FFA Leadership
- Horticulture
- Nursery Landscape
- Food Science

What can I do with a career in this field?

Graduates in this field can enter the workforce armed with the certifications they receive at The Academy. Likewise, students can further their education to become agriculturalists at a local, state, national, or global level which spans from farmers to foresters, veterinary to food scientists, and wildlife biologists to florists.



The Academy Links **College Credit Opportunities**

Dual En-

rollment: Students in this program will have the opportunity to earn dual enrollment credits through the Penn College Dual Enrollment program.

Students enrolled in any agriculture elective are members of the Big Valley FFA Chapter.





Eligible To:





- **♦ PA Pesticide Applicator**
- **Beef Quality Certification**
- **♦ Youth Quality Care Assurance**
- National Safe Tractor & **Machinery Operation**
- **♦ PA Skills Certificate**
- **OSHA**
- ♦ Pet First Aid/CPR







• Non-Traditional Occupation (Female)



Automotive Technology

The Automotive Technology program prepares individuals to apply technical knowledge and skills to repair, service, and maintain all types of automobiles. Includes instruction in brake systems, electrical systems, engine performance, engine repair, suspension and steering, automatic and manual transmissions and drive trains, and heating and air condition systems.

Learn the latest advances in the automotive service industry.

- Automotive Electrical and Electronic Systems
- Brake Repair and Installation
- Drive Train and Engine Performance
- Suspension and Steering Systems
- Heating and Cooling Systems
- Tools and Fasteners
- Safety

What can I do with a career in this field?

Entry-level service technicians often perform tasks, such as: safety inspections, basic maintenance (lubrication and filter changes) and preparing new and pre-owned vehicles for the consumer market. With advanced education and experience, you can also become a parts manager, business owner, master technician, service advisor or service manager.



The Academy Links College Credit

- SOAR qualified program
- (CIP 47.0604)

SOAR: Students may qualify for several free credits at participating colleges across Pennsylvania, such as: Pennsylvania College of Technology, Thaddeus Stevens College of Technology, and Harrisburg Area Community College.

Dual Enrollment: Students in this program will have the opportunity to earn dual enrollment credits through the Penn College Dual Enrollment program.



Eligible To:

- Mifflin County Students
- Juniata County Students
- Adult Certification Classes



CERTIFICATIONS



Co-Op Eligible!



- SP2 Safety and Pollution
- PA Safety Inspection
- OBDII Emission Certification
- Pro-Cut Brake Lathe
- ASE Student Certifications
- **♦ PA Skills Certificate**

Upperclassmen may be hired at local companies to work during the school day, earning real-world experience and building their resumes.







• Non-Traditional Occupation (Female)

PA DEPARTMENT OF LABOR IN- DEMAND OCCUPATION

Collision Repair

The Collision Repair program prepares individuals to apply technical knowledge and skills to repair, reconstruct and finish automobile bodies, fenders, and external features. Includes instruction in structure analysis, damage repair, non-structural analysis, mechanical and electrical components, plastics and adhesives, painting and refinishing techniques, and damage analysis and estimating.

Put a dent in these areas of auto collision, repair and restoration:

- Vehicle Design and Construction
- Non-structural Repairs
- Structural Repairs
- Welding and Cutting Procedures
- Refinishing, Tinting, and Blending
- Estimating
- Mechanical and Electrical Systems
- Safety

What can I do with a career in this field?

Gear up for opportunities like automotive collision and repair shop owner, auto collision repair technician, detailer, disassembly specialist, estimator, painter, paint preparation technician or unibody frame technician.



The Academy Links College Credit Opportunities

• SOAR qualified program (CIP 47.0603)

SOAR: Students may qualify for several free credits at participating colleges across Pennsylvania, such as: Pennsylvania College of Technology and Thaddeus Stevens College of Technology.

Dual Enrollment: Students in this program will have the opportunity to earn dual enrollment credits through the Penn College Dual Enrollment program.



Eligible To:

- Mifflin County Students
- Juniata County Students
- Adult Certification Classes



CERTIFICATIONS

- ♦ EPA 609 Refrigerant Recovery Recycling
- ♦ PA Safety Inspection
- ♦ SP2 Safety and Pollution
- ♦ PA Skills Certificate



Co-Op Eligible!

Upperclassmen may be hired at local companies to work during the school day, earning real-world experience and building their resumes.







 Non-Traditional Occupation (Female)



Construction Trades

The Construction Trades program prepares individuals to apply knowledge and skills in the construction technology field. Instruction is provided in the basic skills in a variety of areas associated with building construction such as carpentry, masonry, plumbing, heating and electrical. Instruction includes but is not limited to blueprint reading; cost estimating; uses of hand and power tools; cutting, fitting, fastening and finishing various materials; and applying technical specifications and knowledge concerning the physical properties of materials.

Nail down important skills such as:

- Building Plans & Blueprint Reading
- Power Tools and Equipment
- Residential Electricity
- Basic Plumbing
- Site and Building Layout
- Floor & Roof Framing and Repairs
- Wall Framing and Insulation
- Concrete, Block, and Brick Masonry
- Stairs and Staircases

What can I do with a career in this field?

Graduates of this program can become rough or finish carpenters, estimators, surveyors, general contractors, architects, construction foremen, brick/block/stone masons, industrial engineers, carpenters, floor and tile installers, roofers, drywall and ceiling installers, building inspectors or an union apprentice.



The Academy Links College Credit Opportunities

• Tech Prep 1:1 articulation program (CIP 46.9999)

Students may qualify for several free credits at Triangle Tech in Sunbury, PA.

Dual Enrollment: Students in this program will have the opportunity to earn dual enrollment credits through the Penn College Dual Enrollment program.



Eligible To:

- Mifflin County Students
- Adult Certification Classes



CERTIFICATIONS

- Occupational Safety and Health Administration (OSHA)
 Construction Industry Safety and Health Certificate
 (10 hours)
- ♦ PA Skills Certificate
- **♦** Telehandler Operator
- **♦** American Ladder Institute
- ♦ Fall Protection Certificate
- ♦ Areal Work Platform Certification



Co-Op Eligible!

Upperclassmen may be hired at local companies to work during the school day, earning real-world experience and building their resumes.







 Non-Traditional Occupation (Female)

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Cosmetology



The Cosmetology program prepares individuals to cut, trim, and style scalp, facial, and body hair; apply cosmetic preparations; perform manicures and pedicures; massage the head and extremities; and prepare for practice as licensed cosmetologists in specialized or full-service salons. Includes instruction in hair cutting and styling, manicuring, pedicuring, facial treatments, shampooing, chemical applications, esthetics, shop management, sanitation and safety, customer service, and applicable professional and labor laws and

Learn all the latest techniques in the cosmetology field.

- Hair styling, cutting, coloring, permanent waving, relaxing and straightening
- Facials
- Manicures and Pedicures
- Personal Hygiene
- Sterilization
- **Effective Communication Skills**

What can I do with a career in this field?

Many cosmetologists begin their careers prior to licensing by working as spa and salon receptionists and shampoo assistants. You can also be a salon owner, cosmetologist, cosmetology teacher, chemical/texture specialist, esthetician, manicurist, makeup artist, nail technician or natural hair braider.



The Academy Links **College Credit Opportunities**

• Tech Prep 1:1 articulation program (CIP 12.0401)

Students may qualify for several free credits at Penn Highlands Community College.



Eligible To:

- Mifflin County Students
- **✓** Juniata County Students
- Adult Certification Classes





- ♦ Pennsylvania State Board of **Cosmetology License**
- ♦ Nail Technician
- Esthetician
- Natural Hair Braider
- **SP2 Safety**
- ♦ Pennsylvania Skill Certificate



Students are provided opportunities to earn clinical hours that are applied to their 1250 hour requirement throughout the school







Non-Traditional Occupation (Male)

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PA DEPARTMENT OF LABOR IN -DEMAND & HIGH-PRIORITY OCCUPATION

Culinary Arts

The Culinary Arts program prepares individuals in production and service used in governmental, commercial or independently owned institutional food establishments and related food industry occupations. Includes Instruction in selecting, storing, preparing and serving food and food products; basic nutrition; sanitation, and food safety; the use and care of commercial equipment; serving techniques; and the operation of institutional food establishments.

Learn the latest techniques in the culinary kitchen:

- Meat, fish, seafood and poultry preparation
- Vegetables and starches
- Knife skills
- Breakfast food preparation
- Sauce and soup preparation
- Food service management
- And much more!

What can I do with a career in this field?

Many of our students work in the field during high school and continue after graduation as executive chefs, kitchen managers, food scientists, caterers, nutritionists, pastry chefs, personal chefs, line cooks, kitchen workers, wholesale, and even product research/development.



The Academy Links **College Credit Opportunities**

• SOAR qualified program (CIP 12.0508)

SOAR: Students may qualify for several free credits at participating colleges across Pennsylvania, such as: Pennsylvania College of Technology and Harrisburg Area Community College.



Eligible To:

- Mifflin County Students
- **✓** Juniata County Students
- **✓** Adult Certification Classes





- ♦ ServSafe Certificate (National **Restaurant Association**)
- ♦ PA Skills Certificate
- **SP2 Safety**
- ProStart Levels I & II (National **Restaurant Association**)



Upperclassmen may be hired at local companies to work during the school day, earning real-world experience and building their resumes.









Early Childhood Education

The Early Childhood Education program that focuses on the provision and management of childcare services and that prepared individuals to plan, design, and manage childcare facilities and programs that meet children's developmental needs and interests and that provide safe and healthy environments. Includes instruction in child development and psychology; home-and institution-based childcare; identification of diseases, injuries, and psychological trauma and applicable referral; parent relations; personnel and business management principles; and related laws and policies.

What can I do with a career in this field?

Employment as an aide in a child care center, a nanny, or family child caregiver requires a high school diploma and two years experience working with children. Students in this program graduate with enough experience to become an assistant group supervisor—one step above an aide. With further college education, jobs include teachers, child care center directors, child care referral agents and licensing specialists.



The Academy Links **College Credit Opportunities**

• SOAR qualified program (CIP 19.0708)

SOAR: Students may qualify for several free credits at participating colleges across Pennsylvania, such as: Harrisburg Area Community College, Reading Area Community College, Lackawanna College, Harcum College, and Pennsylvania Highlands Community College.



Eligible To:

- **✓** Mifflin County Students
- Juniata County Students
- **✓** Adult Certification Classes



- **Child Development Associate** Credential
- PA Key Stars 101 &102
- Better Kid Care Health & Safety
- **Child Abuse Training**
- **CPR/First Aid Certificate**
- ♦ Pennsylvania Skills Certificate



Upperclassmen may be hired at local companies to work during the school day, earning real-world experience and building their resumes.







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• Non-Traditional Occupation (Male)

PA DEPARTMENT OF LABOR HIGH-PRIORITY & IN-DEMAND OCCUPATION

Electrical Installation

The Electrical Installation program prepares individuals to apply technical knowledge and skills necessary to install, operate, maintain and repair electrically-energized residential, commercial and industrial systems, and DC and AC motors, controls and electrical distribution panels. Instruction emphasizes practical application of circuit diagrams and use of electrical codes and includes blueprint reading, sketching and other subjects essential for employment in the electrical occupations. Reading and interpretation of

Experience enlightening instruction in the following areas:

- AC and DC Machines
- Blueprint Reading
- Residential and Commercial Wiring
- Conduit Bending
- Electrical Maintenance

What can I do with a career in this field?

You can be an electrical engineer, electrician, electrician's apprentice, power plant technician, lineman; installation, maintenance and repair technician or apprentice, or counter/rental clerk.



The Academy Links **College Credit Opportunities**

• SOAR qualified program (CIP 46.0399)

SOAR: Students may qualify for several free credits at participating colleges across Pennsylvania, such as: Harrisburg Area Community College and Rosedale Technical College.

Dual Enrollment: Students in this program will have the opportunity to earn dual enrollment credits through Penn College Dual Enrollment program through Penn College of Technology by being concurrently enrolled in Penn College and The Academy.



Eligible To:

- Mifflin County Students
- **✓** Juniata County Students
- Adult Certification Classes



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- Occupational Safety and Health **Administration (OSHA) Construction Industry Safety and Health Certificate** (10 hours)
- Pennsylvania Skills Certificate
- **Telehandler Operator**
- **American Ladder Institute**
- Areal Work Platform Certification



Upperclassmen may be hired at local companies to work during the school day, earning real-world experience and building their resumes.







• Non-Traditional Occupation

(Female)

Mechatronics/Robotics/Automation

This is an instructional program prepares individuals to apply basic engineering principles and technical skills in both the mechanical and electrical fields. Instruction is planned to provide preparation in the design, development and testing of electromechanical devices and systems such as automatic control systems, servomechanisms, vending machines, elevator controls, missile controls, tape control machines and auxiliary computer equipment. Instruction also includes feasibility testing of engineering concepts, systems analysis including designs, selection, testing, and application of engineering data; and, the preparation of written reports and test results in support of mechanical and electrical engineers.

Control your knowledge in these areas:

- Basic Electricity & Electrical Systems
- Electronics
- A.C. and D.C. Motors
- Programmable Logic Controls
- Robotics
- Fluid Power Systems

What can I do in this field?

You'll be able to land an entry-level job wherever there is automation. Those kinds of jobs include robot installation and maintenance, automation equipment installation, troubleshooting and maintenance and PLC programming. You'll know how to install, maintain and repair the mechanical, controls, fluid power systems, electrical and electronic equipment found in a bunch of different of fields. Plus, your mechatronics training will equip you to make sure HVAC, mechanical, electrical and computer-driven systems run.



The Academy Links College Credit Opportunities

 SOAR qualified program (CIP 15.0403)

SOAR: Students may qualify for several free credits at participating schools, including: Clarion University, Harrisburg Area Community College, and Northampton County Area Community College.

Dual Enrollment: Students in this program will have the opportunity to earn dual enrollment credits through Penn College Dual Enrollment program through Penn College of Technology.



Eligible To:

- Mifflin County Students
- Juniata County Students



CERTIFICATIONS

- **♦ PA Skills Certificate**
- Occupational Safety and Health Administration (OSHA) Construction Industry Safety and Health Certificate (10 hours)



Co-On Fligible

Upperclassmen may be hired at local companies to work during the school day, earning real-world experience and building their resumes.







 Non-Traditional Occupation (Female)

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Health Professions

The Health Professions program prepares individuals to apply knowledge and skills in the health occupations. Instruction is provided in the basic skills in a variety of areas associated with health occupations such as health and medical services, pharmaceutical and medical instruments and supplies. Instruction includes but is not limited to foundations of health (medical terminology); anatomy and physiology; legal, ethical and eco-

Gain a healthy understanding of:

- CPR and First Aid
- Basic patient bedside care
- Body Mechanics
- Infection Control
- Medical Terminology
- Patient Rights—HIPPA
- Vital Signs

What can I do with a career in this field?

Many graduates continue their education to pursue careers in nursing, sports medicine, physical therapy (PT), and radiology. You can become a physician's assistant, physical therapist, occupational therapist (OT), laboratory technician, x-ray technician, medical records coder, registered nurse (RN) or licensed practical nurse (LPN).



The Academy Links College Credit Opportunities

• SOAR qualified program (CIP 51.9999)

SOAR: Students may qualify for several free credits at participating colleges across Pennsylvania, such as: Mount Aloysius College, Commonwealth Technical Institute, Harcum College, and Pennsylvania College of Technology.

Dual Enrollment: Students in this program will have the opportunity to earn dual enrollment credits through Penn College Dual Enrollment program by being concurrently enrolled in Penn College and The Academy.



Eligible To:

- Mifflin County Students
- Adult Certification Classes



CERTIFICATIONS

- ♦ Certified Nursing Assistant (CNA) Certificate
- ♦ SP2 Safety
- CPR/First-Aid Certificate
- ♦ Pennsylvania Skills Certificate



Co-Op Eligible!

Upperclassmen may be hired at local companies to work during the school day, earning real-world experience and building their resumes.







Non-Traditional Occupation (Male)



Precision Machining

Machinists are the foundation of all industries, and without them, no manufacturing or construction jobs would exist. In the Precision Machining program, you get training in the top 3 hardest jobs to fill According to the Bureau of Labor Statistics (Machining, Welding, CNC Programming). Precision Machining students are highly sought out by local employers for their knowledge and varied skillset.

Learn the latest advances in the precision machining field:

- Operating Lathes
- Operating Milling Machines
- Operating Power Saws
- Bench layout
- Welding
- Metallurgy
- **Blueprint Reading**
- CNC Programming

What can I do with a career in this field?

Graduates of the Precision Machining program go straight into the workforce or get further schooling. Students can become machinists, tool and die makers, CNC programmers, production managers, cost estimators, engineers, aircraft technicians, inspectors, or engineering technicians just to name a few!



The Academy Links **College Credit Opportunities**

• SOAR qualified program (CIP 48.0501)

SOAR: Students may qualify for several free credits at participating colleges across Pennsylvania, such as: Clarion University, Thaddeus Stevens College of Technology, Pennsylvania College of Technology, Harrisburg Area Community College and Reading

Dual Enrollment: Students in this program will have the opportunity to earn dual enrollment credits through Penn College Dual Enrollment Program by being concurrently enrolled in Penn College and The Academy.



Eligible To:

- **✓** Mifflin County Students
- **✓** Juniata County Students
- Adult Certification Classes



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- National Institute of Metalworking (NIMS) Level I **Credentials**
- ♦ Occupational Safety and Health **Administration (OSHA) Construction Industry Safety and Health Certificate** (10 hours)
- ♦ PA Skills Certificate



Upperclassmen may be hired at local companies to work during the school day, earning real-world experience and building their resumes.







• Non-Traditional Occupation (Female)



Welding Technology

The Welding Technology program prepares individuals to apply technical knowledge and skills to join or cut metal surfaces. Includes instruction in arc welding, resistance welding, brazing and soldering, cutting, high-energy beam welding and cutting, solid state welding, ferrous and non-ferrous materials, oxidation-reduction reactions, welding metallurgy, welding processes and heat treating, structural design, safety, and applicable codes and standards.

Learn the most common welding methods:

- SMAW
- GMAW
- GTAW
- FCAW

What can I do with a career in this field?

Graduates of the Welding Technology program go straight into the workforce or get further schooling. Students can become a welding inspector, pipe welder, TIG welder, fabricator, bridge/structural welder and ironworker just to name a few!



The Academy Links College Credit Opportunities

• SOAR qualified program (CIP 48.0508)

SOAR: Students may qualify for several free credits at participating colleges across Pennsylvania, such as: Clarion University, Thaddeus Stevens College of Technology, Pennsylvania College of Technology, Harrisburg Area Community College and Reading Area Community College.



Eligible To:

- Mifflin County Students
- Juniata County Students
- Adult Certification Classes



CERTIFICATIONS

- ♦ AWS D 1.1 Structural Steel
- Occupational Safety and Health
 Administration (OSHA)
 Construction Industry Safety and
 Health Certificate
 (10 hours)
- Rigging Certification



Upperclassmen may be hired at local companies to work during the school day, earning realworld experience and building their resumes.







• Non-Traditional Occupation (Female)

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Teaching Academy

The Teacher Academy is an elective for seniors who are interested in pursuing a career in the field of education. During this semester course, students will be required to complete online curricular requirements prior to being placed with an MCSD-certified teacher. The Teacher Academy course introduces students to the fundamental skills required to work in the teaching profession in the 21st Century.





AT A GLANCE:

COST

Free

(No Tuition or Fees!)

REQUIREMENTS

- Enroll in a SOAR approved Academy Program
- Schedule college-prep academic classes at your high school
- Maintain a 2.5 GPA in your Academy program
- Achieve your High School Diploma
- Earn a Competent or Advanced score on your NOCTI exam
- Complete 100% of your technical program competencies list at an **Industry Proficient Level**

PORTABLE

Credits transfer to over 40 different institutions in Pennsylvania

www.collegetransfer.net

The Pennsylvania Department of Education (PDE) developed and supports the SOAR program, which helps career and technical education programs lead seamlessly to post-secondary education.

The mission of SOAR is to prepare students for college and careers in an increasingly diverse, high-performing workforce. PDE grants SOAR Programs of Study (POS) approval based in part on the adoption of statewide, industry-aligned competencies and the PA academic standards, instructor certifications, and status as High Priority Occupations as defined by the Pennsylvania Department of Labor and Industry. SOAR creates a transfer credit relationship between The Academy and over 40 Pennsylvania post-secondary colleges. Students who achieve SOAR's challenging academic technical criteria (listed to the left) by the time they graduate from The Academy can earn free credits to transfer to college, saving close to one full, free semester of college!

Note: Since requirements include test scores and GPAs, students will not know for certain if they qualify for SOAR credits until late in their senior year. Therefore, SOAR credits should be considered a bonus credit that you may earn if you work hard and achieve, not a guaranteed credit that every student will receive.

Perfect for:

- The academically strong, motivated student.
- The student who knows they want to go to college locally or in-state (in Pennsylvania), even if they haven't chosen a school yet.

Admissions Policy

Admission into the Mifflin County Academy of Science and Technology does not guarantee admission for the student every year thereafter. From time to time, classroom quotas may limit the number of students who are able to return to the program the following year. In the event a program's quota (number of students that can be safely educated at one time) has been met in subsequent years, the student's prior year attendance and grades at The Academy will be the determining factor of who is and who is not re-enrolled in that program.

Application Process

Applications are available on the Academy's website at www.theacademy.net and are due by April 1st.

The Academy evaluates the student applicant in terms of his/her preferred Academy course by utilizing the following criteria:

- 1. Attendance
- 2. Grade Point Average
- 3. Recommended Courses
- 4. Essay response on The Academy application

The Academy's Principal recommends placement of all students. If a program's quota has been met, students may be asked to participate in an interview and/or to enroll in their second choice program.

Student Attendance

Students must maintain an excellent attendance record in order to develop the skills, knowledge, attitude and behavior necessary to succeed in high school, post-secondary education and employment. Class attendance is a student's obligation and responsibility. Students who abuse the attendance policy could be denied credit for their course of study, and may also be denied the opportunity to continue in their Academy program the following school year.

What is a Non-Traditional Career?

Nontraditional Careers refers to jobs that have been traditionally filled by one gender. Nontraditional occupations are occupations for which Individuals from one gender comprise less than 25% of the individuals employed. Examples are



males in Cosmetology and Early Childhood Childcare and females in Precision Machining and Agriculture. Promoting nontraditional career opportunities opens doors for every individual. It breaks the mold of expectations and allows all learners to explore a wide range of career opportunities in an atmosphere free from stereotypes of gender and jobs. Women are more often the focus of nontradi-

tional programs because the opportunity to earn higher wages exists in occupations that are commonly nontraditional for women. Although occupations that are commonly nontraditional for men often do not yield higher wages, they may provide increased job satisfaction and may yield a higher wage for them than their female counterparts working in the same career.



PA DEPARTMENT OF LABOR HIGH-PRIORITY & IN-DEMAND OCCUPATIONS

High-Priority & In-Demand Occupations are designated by the Department of Labor because they are in high demand and require a high skill level. As a result, graduates of these programs are likely to secure a job faster and earn higher-than-average wages. High-Priority & In-Demand Occupations are updated each year.



Automotive

AMT112: Brake Systems

Fundamentals of brake hydraulics, including theory and operation of servo and non-servo drum brakes, disc and drum brake machining, operation of disc brakes, operation of power assist brakes, and overview of electronic anti-skid brakes.

3 Credits (2 Lecture - 3 Lab)

Enrollment requirement: 75% (C) minimum overall GPA.

AMT113: Steering and Suspension

Principles of operation of steering and suspension, rack and pinion steering gears, and conventional steering gears. Study includes the theory of operation of power steering gears, steering geometry, wheel alignment principles, and static and dynamic wheel balancing. 3 Credits (2 Lecture - 3 Lab)

Enrollment requirement: 75% (C) minimum overall GPA.

Collision Repair

ABC100: Introduction to Non-Structural Collision Repair

Analysis of basic principles and industry best practices, including issues of human and environmental safety. Theory/overview of removing, repairing, replacing, and adjusting outer body panels; straightening and roughing out of damaged steel panels and preparing them for body filler; and repairing aluminum panels. Study of proper replacement of corrosion protection to the repaired panels and adjustment of panels for proper fit. Introductory theory of cutting and welding of steel. Group interaction/activities; application of assessment tools. 2 Credits (2 Lecture)

Corequisite(s): ABC104 (waiver not available)

Enrollment requirement: 75% (C) minimum overall GPA.

ABC104: Introduction to Non-Structural Collision Repair Applications

Application of theory, techniques, principles, and industry best practices, including issues of human and environmental safety. Applied skills include removing, repairing, replacing, and adjusting outer body panels; straightening and roughing out damaged steel panels and preparing them for body filler; repairing aluminum panels for proper replacement of corrosion protection; and adjusting panels for proper fit. Group interaction/activities; application of assessment tools.

3 Credits (0 Lecture – 9 Lab)

Corequisite(s): ABC100 (waiver not available)

Enrollment requirement: 75% (C) minimum overall GPA.

Construction Trades

BCT103: Construction Hand & Power Tools

Survey of hand and power tools typically used to perform construction work. Emphasis on the development of skills needed to effectively perform layout, measurement, cutting, fastening, and finishing operations. Includes maintenance of tools and equipment, safe use of hand and power tools, and emerging tool technology. 1 Credit: 0 Lecture, 3 Lab

Enrollment requirement: 75% (C) minimum overall GPA.

BCT 109: Framing Principles

Theory and application of framing techniques in residential and light commercial construction. Emphasis on basic principles and skills used in hand and machine woodworking operations.

l Credit: 0 Lecture, 3 Lab

Enrollment requirement: 75% (C) minimum overall GPA.

Electrical Technology

ELT116: Construction Lab I: Residential I

Introduction to residential wiring, plans, specifications, and codes. Theory and lab assignments covering procedures for wiring basic lighting and receptacle circuits, installing special purpose circuits and switching circuits, and producing accurate wiring diagrams. Blueprint reading and the understanding and utilization of the National Electrical Code (NEC) are strongly emphasized in the course. 5 Credits (3 Lecture - 6 Lab)

Corequisite(s): ELT111 or RET111 (waiver available)

Enrollment requirement: 75% (C) minimum overall GPA.

Medical Terminology

MTR100: Medical Terminology Survey

Introduction to the basic structures and rules of interpreting medical terminology, designed to develop the ability to read, understand, and write the medical language. 1 Credit (1 Lecture)

Enrollment requirement: 75% (C) minimum overall GPA.

MTR104: Basics of Medical Terminology

Foundation for the use of the language of medicine, with emphasis on correct pronunciation and spelling, various word parts, abbreviations and symbols, and terms pertaining to body systems. Etiology, symptomatology, pathology, and diagnostic procedures for identifying various disease processes provide an increased understanding of medically related conditions and procedures. 3 Credits (3 Lecture)

Enrollment requirement: 75% (C) minimum overall GPA.

Horticulture

HRT101: Introduction to Ornamental Horticulture

Overview of the diverse ornamental horticulture industry, including the worldwide scope and economic impact of the industry in today's market-place. Emphasis on information access through the Internet, trade journals, trade organizations, the horticulture industry, guest speakers, and visitations to various horticultural businesses. Exploration includes products, services, and information used in the industry; production and marketing (wholesale and retail) of horticultural products and services; and traditional and nontraditional career paths within the industry. 1 Credit (1 Lecture)

Enrollment requirement: 75% (C) minimum overall GPA.

Machinist General & Machine Tool Technology

MTT128: Mill Applications

Introduction to the theory and practical applications of basic metalworking. Emphasis on mill applications, industrial shop safety, material selection, job planning, bench-work, quality control, and inspection. (*Manual*) Milling machines, hand tools, drill presses, pedestal grinders, band saws, and precision-measuring equipment are used to complete required projects. 4 Credits (1 Lecture - 9 Lab) *Enrollment requirement: 75% (C) minimum overall GPA*.

MTT129: Lathe Applications

Introduction to the theory and practical applications used to safely set up and operate a metal turning engine lathe. Operations such as turning, facing, boring, grooving, drilling, turning tapers, single-point threading, and performing cut-off procedures are implemented. Three and four-jaw chucking techniques and turning between centers are used to complete required projects. 4 Credits (1 Lecture - 9 Lab) *Enrollment requirement: 75% (C) minimum overall GPA*.

COOPERATIVE EDUCATION

The cooperative education program at The Academy permits senior students who have met specific requirements to be released from the school campus, work part-time or full-time for an employer, and earn credits towards graduation.

The student reports to the assigned job, which is referred to as the student's Training Site. The student/employee is a representative of the school and is expected to demonstrate professional qualities of responsibility, dependability, ethical behavior, and maturity while performing tasks for the employer.

The purpose of cooperative education programs is to provide the student with competencies developed through paid, supervised, on-the-

Benefits For the student:

- Learn while you earn
- Become responsible and selfmotivated
- Build self-esteem
- Get acquainted with business and industry standards
- Acquire work ethics
- Possible hire after graduation
- Ease transition from school to work

22-23 Training Sites:

- Zimmerman Truck Lines Inc
- Kerstetter's Garage
- Brenner Tire and Auto
- Five Star International, Inc
- Penn DOT Maintenance Depart.
- SEDA COG
- Panda Preschool and Daycare
- Kish Valley Electric
- Cline Electric
- Geisinger Lewistown Hospital
- Geisinger Lewistown Clinic

CAREER & TECHNICAL STUDENT ORGANIZATIONS

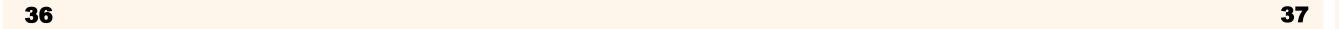
Student leadership organizations are an important part of any technical training. The Academy offers its students the opportunity to join a career and technical student organization that is directly related to their area of study. Each organization has established goals that strive to develop leadership abilities through participation in educational, vocational, civic, recreation, and social activities. Each student is challenged to develop realis-









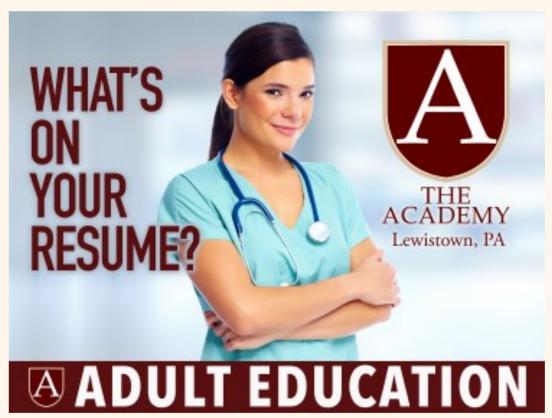




LIFE-CHANGING OPPORTUNITIES.

Local. Affordable. In-Demand

The Academy is the Juniata River Valley's largest post-secondary school, offering a variety of adult and post-secondary courses for those looking for a start or to switch careers. Career and technical education provides multiple options for career success. The Academy offers employers a way to close the skills gap and offers community members an opportunity to change their lives.



Full Time Programs

Practical Nursing Nurse Aide CDL - Class A

Part Time Programs

CDL - Class B
PA Safety Inspections
PA Emissions/OBD II
Basic Welding
Basic Machining
CNC Machining
ServSafe Manager
Emergency Medical Responder
Emergency Medical Technician
Child Development Associate
Mechatronics

Intergenerational Programs

Cosmetology
Cosmetology Teacher
Nail Technician
Mechatronics
AWS Certified Welding

Online Programs

Over 144 different on-line course in 12 categories.

See our website for current listings.

THEACADEMY.NET





For more
information on
enrollment and
course offerings call
the school
717-248-3933
or go on-line at

THEACADEMY.NET



The Mifflin County Academy of Science and Technology

www.theacademy.net

The Academy does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. Inquiries may be directed to The Academy's Title IX or the Section 504 Coordinator, Dan Potutschnig, at 700 Pitt Street, Lewistown, PA 17044 or 717-248-3933.

APPLY TODAY! Contact your School Counselor or contact the Principal, Norma O'Brien, for more information. Email njo05@mcsdk12.org or call 717-248-3933.

Students attending non-public schools in Mifflin and Juniata Counties are also eligible to attend The Academy. Enrollment averages approximately 380 students annually. Vocational-technical educational programs offered at the The Academy are approved by the Pennsylvania Department of Education. Students receive academic credit from their sending high schools for successful completion of each planned course at The Academy. This assists students in completing the requirements for graduation as determined by their high school. Upon successful completion of all planned courses in a specific technical program, students also receive a program completion certificate from The Academy.