



Cumberland Perry Area Vocational Technical School (CPAVTS) serves students from fourteen high schools in Cumberland, Perry, York, and Adams County. CPAVTS is an extension of your high school, offering comprehensive instruction in 22 career and technical programs. Students attend CPAVTS for half of their school day, taking courses in their technical program plus social studies. Students attend their sending high school for English, Science, Mathematics, Physical Education, and other graduation requirements.

The full scope of skills and competencies in the technical programs at CPAVTS are taught over a three-year course sequence. However, students may attend CPAVTS for one or two years to support their career goals.

CPAVTS students are expected to be responsible and respectful, demonstrating safe work habits at all times. **Students must be able to understand and comply with all school rules and procedures.**

CPAVTS has a competitive application process. Students are admitted based on their application score and school district enrollment quotas. See your sending school counselor for an application. Clicking on the program names below will connect you to the program web page at www.cpavts.org.

2017-2018 CAREER PATHWAYS AND PROGRAMS AT CPAVTS

<p style="text-align: center;"><u>CONSTRUCTION AND MAINTENANCE</u></p> <p style="text-align: center;">Carpentry Electrical Construction and Maintenance Heating/Ventilation/Air Conditioning Horticulture/Landscaping Masonry</p>	<p style="text-align: center;"><u>ARTS & TECHNOLOGY</u></p> <p style="text-align: center;">Advertising Art & Design Computer Networking Computer Programming Graphic Communications</p>
<p style="text-align: center;"><u>MANUFACTURING</u></p> <p style="text-align: center;">Electronics Technology Precision Machine Technology Welding Technology</p>	<p style="text-align: center;"><u>HEALTH SCIENCES</u></p> <p style="text-align: center;">Dental Assistant Nurse/Nursing Assistant</p>
<p style="text-align: center;"><u>HUMAN SERVICES AND HOSPITALITY</u></p> <p style="text-align: center;">Cosmetology Criminal Justice Culinary Arts Early Childhood Education</p>	<p style="text-align: center;"><u>TRANSPORTATION & LOGISTICS</u></p> <p style="text-align: center;">Auto Collision Technology Automotive Technology Diesel Technology Logistics & Warehouse Management</p>

Additional information on curriculum, college credit opportunities, and uniform requirements is available online at www.cpavts.org/.

ALL PROGRAMS ARE AVAILABLE TO MALES AND FEMALES

ADVANTAGES FOR STUDENTS ATTENDING CPAVTS

Earn College Credit - College in the High School Program

The College in High School (CHS) program allows high school students to take college classes while enrolled at CPAVTS during the regular school day. Students who are eligible to take College in the High School courses can earn credits toward high school graduation and credits towards a college degree at the same time. Harrisburg Area Community College or Pennsylvania College of Technology assesses and approves CPAVTS instructors to teach these courses. HACC or Penn College awards college credits to students who complete the courses with a passing grade and all credits are eligible to transfer to other colleges and universities depending on agreements with those schools. For College in the High School course details go to www.cpavts.org.

Earn College Credit - Program of Study (POS) College Articulation Agreements

Twenty programs at CPAVTS are recognized by the Pennsylvania Department of Education as a “Program of Study”. Students in these programs have the opportunity to earn college credit at various post-secondary schools in Pennsylvania provided they meet the following requirements:

1. Graduate from high school
2. Earn at least 2.5 GPA in your program courses
3. Achieve a score of “Advanced” or “Competent” on the NOCTI exam
4. Successfully complete all tasks on the Program of Study task list – requires all three years of a program.

Suggested Course Sequence by the Pennsylvania Department of Education for Programs of Study
For Students Enrolled in Career and Technical Programs:

Grade 9	Grade 10	Grade 11	Grade 12
English	English	English	English
Earth Science	Biology	Chemistry	Elective
Social Studies	Social Studies	Social Studies	Social Studies
Algebra I or Pre-Algebra	Geometry or Algebra I	Algebra II or Geometry	Additional Math
Physical Education	Physical Education	Physical Education	Physical Education
Electives	CPAVTS Program	CPAVTS Program	CPAVTS Program

Additional information on Program of Study and which colleges are participating can be found at www.cpavts.org.

Earn a Pennsylvania Skills Certificate

The Pennsylvania Skills Certificate was created by the PA Department of Education to recognize career and technical education students who have shown advanced skill achievement in their career and technical program. Students must complete 50% of the program and be seniors to be eligible to earn a PA Skills Certificate.

To earn the Pennsylvania Skills Certificate, students must achieve at the advanced level on the end of program NOCTI test. The test consists of two parts – written and performance. The written test covers factual knowledge, technical information, understanding of academic principals and problem solving related to the technical field. The performance test allows students to demonstrate their skills to industry professionals who proctor the exam.

Earn Industry-Recognized Certifications

CPAVTS have the opportunity to earn industry certifications which are specific to their career program. Examples include PA State Inspection certification for Auto Tech students and Certified Nursing Assistant certification for nursing students. A complete list of certifications is listed under each program description. During the 2015-2016 school year, over 300 CPAVTS students earned at least one industry certification.

CONSTRUCTION AND MAINTENANCE

CARPENTRY

There are two types of carpentry work: rough and finish. Rough carpentry includes framing, boarding, sheathing, bracing, roofing, and studding; finish carpentry includes the installation of finished flooring, stair work, siding, trim, wallboards, windows, and hardware. Students in the **Carpentry** program will learn the basics of both rough and finish carpentry, including such areas as blueprint reading, using power and hand tools, framing techniques, installing trim and hardware, estimating, and identifying materials. Many of these skills are developed through live work projects performed throughout the school. Safety instruction is emphasized throughout the program.

<u>Carpenter</u>	<u>Industry Certifications</u>	<u>Related Occupations</u>
2016 Median Wage in PA \$48,600 per year	OSHA – 10 PA Builders Association	Estimator Dry wall installer Construction & building inspector
Program of Study Approved	2017 PA In Demand Occupation List	

ELECTRICAL CONSTRUCTION AND MAINTENANCE

Students in the **Electrical Construction & Maintenance** program receive classroom training and practical experience in the installation of circuits, switches, conduits, circuit breakers, and other electrical devices; instruction includes the proper use and care of hand tools and equipment used to install electrical systems on a construction site. Students learn to connect and disconnect electrical equipment and determine proper installation and operation of electrical work, apply procedures used in interior circuits and outlets, and troubleshoot electrical malfunctions. Special emphasis is placed on the National Electric Code Specifications used in residential, commercial, and in industrial electrical construction projects.

<u>Electrician</u>	<u>Industry Certification</u>	<u>Related Occupations</u>
2016 Median Wage in PA \$60,160 per year	OSHA – 10 PA Builders Association	Electrical engineer Avionics technicians Construction & building inspector
Program of Study Approved	2017 PA In Demand Occupation List	

HEATING, VENTILATION, AIR CONDITIONING, AND REFRIGERATION

The **Heating, Ventilation and Air Conditioning (HVAC)** program provides the fundamentals of installation, repair, and maintenance of equipment and accessory parts used for heating, air conditioning, and cooling systems. Students learn basic electricity as it applies to the electrical power source and activities used in air conditioning, heating, and refrigeration units. Various equipment and training simulators are used to teach basic refrigeration in chilling and freezing systems. They will learn to solder and braze while developing skills required for the installation, repair, and maintenance of air conditioning, heating, and refrigeration units. Instruction includes: connecting ducts, refrigerant lines, and electrical hookups to power sources; the removal and/or replacement of parts by using torches, electrical meters, testing equipment, gauges, and hand tools; diagnosing unit breakdowns; disassembling and reassembling systems; making adjustments to ensure efficient operations; and reading basic blueprints and writing diagrams. The program also covers many of the basic skills needed in the plumbing trade, providing those students interested an opportunity to pursue a career in plumbing.

<u>HVAC-R Technician</u>	<u>Industry Certification</u>	<u>Related Occupations</u>
2016 Median Wage in PA \$49,650 per year	EPA 608, PA Builders Association, OSHA - 10	Service technician Plumber Sheet metal or pipe fitter
Program of Study Approved	2017 PA In Demand Occupation List	

HORTICULTURE AND LANDSCAPING

There are several career pathways in the **Horticulture** program. Greenhouse managers, soil and plant scientists, groundskeepers, and landscape designers are just a few of the occupations in this wide-ranging field. Students spend time in the greenhouse, classroom, and outdoors as they learn identification, botany, proper plant care, and other factors impacting care and growth of plant materials. This knowledge is then utilized in the design and preparation of decorative and functional sites. Topics include sustainable practices such as hydroponics and environmental issues facing today's society, design and installation of plants, ponds, and hardscaping, laws and zoning regulations, business ethics and practices, safety and equipment operation, floral design, turf management and irrigation, and other related areas. We also offer college in the high school along with certifications for OSHA. Come explore the opportunity waiting for you!

<u>Landscaping & Groundskeeper</u>	<u>Industry Certification</u>	<u>Related Occupations</u>
2016 Median Wage in PA \$28,120 per year Program of Study Approved	OSHA- 10 2017 PA In Demand Occupation List	Floral designer Groundskeeper Landscape

ALL PROGRAMS ARE AVAILABLE TO MALES AND FEMALES

MASONRY

The **Masonry** program provides the fundamental skills needed to work with bricks, blocks, and concrete. Students learn brick and block laying; mortar mixing; scaffold construction; building construction; the proper use of masonry tools; and how to read blueprints to determine an accurate brick layout following the builder's specifications. Additionally, students check alignment and positioning of bricks by using a dry course; check for horizontal or vertical straightness by using a mason's level; gauge lines, and plumb lines; and use story gauge rods to check work. Special emphasis is placed on mortar mixing and proper spreading of mortar to ensure accurate spacing of the joints. Students learn the safe use and proper care of hand tools such as trowels, jointers, rules, squares, brick hammer, mason levels, and gauge lines.

Brick and Block Mason

2016 Median Wage in PA
\$54,820 per year

Industry Certification

OSHA – 10
Rough Terrain Forklift

Related Occupations

Tile setter
Cement finisher
Construction supervisor

Program of Study Approved

2017 PA In Demand Occupation List

ARTS AND TECHNOLOGY

ADVERTISING ART & DESIGN

A large percentage of merchandising and advertising for modern promotion is done through the medium of **Advertising Art and Design**. The purpose of this course is to help prepare students for an entry-level job or to prepare the student to advance into post-secondary training at colleges and art schools. Throughout the program, students will maintain a portfolio to promote their work and talent when they graduate. The major emphasis is on the basic principles of design: color, development of skills, exploration of media, and Advertising Art and Design practices. Special emphasis is placed on manual illustration and layout skills in the area of art production, technical features of design, layout and composition, and color theory. Students will prepare graphic and advertising projects from the idea stage through to pre-press using the current Adobe Creative Suite software.

Graphic Designer

2016 Median Wage in PA
\$49,660 per year

Industry Certification

Adobe® Certification

Related Occupations

Web page designer
Graphic illustrator

Program of Study Approved

GRAPHIC COMMUNICATIONS

The **Graphic Communications** program provides students with practical instruction in the basics of producing a wide variety of printed materials. They learn the offset printing process by preparing projects from the initial design to finished product, and the theory of photography is taught: Students use a digital camera and digital plate-setting to produce plates used in the reproduction of printed materials. This program also provides students with practical experience in learning the techniques of layout and design of a printing assignment, as well as computer skills, which are learned through the use of Windows and Macintosh operating systems. Additionally, students learn how to proofread their work, which is an important part of preprint operations to ensure accuracy before work is sent to press. Other activities included in the curriculum are: paper selection; cutting and binding; and collating and finishing. Competencies in printing press operations on a wide variety of equipment are stressed in the program; work orders from a variety of sources provide students with opportunities to experience actual production work.

Printing Press Operator

2016 Median Wage in PA
\$37,600 per year

Industry Certification

Adobe® Certification

Related Occupations

Printer
Graphic designer

Program of Study Approved

COMPUTER NETWORKING

The **Computer Networking** program is designed to give students a broad background in the fundamentals of designing, installing, and maintaining a computer network. Specifically, students will cover the following topics: Computer hardware, troubleshooting, repair, and maintenance, operating systems and software, network technologies, network media and topologies, network devices, network management, network tools and troubleshooting, and security fundamentals. Emphasis will be placed on preparing students to test for industry credentials and certifications.

Computer Network Administrator

2016 Median Wage in PA
\$76,130 per year

Industry Certification

A+, Net +, Security +
CCNA Routing & Switching

Related Occupations

Network Administrator
Systems Analyst
Security Specialist

Program of Study Approved

ALL PROGRAMS ARE AVAILABLE TO MALES AND FEMALES

COMPUTER PROGRAMMING

In **Computer Programming** students will learn to write, develop, and test code for applications to run on computer systems. In addition, they will learn about analyzing and designing solutions to troubleshoot software issues. Students will cover the following topics: understanding computer basics, interpret logical expressions using Boolean Algebra, create simple programs using algorithms, apply program analysis for evaluating algorithms and testing and debugging systems, and learn about computing practice focusing on data structures and object-oriented program design. Emphasis will be on completing college level course work leading to earning college credits through our agreement with Harrisburg University of Science and Technology.

Computer Programmers

2016 Median Wage in PA
\$81,120 per year

Industry Certification

To be determined

Related Occupations

Software Developers, Systems
Software Developers, Applications
Web Developers

2017 PA In Demand Occupation List

HEALTH SCIENCES

DENTAL ASSISTANT

Students in the **Dental Assisting** program learn how to properly aid dentists and dental hygienists. During the course of the program, they will learn the proper techniques that go into every aspect of assisting in a dental office, from taking x-rays to scheduling appointments. To ensure that students are trained as accurately as possible, they practice on modern dental equipment and become familiar with tools common to the profession. Other tasks assigned in this program include learning proper sterilization, instrument transferral, infection control, and preventative healthcare techniques; and assisting with basic dental procedures. While students emerge from the Dental Assisting program fully equipped to work as a dental assistant, further education is required before the student can achieve other positions in the field.

Dental Assistant

2016 Median Wage in PA
\$35,660 per year

Industry Certification

PA Dental Radiographic
First Aid/CPR/AED

Related Occupations

Dental hygienist
Radiologic Technicians

Program of Study Approved

2017 PA In Demand Occupation List

NURSING/NURSING ASSISTANT

Students in the **Nursing Assistant** program explore a variety of health professions to develop an awareness of job opportunities in the field. They develop the skills needed to perform effectively in entry-level positions and to receive a good foundation for continued study. Nursing program students learn patient care, first aid, and laboratory skills, and receive simulated work experiences such as assisting doctors with physical exams; demonstrating laboratory skills; assisting with patient care in the office or hospital; and practicing long-term care settings. Special emphasis is placed on personal hygiene; instrument and equipment identification; telephone training; correspondence and record keeping; basic nursing procedures; infection control; standard precautions; sterilization; and OSHA standards. Students are also given instruction in the sciences related to this field including medical terminology, anatomy, pharmacology, and laboratory techniques. This program will provide students with an opportunity to learn advanced functions, including clinical experience with patients through affiliation with Bethany Village Retirement Centre.

Certified Nursing Assistant

2016 Median Wage in PA
\$29,190

Industry Certification

C.N.A.
First Aid/CPR/AED

Related Occupations

Nurse practitioner
Health Aide
Practical Nursing

Program of Study Approved

2017 PA In Demand Occupation List

HUMAN SERVICES AND HOSPITALITY

CULINARY ARTS

Culinary Arts is a program that offers a broad range of skills and knowledge concerning the selection, preparation, and handling of foods. Skill development will focus on: safety and sanitation; dining room service; preparation of food; buffet service; meat cutting; baking; store room procedures; and basic management skills. Unlike the home economics courses offered by most general high schools, the instruction and on-the-job training will be conducted in a fully equipped cafeteria and restaurant at Cumberland Perry AVTS.

Chef
2016 Median Wage in PA
\$51,330

Industry Certifications
ServSafe®

Related Occupations
Cook, Pastry chef
Butcher, Food Service Manager
First-Line Supervisors of Food
Preparation and Serving Workers

Program of Study Approved

2017 PA In Demand Occupation List

COSMETOLOGY

The **Cosmetology** program at CPAVTS gives students a great head start to a lucrative career. Our curriculum is rigid, however, by the time students graduate they will have skills desirable to employers in the Cosmetology industry. Students in the program learn all aspects of haircare, skin care, and nail care, and not only do they practice on mannequins but they practice on each other as well. Once the student earns 300 hours they are ready to apply skills to customers in the Cosmetology clinic. Instruction also includes resume writing, interviewing, marketing and retailing so students are prepared to start the job search process. Students need to earn 1250 hours to be eligible to test for the PA Cosmetology License Exam.

Cosmetologist
2016 Median Wage in PA
\$28,010 per year

Industry Certification
State Board of Cosmetology

Related Occupations
Barber
Make up artist

CRIMINAL JUSTICE

Students in the **Criminal Justice** program learn administrative procedures; vehicle code and accident investigation; crime codes and criminal investigation; prevention of crime; laboratory procedure; and supplemental activities. Simulated activities develop skills in procedures used in police patrol, criminal investigations, accident investigation, report writing, use of Crime Code and Pennsylvania Vehicle Code, first aid, and firearms training. Special emphasis is given toward each student's career objectives. Students develop skills needed to perform effectively in police departments and security agencies, and receive a good foundation for continued study in Police Administration or Criminal Justice.

Police Officer
2016 Median Wage in PA
\$65,130 per year

Industry Certification
First Aid/CPR
National Incident Management

Related Occupations
Police Detective
Fire Fighter
Correctional Officer

Program of Study Approved

EARLY CHILDHOOD EDUCATION

The **Early Childhood Education** program instructs students in the preparation and presentation of nutritional snacks, instructional materials, schedules, and curriculum plans. They will also cover how to manage parent involvement, enrollment, safety/health factors, and discipline. A portion of the program is devoted to child development and preschool child growth patterns. Students will develop techniques that will be applied in the preschool program. Time will be provided to do classroom observations of the preschool children, as well as peer observations of fellow teachers. The student will be responsible for supervising the entire preschool laboratory school program including the children's schedule, attendance, greeting children, enrollment, art, music, science, and indoor/outdoor play activities. Students have a portion of the preschool day set aside for "Learning Centers", a time in which they work independently with an assigned preschool child in an area that the child is currently strengthening.

Pre-School Teacher
2016 Median Wage in PA
\$28,060 per year

Industry Certification
CDA Ready Certification
First Aid/CPR

Related Occupations
Group supervisor
Head start specialist
Child care director

Program of Study approved

ALL PROGRAMS ARE AVAILABLE TO MALES AND FEMALES

TRANSPORTATION AND LOGISTICS

AUTOMOTIVE COLLISION TECHNOLOGY

The **Automotive Collision Technology** Program provides students with the training necessary to repair damaged automotive vehicles. Instruction includes the repair and replacement of defective parts to restore a vehicle to good condition. Students learn how to operate hydraulic jacks; how to use pry bars, dolly blocks, and mallets for the removal of dents; the techniques of metal finishing used to fill the damaged areas of the vehicle with body plastics; and how grind and sand until the body is smooth. Our students also learn to replace auto body parts by installing new sections, and by welding new pieces and panels. Instructions in braising, soldering, and welding practices are stressed. Students develop skills in the preparation of surfaces to be painted, matching and mixing paint, and in spraying techniques. In addition, students install trim and glass, use gauges necessary for frame straightening, and estimate the cost of the repair service.

Autobody Repair Technician

2016 Median Wage in PA
\$42,650 per year

Industry Certification

PA Inspection and Emissions

Related Occupations

Painters & customizers
Insurance adjuster

Program of Study Approved

AUTOMOTIVE TECHNOLOGY

The **Automotive Technology** program provides students with the entry-level skills and knowledge needed for a career in the automotive field. Specialized classroom and shop exercises are designed to provide instruction in the following areas: engine repair, suspension and steering, brakes, electrical/electronic systems, heating and air conditioning, engine performance, manual drive train and axles, automatic transmission/transaxle, emissions control, hybrid technology, and alternative fuels. Students are taught to use computerized technical service manuals and are also trained to participate in the Pennsylvania state safety and emissions inspection program. Qualified level 3 students are able to participate in the cooperative education program. This program allows students to gain paid work experience at participating repair facilities while attending school.

Automotive Technician

2016 Median Wage in PA
\$38,040 per year

Industry Certification

PA Inspection and Emissions

Related Occupations

Repair estimator
Safety or emissions inspector

Program of Study Approved

2017 PA In Demand Occupation List

DIESEL TECHNOLOGY

Students in the **Diesel Technology** course will receive training in all areas of diesel engine construction, operation, troubleshooting and repair, and in the maintenance, servicing, and repair of over-the-road trucks, trailers and transportation equipment. The first year of instruction will focus on diesel powered engines (this is primarily related to transportation equipment, but can also be applied to diesel powered construction equipment, high lifts, farm machinery and other diesel-powered equipment). Electrical systems, turbo chargers, engine speed governors and lubrication systems are a few examples of the engine subsystems that are covered. Students will be assisted in developing a keen attention to detail, which is necessary for success in this trade. The second and third year students study the other components and systems of the truck: transmissions, rear axles, clutches, drive lines, batteries, starters, alternators, steering, suspension, alignment and air conditioning, just to name a few. Instruction will be provided in oxyacetylene, AC/DC and MIG welding operations. Students who qualify will also be eligible to take the Pennsylvania Vehicle State Safety Inspection Program for mechanics and EPA, type 609 air conditioning certification is also offered.

Bus and Truck Mechanic

2016 Median Wage in PA
\$44,340 per year

Industry Certification

PA Inspection and Emissions
Air conditioning 609, OSHA 10

Related Occupations

Mobile heavy equipment repair
Farm equipment repair

Program of Study Approved

2017 PA In Demand Occupation List

LOGISTICS AND WAREHOUSE MANAGEMENT

Logistics & Warehouse Management students will receive training in the technical and "hands on" aspects of operating a warehouse. Instruction will center on "inventory control", which is a plan for supply needs; control of goods received; efficient accessible storage; and proper distribution of materials. Effective record keeping is stressed. Additional activities will include: materials organization; inspection of goods and accounting for warehouse merchandise; receiving and shipping practices; and the use of power equipment such as forklifts, electric pallet jacks, rollers, and conveyor belts for loading, unloading, or

ALL PROGRAMS ARE AVAILABLE TO MALES AND FEMALES

placement of packaged merchandise in warehouse or storage areas. Students will receive actual training in "live" work situations. His/her experience will be comprised of working in a warehouse area that stores in excess of \$100,000 of stock merchandise a year and will become familiar with handling merchandise that ranges in weight from one ounce to three tons. The program also offers use of data base (computer) entry system for stored materials

Shipping and Receiving Clerk

2016 Median Wage in PA
\$34,100 per year

Program of Study Approved

Industry Certification

OSHA – 10

2017 PA In Demand Occupation List

Related Occupations

Stock supervisor
Distribution clerk
Forklift operator

MANUFACTURING

ELECTRONICS TECHNOLOGY

The **Electronics Technology** program provides a foundation in the principles of basic electronics and an in depth background in the field. This program will introduce the student to computers and many of the popular operating systems. This program includes instruction beginning with the structure of the atom, units of measurement, and most of the formulas required to understand basic electronics. For all theory presented, the student will construct circuits and do experiments to help them to understand the theories learned. The student will apply learned theories to testing electronic components and diagnosing circuit problems. The student is also introduced to digital electronics where they build and analyse logic circuits, and will learn how microprocessors function and how they can be used to control electronic systems. Other activities include rebuilding a (PC) computer (identifying all major components and determining their function); installing and studying most Windows operating systems; and learning how to diagnose many of the common computer problems encountered.

Electronics Engineering Technician

2016 Median Wage in PA
\$55,190

Program of Study Approved

Industry Certification

Student Electronics Technician
OSHA 10

Related Occupations

Broadcast technician
Avionics technician
Data system technician

PRECISION MACHINE TECHNOLOGY

The **Precision Machine Technology** program prepares students for a challenging and rewarding career and provides them entry level training for the manufacturing industry. Students will begin with bench work, blueprint reading, and layout. They will then progress to learning precision measuring tools and techniques to ten thousandths of an inch (.0001"). Students will also learn machining techniques on manual vertical milling machines and manual lathes before progressing on to CNC (Computer Numerical Control) machines. An emphasis on the programming and set up are also included in the CNC training along with instruction on MasterCam and SolidWorks computer software. The course is designed to prepare students for a career as a machinist but is an excellent choice for a student with the desire to become an engineer.

Machinist

2016 Median Wage in PA
\$41,910

Program of Study Approved

Industry Certification

NIMS - multiple

2017 PA In Demand Occupation List

Related Occupations

CNC operator
Tool and die maker
Maintenance Technician

WELDING TECHNOLOGY

Welding offers training in oxyacetylene and AC/DC arc welding, semiautomatic MIG, plasma cutting, and TIG welding systems. Starting with planning and layout work, the student progresses to setting up and operating welding, brazing, and cutting equipment, oxyacetylene welding light gauge metals in all positions, and shielded metal arc welding in all positions. Emphasis is placed on blueprint reading to identify properties of metal; metal types; types and use of electrodes and welding rods; electrical principles; and welding symbols. The use of manuals and specifications charts and the understanding of welding standards established by the American Welding Society are stressed. Training will be offered in the planning, layout, forming, joining and fabrication of various shapes in light and heavy gauge metals and pipe. Students learn to use specialized hand tools and to operate shears, forming and shaping machines, drill presses, and metal cutting saws.

Welding Technician

2016 Median Wage in PA
\$42,150 per year

Program of Study Approved

Industry Certification

AWS®

2017 PA In Demand Occupation List

Related Occupations

Sheet metal worker
Boilermaker
Solderers & Brazers

ALL PROGRAMS ARE AVAILABLE TO MALES AND FEMALES