



Whether you are planning to attend college, seek employment, join the military, or pursue other options, **Cumberland Perry Area CTC programs give students an advanced career pathway by the time they graduate high school.**

Cumberland Perry Area Career & Technical Center (CPACTC) is jointly owned and operated by thirteen regional school districts. The programs are an extension of your high school electives, offering comprehensive instruction in 22 career and technical programs. Students attend CPACTC 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 CPACTC are taught over a three-year course sequence. However, students may also attend CPACTC for one or two years to support their career goals.

CPACTC has a competitive application process that includes attendance, grades, teacher recommendations, and a career readiness interview. [CLICK HERE TO APPLY](#), or go to <http://www.cpatech.org>
Clicking on the program names below will connect you to the program web page at www.cpatech.org.

2024-2025 CAREER PATHWAYS AND PROGRAMS AT CPACTC

<p><u>CONSTRUCTION AND MAINTENANCE</u></p> <p>Carpentry Electrical Construction and Maintenance Heating/Ventilation/Air Conditioning (HVAC) Horticulture/Landscaping Masonry</p>	<p><u>ARTS & TECHNOLOGY</u></p> <p>Advertising Art & Design Computer Networking Computer Programming</p>
<p><u>MANUFACTURING</u></p> <p>Advanced Manufacturing Technology Automation, Robotics & Electronics Welding Technology</p>	<p><u>HEALTH SCIENCES</u></p> <p>Dental Assisting Healthcare Pathways Emerging Health Professionals</p>
<p><u>HUMAN SERVICES AND HOSPITALITY</u></p> <p>Cosmetology Criminal Justice Culinary Arts Early Childhood Education</p>	<p><u>TRANSPORTATION & LOGISTICS</u></p> <p>Auto Collision Technology Automotive Technology Diesel Technology Logistics & Warehouse Management</p>
<p>*Cumberland Perry also offers a DIVERSIFIED OCCUPATIONS Program. This is a work-based learning program for students not enrolled in a traditional Career and Technical Education Program. Please refer to the description at the end of this booklet for more information.</p>	

The Cumberland Perry Area Career & Technical Center 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. The Cumberland Perry Area Career & Technical Center does not discriminate in any manner, including Title IX sexual harassment, in any school program or activity. The school has established Title IX personnel to promptly respond to concerns and reports of sexual harassment and assault. All investigations into reports of sexual harassment and assault will be impartial, free of bias and conflicts, and will not prejudice the facts for either side. The school strives to maintain an environment where all students, staff, and greater community feel safe. Inquiries may be directed to the CPACTC Title IX Coordinator or the Section 504 Coordinator: Administrative Director, 110 Old Willow Mill Road, Mechanicsburg, PA 17050 or 717-697-0354 or jbruhn@cpatech.org.

ADVANTAGES FOR STUDENTS ATTENDING CPACTC

Learn Real World Skills

Students learn real world skills using the same tools and equipment as industry professionals. By demonstrating their knowledge and abilities, student can earn a Pennsylvania Skills Certificate through the PA Department of Education. 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 – theory and performance. The Theory portion covers factual knowledge, technical information, understanding of academic principals and problem solving related to the technical field. The Performance portion of the NOCTI test allows students to demonstrate their skills to industry professionals who proctor the exam.

Earn College Credits

College in the High School Program

The College in the High School (CHS) program allows high school students to take college classes while enrolled at the CTC 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. Depending on the program, participating colleges and universities include HACC, Pennsylvania College of Technology (Penn College), and Harrisburg University (HU). The courses are taught by CPACTC instructors, who have been approved by the college/university to teach these courses. HACC, Penn College, and HU award college credits and a college transcript to students who complete the courses with a passing grade. These credits are often eligible to transfer to other colleges and universities that a student may attend. For College in the High School course details go to www.cpatech.org.

College Credit Articulation Agreements

EVERY PROGRAM at CPACTC has the opportunity to earn articulated credit at a participating post-secondary school. This means that college credits are awarded when students meet certain requirements and enroll at a participating school. Program specific articulation agreements can be found at www.cpatech.org.

SOAR Program

Twenty programs at CPACTC (visit www.cpatech.org) qualify under the Pennsylvania Department of Education's SOAR program, which grants college credit at various post-secondary schools in Pennsylvania when students meet the following requirements:

1. Graduate from high school with a 2.5 in the CTC program
2. Achieve a score of "Advanced" or "Competent" on the NOCTI exam
3. Successfully complete all tasks on the Program of Study task list (generally requires student to complete all three years of a program)

Earn Industry-Recognized Credentials

CPACTC students have the opportunity to earn industry credentials which employers recognize and indicate a student has achieved particular skills and knowledge. There are MANY CREDENTIALS offered at CPACTC and they are specific to a student's program and career pathway. Examples include PA State Inspection certification for Auto Tech students and Certified Nursing Assistant certification for nursing students. A complete list of credentials is listed under each program at www.cpatech.org. description. During the 2022-2023 school year, CPACTC students earned 1428 credentials!

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

**Suggested Course Sequence for
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	CPACTC Program	CPACTC Program	CPACTC Program

CONSTRUCTION AND MAINTENANCE PROGRAMS

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.

Potential Career Pathways
(w/ 2023 Median Wage)

Carpenters-\$50,815
Construction Laborers-\$46,185
Construction Managers-\$95,260*
Supervisors-Construction & Ext. Workers-\$68,310*
Construction and Building Inspectors-\$59,800
Cabinet Makers & Bench Carpenters-\$36,410
...and many more!

Industry Credentials

OSHA10-Construction
ASHI Basic First Aid
ASHI CPR & AED
JLG Aerial Work Platform
JLG Material Handler
JLG Scissor Lift
PA Builders Association

College Credits

(Visit our website to view all college articulation partners)

2023 PA Dept. of Labor In-Demand Occupation List
2023 PA Dept. of Labor High Priority Occupation
*ONET Online Bright Outlook Occupation 2023

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 industrial electrical construction projects.

Potential Career Pathways
(w/ 2023 Median Wage)

Electrical Engineers-\$98,530*
Electrical Power-Line Installers & Repairers-\$81,380
Supervisors-Construction & Ext. Workers-\$68,310*
Electricians-\$66,270
Security and Fire Alarm Installer-\$48,970*
...and many more!

Industry Credentials

OSHA 10-Construction
NJATC 1st Year Apprenticeship
IEC 1st Year Apprenticeship
PA Builder's Assoc. Skills Cert

College Credits

(Visit our website to view all college articulation partners)

2023 PA Dept. of Labor In-Demand Occupation List
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*ONET Online Bright Outlook Occupation 2023

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 these students interested an opportunity to pursue a career in plumbing.

Potential Career Pathways

(w/ 2023 Median Wage)

Energy Engineers-\$99,040
HVAC Mechanics & Installers-\$51,105
Geothermal Technicians-\$39,830
...and many more!

Industry Credentials

OSHA 10-Construction
EPA 608
Pa Builder's Association Skills Cert.

College Credits

(Offered Thru HACC)

HVAC 100-EPA Refrigeration
HVAC 101-Basic Elec. Func.
HVAC 103-Fund. Of A/C
HVAC 109-Heating Systems

(Visit our website to view all college articulation partners)

2023 PA Dept. of Labor In-Demand Occupation List
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*ONET Online Bright Outlook Occupation 2023

HORTICULTURE AND LANDSCAPING

There are several career pathways in the **Horticulture & Landscaping** 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!

Potential Career Pathways

(w/ 2023 Median Wage)

Farmworkers/Laborer (Greenhouse)-\$31,985
Landscape/groundskeeper-\$36,600
Supervisor-Landscapers and Groundskeepers-\$49,370*
Pesticide Handler, Sprayer, Applicator-\$35,840
Grounds Maintenance Workers-\$32,090*
Soil and Plant Scientist-\$63,200
...and many more!

Industry Credentials

OSHA 10-Construction
PA Certified Horticulturalist Assoc.
Pesticide Certification

College Credits

(Offered thru Pennsylvania Coll. Of Tech.)

HORT 101-Intro. Ornamental Horticulture
HORT 113-Ornamental Plants

(Visit our website to view all college articulation partners)

2023 PA Dept. of Labor In-Demand Occupation List
2023 PA Dept. of Labor High Priority Occupation
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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.

Potential Career Pathways
(w/ 2023 Median Wage)

Brickmason and Blockmason-\$55,320
Cement Masons/Concrete Finishers-\$54,910
Tile and Stone Setters-\$50,865
Helpers-Brick/Block/Stonemason-\$46,130
...and many more!

Industry Credentials

OSHA 10-Construction
Rough Terrain Forklift Class 7
PA Builder's Assoc. Skills Cert.
Mobile Elevating Work Platform
(MEWPS)

College Credits

(Visit our website to view all college articulation partners)

2023 PA Dept. of Labor In-Demand Occupation List
2023 PA Dept. of Labor High Priority Occupation
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ARTS AND TECHNOLOGY PROGRAMS

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.

Potential Career Pathways
(w/ 2023 Median Wage)

Graphic Designers-\$50,855
Desktop Publishers-\$45,390
Special Effects Artists and Animators-\$75,270
Commercial and Industrial Designer-\$68,890
...and many more!

Industry Credentials

Adobe Photoshop
Adobe InDesign
Adobe Illustration

College Credits

(Visit our website to view all college articulation partners)

2023 PA Dept. of Labor In-Demand Occupation List
2023 PA Dept. of Labor High Priority Occupation
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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.

Potential Career Pathways
(w/ 2023 Median Wage)

Information Security Analyst-\$89,795
Network/Comp. System Admin.-\$81,995
Web Developer-\$72,190*
Computer User Support Spec.-\$55,400
...and many more!

Industry Credentials

CompTiA A+
CompTiA Net+
CCNA
Linux+
Server+
Security+

College Credits

(Offered thru HACCC)

CNT 120-Network Tech.
Communications

CNT 125-Network Tech.
Communications

2023 PA Dept. of Labor In-Demand Occupation List
2023 PA Dept. of Labor High Priority Occupation
*ONET Online Bright Outlook Occupation 2023

(Visit our website to view all college articulation partners)

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.

Potential Career Pathways
(w/ 2023 Median Wage)

Software Developers-\$99,280*
Web Developer-\$72,190*
Computer Net. Supp. Spec.-\$55,400
...and many more!

Industry Credentials

PCEP Certified Entry Level Python Programmer -
Python Institute

College Credits

(Offered thru Harrisburg University)

CISC 120-Fund. Of Computing
CISC 160-Data Structures
CISC 300- Web Technologies

(Visit our website to view all college
articulation partners)

HEALTH SCIENCES PROGRAMS

DENTAL ASSISTING

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 transferal, 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.

Potential Career Pathways
(w/ 2023 Median Wage)

Dental Assistant-\$42,010
Dental Lab Technician-\$42,200
Dental Hygienist-\$71,900
...and many more!

Industry Credentials

DANB Radiation Health and Safety
DANB Infection Control
ASH CPR & AED
ASHI Basic First Aid
OSHA 10-Healthcare

College Credits

(Visit our website to view all
college articulation partners)

2023 PA Dept. of Labor In-Demand Occupation List
2023 PA Dept. of Labor High Priority Occupation
*ONET Online Bright Outlook Occupation 2023

HEALTHCARE PATHWAYS

The Healthcare Industry employs over 600,000 Pennsylvanians and is the largest private employer in Cumberland County. Employment is projected to increase 15% by 2026 and there is a tremendous need for skilled workers to fill the current and future skills gap. The Healthcare Pathways Program at Cumberland Perry Area CTC prepares students with the theoretical knowledge and tangible skills needed for a variety of different pathways within the Healthcare Industry, including employment and post-secondary education opportunities.

After a core curriculum that includes an Introduction to Healthcare, Patient Care Skills, Anatomy and Physiology, and Medical Terminology, students will have the ability to select options within the program that best fit their future career goals, including the potential attainment of stackable credentials and college credits. Elective options include Phlebotomy, EKG, CNA, Office Procedures, and Pharmacy Technician courses, Cooperative Education, and seniors may apply for the Emerging Health Professionals program.

Potential Career Pathways
(w/ 2023 Median Wage)

Nursing Assistants-\$35,020
Home Health Aide-\$27,485
Registered Nurse-\$75,995
...and many more!

Industry Credentials

Certified Nursing Assistant
Personal Care Aide
ASHI CPR & First Aid + Basic First Aid
Act 31 Mandated Reporter
OSHA 10-Healthcare
AMCA Phlebotomy Technician
NHA Pharmacy Technician

College Credits

(Visit our website to view all
college articulation partners)

2023 PA Dept. of Labor In-Demand Occupation List
2023 PA Dept. of Labor High Priority Occupation
*ONET Online Bright Outlook Occupation 2023

EMERGING HEALTH PROFESSIONALS

The Emerging Health Professionals Programs is SENIOR ONLY program that combines college level dual enrollment courses, job shadowing in various healthcare facilities, and a skills-based patient care curriculum. The program is designed for high school seniors interested in a pathway towards careers requiring post-secondary education in the healthcare industry. The Emerging Health Professionals Program is a half-day program that runs the duration of the school year in conjunction with required high school curriculum. Students spend two days a week taking college courses, two days a week in a health care setting and one day a week developing skills. Students in this program take Anatomy and Physiology I and II at our partner college for a total of eight college credits.

Applicants must have completed one year of high school Biology and Chemistry with a GPA of 3.0 (or % equivalent) as well as Pre-Calculus/Trigonometry (or equivalent) with a GPA of a 3.0 or intends to be enrolled senior year. Students must provide their own transportation and are responsible for college dual-enrollment costs. This program has a separate application, which may be found at www.cpatech.org → Programs → Health Sciences → Emerging Health Professionals.

Potential Career Pathways
(w/ 2023 Median Wage)

Family and General Practitioners-
\$210,220*
Physician Assistants-\$102,775
Nurse Practitioners-\$101,950*
Physical Therapists-\$88,450

Program offers various other health career pathways as well.

Industry Credentials

Personal Care Aide
ASHI CPR & First Aid + Basic First Aid
Act 31 Mandated Reporter
OSHA 10-Healthcare

College Credits

(Offered thru Messiah College)

BIO185/185L-Anatomy and Phys. I
BIO186/186I-Anatomy and Phys. II
(Each Course is 4 Credits)
MTR 100-Medical Terminology

(Visit our website to view all college articulation partners)

2023 PA Dept. of Labor In-Demand Occupation List
2023 PA Dept. of Labor High Priority Occupation
*ONET Online Bright Outlook Occupation 2023

HUMAN SERVICES AND HOSPITALITY PROGRAMS

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 Area CTC.

Potential Career Pathways
(w/ 2023 Median Wage)

Chefs/Head Cooks-\$57,040
Food Service Manager-\$55,320
Supervisor-Food Prep. & Servers-\$37,180
Cooks, Ins. & Café-\$31,840
Cooks-Restaurant-\$29,330
...and many more!

Industry Credentials

Servsafe Manager
Servsafe Allergens
ProStart I & II
ACF Certified Fundamentals Cook

College Credits

(Visit our website to view all college articulation partners)

2023 PA Dept. of Labor In-Demand Occupation List
2023 PA Dept. of Labor High Priority Occupation
*ONET Online Bright Outlook Occupation 2023

COSMETOLOGY

The **Cosmetology** program at CPACTC gives students a great head start to a lucrative career. Our curriculum is rigid, however, by the time student's graduate they will have skills desirable to employers in the Cosmetology industry. Students in the program learn all aspects of hair care, 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.

Potential Career Pathways
(w/ 2023 Median Wage)

Spa Manager-\$110,630
Skincare Specialist-\$34,090*
Cosmetologist-\$30,580
Manicurist and Pedicurist-\$25,705
...and many more!

Industry Certifications

PA State Board of Cosmetology License
Barbicide

College Credits

(Visit our website to view all college articulation partners)

2023 PA Dept. of Labor In-Demand Occupation List
2023 PA Dept. of Labor High Priority Occupation
*ONET Online Bright Outlook Occupation 2023

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 PA Crime Code and Pennsylvania Vehicle Code, first aid, and firearms training. Special emphasis is given towards 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, Criminal Justice or Police Science.

Potential Career Pathways
(w/ 2023 Median Wage)

Supervisor-Police & Detectives-\$91,090*
 Detectives and Criminal Investigators-\$83,170
 Emergency Management Directors-\$74,590*
 Police/Sheriff Patrol Officer-\$68,975
 Correctional Officers/Jailers-\$54,580
 ...and many more!

Industry Credentials

NIMS IS 100 SERIES
 NIMS IS 200 SERIES
 NIMS IS 700 SERIES
 NIMS IS 800 SERIES
 ASHI CPR/AED Pro
 ASHI Basic First Aid

College Credits

(Visit our website to view all college articulation partners)

2023 PA Dept. of Labor In-Demand Occupation List
 2023 PA Dept. of Labor High Priority Occupation
 *ONET Online Bright Outlook Occupation 2023

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 and 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 while teaching. 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.

Potential Career Pathways
(w/ 2023 Median Wage)

Elementary School Teacher-\$64,640
 Childcare Admin.-Preschool & Daycare-\$48,210
 Preschool Teachers-\$31,370
 Childcare Workers-\$25,820
 ...and many more!

Industry Credentials

Health and Safety Basics/Better Kid Care
 Act 31 Mandatory Reporter Training
 ASHI CPR & AED Pro
 Child Development Associate (Ready)

College Credits

(Offered thru Shippensburg University)

ECH 204-Child Development
 ECH 205-Positive Behavior
 ECH 206-Early Childhood

(Visit our website to view all college articulation partners)

2023 PA Dept. of Labor In-Demand Occupation List
 2023 PA Dept. of Labor High Priority Occupation
 *ONET Online Bright Outlook Occupation 2023

TRANSPORTATION AND LOGISTICS PROGRAMS

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. Various techniques of metal finishing used to fill the damaged areas of vehicles with body plastics and how to grind and sand until the body is smooth are also covered. Our students also learn to replace auto body parts by installing new sections, and by welding new pieces and panels. Instruction in braising, soldering, and welding practices are stressed. Students develop skills in the preparation of surfaces to be painted, matching and mixing paint, and various spraying techniques. In addition, students install trim and glass, use gauges necessary for frame straightening, and estimate the cost of the repair service.

Potential Career Pathways
(w/ 2023 Median Wage)

Automotive Body & Related Repairers-\$46,200
 Insurance Appraiser-\$64,950
 Claims Adjuster, Examiner, Investigator-\$66,790
 ...and many more!

Industry Credentials

I-CAR (various)
 PA Emissions Inspection
 PA Safety Inspection
 SP/2 Automotive
 EPA 609-A/C
 OSHA 10-Transportation

College Credits

(Offered thru Penn. Coll. Of Tech)

ABC 100-Intro. to Non-Structural Repair
 ABC 104-Intro.to Non-Structural Repair Apps.

(Visit our website to view all college articulation partners)

2023 PA Dept. of Labor In-Demand Occupation List
 2023 PA Dept. of Labor High Priority Occupation
 *ONET Online Bright Outlook Occupation 2023

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 Department of Transportation (PENNDOT) safety and emissions inspection program and test. 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.

Potential Career Pathways (w/ 2023 Median Wage)

Automotive Service Technicians-\$43,805
Automotive Engineers-\$88,430
Automotive Engineering Technicians-\$56,980
Auto Parts Salesperson-\$31,710
...and many more!

Industry Credentials

I-CAR (various)
PA Emission Inspection
PA Safety Inspection
EPA 609-A/C
OSHA 10-Transportation

College Credits

(Offered thru Penn. Coll. Of Tech)

AMT 109-Auto Elec Fund
AMT 112-Brake Systems
AMT 113-Steering & Suspension
AMT 126-Engine Elec Systems

(Visit our website to view all college articulation partners)

2023 PA Dept. of Labor In-Demand Occupation List
2023 PA Dept. of Labor High Priority Occupation
*ONET Online Bright Outlook Occupation 2023

DIESEL TECHNOLOGY

Students in the **Diesel Technology** course will receive training in all areas of diesel engine construction, operation, troubleshooting and repair. Students also received instruction in maintenance, servicing, and repair of over-the-road trucks, trailers and transportation equipment. The first year of instruction will focus on diesel powered engines that are 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 such as 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 State Department of Transportation (PENNDOT) safety and emissions inspection program and test for mechanics. They will also be eligible to gain the EPA, type 609 air conditioning certification.

Potential Career Pathways (w/ 2023 Median Wage)

Transportation Vehicle, Equipment, Sys. Inspector-\$75,820
Bus/Truck Mechanic & Diesel Engine Spec.-\$49,925
Automotive Service Technicians-\$42,010
...and many more!

Industry Credentials

Cat 1-7 Safety Inspector
PA Emissions
EPA 609-A/C
OSHA 10-General Industry

College Credits

(Visit our website to view all college articulation partners)

2023 PA Dept. of Labor In-Demand Occupation List
2023 PA Dept. of Labor High Priority Occupation
*ONET Online Bright Outlook Occupation 2023

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 also a learned skill. 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 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 the use of data base (computer) entry system for stored materials

Potential Career Pathways
(w/ 2023 Median Wage)

Material Handlers-\$30,290
Forklift Operators-\$36,800
Stock Clerks and Order Fillers-\$32,465
Shipping, Receiving, Inventory Clerk-\$39,040
Transportation, Storage and Distrib. Mgr-\$103,260
Supply Chain Manager-\$94,560
Logistics Analyst-\$74,750
...and many more!

Industry Credentials

NSC Forklift Operator
OSHA 10-General Industry

College Credits

(Visit our website to view all college articulation partners)

2023 PA Dept. of Labor In-Demand Occupation List
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MANUFACTURING PROGRAMS

AUTOMATION, ROBOTICS & ELECTRONICS

Automation, Robotics & Electronics (also commonly called “Electromechanical Technology” or “Mechatronics”) is a three-year program that prepares students for employment and for continued education. Students will learn to design, install, troubleshoot, and repair today’s modern automation, robotic, and industrial equipment. Instructional topics include: industrial motor controls, robotics and electronics, programmable logic controls, mechanical power transmission systems, fluid power systems/hydraulics/pneumatics, blueprints and schematics, electricity and electrical systems, and A/C and D/C Circuitry.

Potential Career Pathways
(w/ 2023 Median Wage)

Industrial Machinery Mechanics-\$54,730
Electrical and Electronic Engineering Tech.-
\$65,260
Robotics Technician-\$58,350
Industrial Engineering Tech.-\$56,550
Electromechanical Technician-\$46,960
...and many more!

Industry Credentials

OSHA 10-Manufacturing

College Credits

(Visit our website to view all college articulation partners)

ADVANCED MANUFACTURING TECHNOLOGY

The **Advanced Manufacturing Technology** program prepares students for a challenging and rewarding career in the manufacturing industry. In this program, students learn to use tools to shape the parts and components used in virtually every industry in the world. 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 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.

Potential Career Pathways
(w/ 2023 Median Wage)

CNC Machine Tool Programmers-\$56,520
Machinists-\$47,030
CNC Machine Tool Operators-\$45,190
...and many more!

Industry Credentials

National Institute of Metalworking Skills
(NIMS) – Various (11)
OSHA 10-Manufacturing

College Credits
(Offered thru HACC)

MDES 207-Mach Shop Theory
IA 205-Numerical Control CNC

(Visit our website to view all college articulation partners)

2023 PA Dept. of Labor In-Demand Occupation List
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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.

Potential Career Pathways (w/ 2023 Median Wage)

Welders, Cutters, Solderers, & Brazers-\$47,140
Structural Metal Fabricators & Fitters-\$40,390
...and many more!

Industry Credentials

AWS Shielded Metal Arc Welding (SMAW)-3G
AWS Shielded Metal Arc Welding (SMAW)-4G
AWS Gas Metal Arc Welding (GMAW)-3G
AWS Gas Tungsten Arc Welding (GTAW)-3G
AWS Fluxcore Arc Welding D1.1 A100
OSHA 10-Manufacturing

College Credits (Offered thru HACC)

WELD 102-Oxy Fuel W & C
WELD 103-Shielded Metal Arc I
WELD 120-Gas Metal Arc I

(Visit our website to view all college articulation partners)

2023 PA Dept. of Labor In-Demand Occupation List
2023 PA Dept. of Labor High Priority Occupation

DIVERSIFIED OCCUPATIONS

The Diversified Occupation (DO) Program provides training in a career and technical field that may not be offered at CPACTC or as an alternative form of education to meet a student's unique needs.

This program combines classroom instructions in employability skills with on-the-job training through an employer that will align with the career interest of high school students. Career competencies are developed by the employer under the direction of a designated supervisor.

Students in this program attend Cumberland Perry 1 half-day per week learning employability skills and spend 4 half-days per week working at least 15 hours in a paid, supervised work experience. More information can be found at <http://www.cpatech.org>