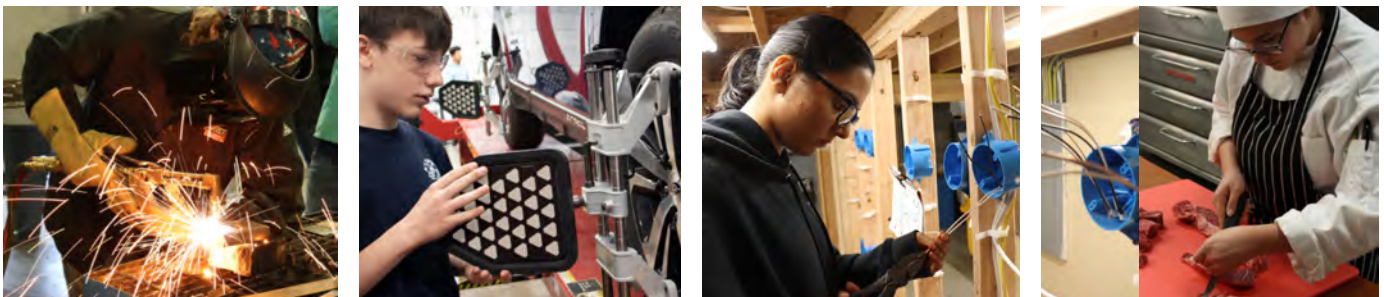
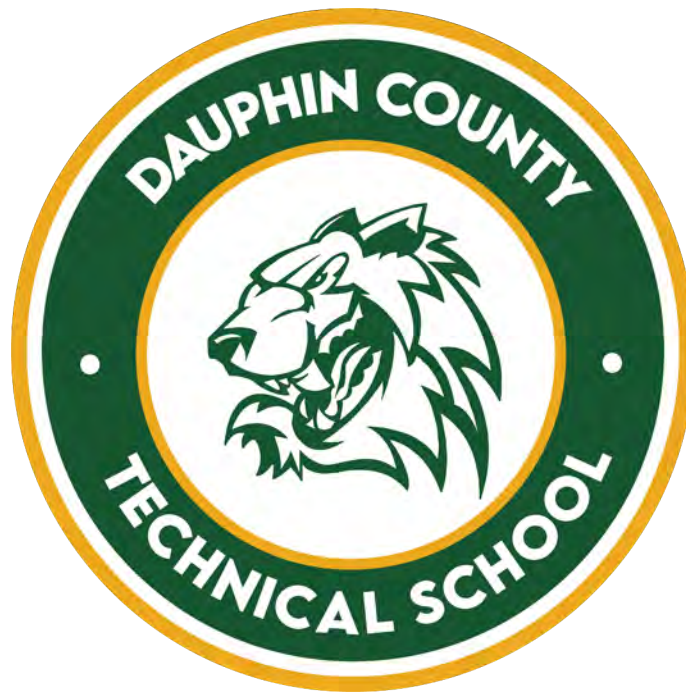


2023 - 2024

DAUPHIN COUNTY TECHNICAL SCHOOL

PROGRAM GUIDE







WELCOME TO
DAUPHIN COUNTY
TECHNICAL SCHOOL

WELCOME TO DAUPHIN COUNTY TECHNICAL SCHOOL

We offer rigorous academic course work along with programs of study trained professionals using state-of-the-art equipment found in top educational institutions, business, and industry. We provide the means for you to successfully attain your career and life goals through our established academically challenging career pathways that include: Automotive Technology, Building Construction, Carpentry, Collision Repair, Commercial Art, Computer Networking Technology, Cosmetology, Culinary Arts, Dental Assistant, Diesel Technology, Electrical Construction & Maintenance, Electromechanical Engineering, Emergency & Protective Services, Engineering & Drafting Design, Engineering & Machining Design, Exercise & Sport Science, HVAC (Heating Ventilation Air Conditioning), Landscaping & Greenhouse Production, Masonry, Medical Assistant, Nursing Foundations, Small Engine Equipment Technology, Veterinary Assistant, Web Development & Design, and Welding Technology.

The need for an internationally competitive and productive workforce with broad skills has never been greater. At Dauphin County Technical School, you will develop the skills that are required for successful and gainful employment. Academically challenging programs will allow for successful application and admission to top colleges, universities, and technical training institutes. We proudly nurture, encourage, motivate, and challenge all of our students.

The DCTS family of faculty and staff challenge you to make the most of the wealth of available educational and business/industry opportunities we offer. We encourage all parents and students to talk with members of our staff to learn about the many advantages available at DCTS!



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FIND YOUR DIRECTION

ABOUT US

Located in the suburbs of Harrisburg, Pennsylvania, is Dauphin County Technical School – a comprehensive Career & Technical high school serving Central Dauphin, Derry Township, Halifax Area, Harrisburg, Lower Dauphin, Middletown Area, and Susquehanna Township School Districts.

Students in 9th through 12th grades outside of these member school districts, still residing in Dauphin County, are eligible to apply as well.

We are a school of choice designed for students who are seeking to enhance their educational goals through relevant career and technical education programs, directly related to the real world of business and industry. We have over 400 business and industry partners throughout our Advisory Committees that oversee, review, and update our programs of study regularly to ensure that we are offering the latest in state-of-the-art facilities for high-skilled, high-demand career fields.

Our Career and Technical Education programs are organized into four career pathways and currently offer 25 state-approved programs of study.



OUR MISSION

At Dauphin County Technical School, we believe in educating the whole student by focusing on both the student's academic and career preparation.

Our mission is to prepare students to enter post-secondary education and industry with the attitude, skills, and knowledge necessary to be successful in a constantly changing and competitive world.

Through the utilization of a curriculum primarily grounded in academic and industry-based standards, DCTS will provide all students with the skills, and knowledge necessary to actively enter a dynamic and competitive high skills workforce, and/or a post-secondary educational career.

Discover all that Dauphin County Technical School has to offer by following us on social media, or checking out our website at www.dcts.org (or scan the QR code)



FIND YOUR DIRECTION

ACADEMIC COURSES

Dauphin County Technical School's academic course offerings prepare students for post-secondary education and/or entry into the workforce.

Through these curricular opportunities, our goal is to provide an educational program in which students are challenged and encouraged to reach their fullest potential.

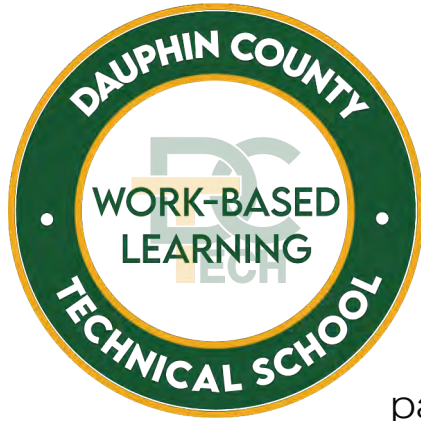
For more information and to see the full list of our Academic programs available, please visit our website at www.dcts.org, select Academics, and click on the Course Catalog image. *(shown here for reference)*



DUAL ENROLLMENT

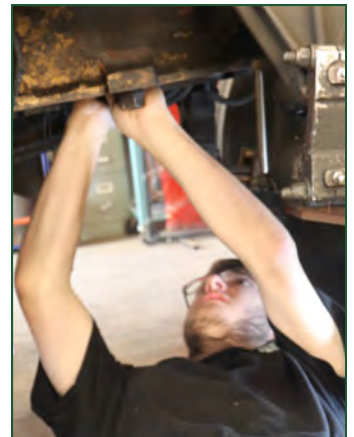
DCTS continues to seek out opportunities for students to maximize their high school experience. Eligible students have the opportunity to earn college credits and fulfill high school requirements at the same time through dual enrollment. For more information on earning college credit in the high school, please reach out to our Guidance Department.

WORK-BASED LEARNING



Dauphin County Technical School has established school to career opportunities for all eligible students, through our Cooperative Education (Co-op) program. Co-op is a unique plan of education designed to integrate classroom learning with supervised, paid work experience. Learning by doing is the key to helping students relate schoolwork to real world employment. Shadowing, Mentoring, Internships, Co-op Work experience, Company visitations and guest speakers are all designed to provide hands-on experience in a specific career.

Work-based learning programs have proven to help students develop a positive work attitude, increase self-awareness and responsibility, refine career goals and enhance problem-solving skills.



FIND YOUR DIRECTION



The mission of **SOAR (Students Occupationally and Academically Ready)** is to prepare students for college and careers in a diverse, high-performing workforce. SOAR is the career and technical Program of Study (POS) educational plan that articulates the secondary career and technical programs to a post-secondary degree, diploma, or certificate program. SOAR programs prepare today's students for High Priority Occupations (HPO) which include career categories that are in high demand by employers, have higher skill needs, and are most likely to provide family-sustaining wages.

Upon the successful completion of the required academics and technical competencies earned at DCTS, students may qualify for several free credits in their POS major at participating colleges across Pennsylvania.

SOAR programs offer qualifying students advanced credit(s) with partnering post-secondary institutions in aligned CTE programs. To learn more about advanced college credit opportunities articulated with post-secondary institutions, go to the equivalency search results at www.CollegeTransfer.net.



COLLEGE & UNIVERSITY CONNECTIONS

LOCAL ARTICULATION AGREEMENTS:

In addition to SOAR credit pathways, Dauphin County Technical School is proud to offer a variety of post-secondary connections available to students through Local Articulation Agreement partnerships. These agreements provide college advanced credits and are in place with many post-secondary institutions including, but not limited to, Central Penn College, Culinary Institute of America, Delaware Valley University, HACC, Harrisburg University of Science & Technology, Pennsylvania College of Technology, Pittsburgh Technology Center, and Thaddeus Stevens College of Technology, with more partnerships formed year-round. See each program page for specific partnerships available or check out our full list of post-secondary connections by visiting www.dcts.org/articulation-agreements.

Articulation Agreement Benefits:

- » Save money on college tuition
- » Save time by shortening college attendance
- » Get on the right career pathway
- » Receive a consistent, seamless education



DID YOU KNOW?

DCTS students have the potential to:

- » Earn industry credentials
- » Participate in a capstone course internship
- » Co-Op opportunities with industry partners
- » Earn Academic Advance Placement credits
- » Participate in sending school athletics
- » Join student organizations & competitions

CONSIDER THE POSSIBLE CAREER CHOICES:

Maybe you know exactly what type of career you want to have in your life, or maybe you are not sure about the options that are available.

Either way, we can help! If you already know what career you are interested in, that's great! You can find out more about your chosen career by turning to that page in this guide. Programs are listed alphabetically for your convenience.

If you're not sure which program you're interested in, check out each page to learn more and answer questions that might match your talents and interests!

WHAT IS A PROGRAM OF STUDY?

A Program of Study (POS) is designed to provide students with the recommended academic and career technical education courses needed for employment in Pennsylvania High Priority Occupations.

These specialized courses help to:

- » Prepare high school graduates for post-secondary education, apprenticeships, or entry into the workforce in their related career field
- » Identify relevant secondary academic and technical courses required for post-secondary enrollment and/or entry into the workforce
- » Align with post-secondary options and offer college credit for specific high school academic and technical courses
- » Focus on preparing students to meet academic and technical program benchmarks
- » Prepare students to enter high priority occupations that support family-sustaining wages
- » Focus on preparing students with industry certifications and higher level STEM (Science, Technology, Engineering, and Math) skills



FIND YOUR DIRECTION

CAREER PATHWAYS

The School of **Construction & Manufacturing** prepares students for careers in designing, planning, managing, building and maintaining the built environment. People employed in these fields work on new structures, restorations, additions, alterations and repairs.

These careers literally build our future!



The School of **Health Science & Public Services** aligns students to careers that promote health, wellness, and diagnosis as well as treating injuries and diseases. Programs within the Public Services pathway prepare students for careers in providing public safety, protective services, and homeland security.

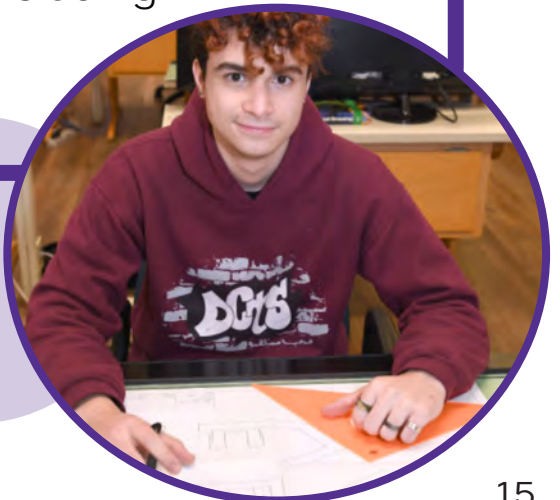


At Dauphin County Tech, our career and technical Programs of Studies are categorized into four main career pathways, which we refer to as 'schools'.

Careers in the School of **Transportation** include the maintenance, repair, and servicing of vehicles and transportation facilities, as well as the refueling of mobile equipment. All transportation relies on equipment which must function as designed. Students in this pathway learn to keep equipment and machinery running while looking for more efficient, safe, and cost-effective ways to do so.



Our School of **Visual Arts & Information Technology** focuses on the interaction between computer, communications, and design. Programs in this area can prepare students for careers that help to communicate a variety of information, including data, graphics and video.



FIND YOUR DIRECTION

DCTS PROGRAMS OF STUDY

AUTOMOTIVE TECHNOLOGY

BUILDING CONSTRUCTION TECHNOLOGY

CARPENTRY

COLLISION REPAIR TECHNOLOGY

COMMERCIAL ART

COMPUTER NETWORKING TECHNOLOGY

COSMETOLOGY

CULINARY ARTS

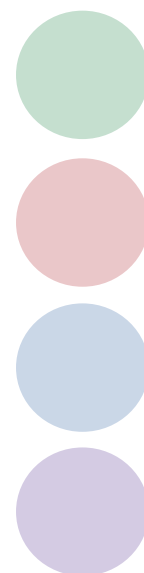
DENTAL ASSISTANT

DIESEL TECHNOLOGY

ELECTRICAL CONSTRUCTION & MAINTENANCE

ELECTROMECHANICAL ENGINEERING TECHNOLOGY

EMERGENCY & PROTECTIVE SERVICES



ENGINEERING & DRAFTING DESIGN

ENGINEERING & MACHINING DESIGN

EXERCISE & SPORT SCIENCE

HEATING, VENTILATION & AIR CONDITIONING

LANDSCAPING & GREENHOUSE PRODUCTION

MASONRY

MEDICAL ASSISTANT

NURSING FOUNDATIONS

SMALL ENGINE EQUIPMENT TECHNOLOGY

VETERINARY ASSISTANT

WEB DEVELOPMENT & DESIGN

WELDING TECHNOLOGY



AUTOMOTIVE TECHNOLOGY

CIP CODE: 47.0604

dcts.org/automotive-technology/

PROGRAM OVERVIEW:

The Automotive Technology program is a recognized NATEF/ASE accredited instructional program that emphasizes skills to diagnose, service and maintain all types of automobiles. Students in this program are also eligible



to receive 12 college credits through our Penn College Dual Enrollment partnership. After graduation, and following one year of employment in the field, students are eligible to take the automotive NATEF/ASE exam. Successful graduates of this program are qualified to enter the automotive field as entry-level service technicians in new car dealerships or related automotive businesses. Students

starting the program are introduced to topics such as brakes, steering and suspension, electrical, and engine performance. To be successful, students should be ready to work with constantly changing technology. If students believe a smooth-running engine is a beautiful sound, and want to keep cars running that way while using the most up-to-date tools and equipment, our Automotive Technology program is the right place!



POTENTIAL INDUSTRY CERTIFICATIONS:

- » OSHA 10-Hour General Industry (Automotive)
- » S/P2 Automotive Service Safety
- » S/P2 Automotive Pollution Prevention
- » S/P2 Automotive Lift Safety
- » ASE Student Certification
- » Snap-On NC3 Certifications in Electrical Multimeter; Zeus Scan Tool Levels 1 & 2; Shopkey Levels 1 & 2; Starting and Charging
- » 609 Refrigerant Handling
- » Safety Inspection (CAT1)
- » Emissions Inspection
- » Ford ACE Training
- » Subaru U Training
- » Honda PACE Training



INTERESTED IN THIS CAREER? THINGS TO CONSIDER

- » Do you have a general interest in cars?
- » Do you feel comfortable working with tools?
- » Do you have a mechanical aptitude?
- » Do you enjoy working with mechanical, electrical, and computer systems?



BUILDING CONSTRUCTION TECHNOLOGY

CIP CODE: 46.9999

dcts.org/building-construction-technology/

PROGRAM OVERVIEW:

This program teaches skills in construction along with the knowledge necessary to build, repair, or maintain a house. Practical experience and classroom training prepares students enrolled in this program for



employment in general construction, remodeling, or property maintenance. Students are taught carpentry, masonry, electrical, plumbing, roofing, and interior and exterior finishes. Students will earn their OSHA-10 Certification and be taught safety throughout the course. Students learn in detail about power tools, hand tools, footers, foundations, flooring, wall, and roof-framing, rough-in

of switch and receptacle circuits, plumbing with PVC, copper, PEX, installation of sinks, showers, bathtubs and toilets, drywall installation and finish, installation of vinyl siding, and shingled roofs. Student completers are expected to take the National Occupational Competency Testing Institute (NOCTI) exam at the end of their high school career.

POTENTIAL INDUSTRY CERTIFICATIONS:

- » CareerSafe: Employability: Interview Skills
- » Forklift Certification
- » Ladder Safety Certification
- » OSHA 10-Hour Construction Industry



INTERESTED IN THIS CAREER?

THINGS TO CONSIDER

- » Do you like working outside?
- » Do you like the ability to be creative and to problem solve?
- » Do you have the desire to work in the world of construction; building new homes, remodeling existing homes, kitchens, bathrooms, additions, etc.?



CARPENTRY

CIP CODE: 46.0201

dcts.org/carpentry/

PROGRAM OVERVIEW:

This program provides students the opportunity to learn building layout, framing, roofing, window and door installation, and finish trim work. On-site projects include the use of hand and power tools to do building layout,



flooring, framing, and wall construction, roofing, and application of exterior and interior finishes. Upon graduation, students can continue their education through local union apprenticeships, a variety of partnering college programs, or the Association of Builders and Contractors. Through this project-based program, students learn about hand and power tool safety, measuring, layout,

basic blueprint reading, basic wood joints, material sizing, basic trim methods, advanced framing methods, interior trim package installation, and more. Advancement in the program means students will be eligible to increase their knowledge on roof framing, building layout, advanced estimation, and deck construction.

POTENTIAL INDUSTRY CERTIFICATIONS:

- » CareerSafe: Employability: Interview Skills
- » OSHA 10-Hour Construction Industry



INTERESTED IN THIS CAREER?

THINGS TO CONSIDER

- » Do you feel comfortable working with hand and power tools?
- » Do you like building things?
- » Do you pay close attention to details?
- » Do you like basic math and are you precise at measuring?



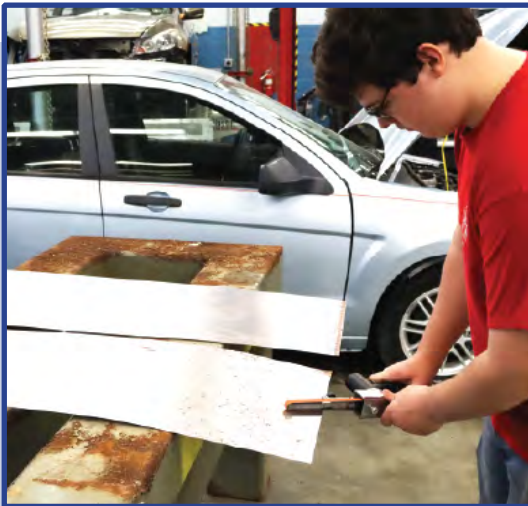
COLLISION REPAIR TECHNOLOGY

CIP CODE: 47.0603

dcts.org/collision-repair-technology/

PROGRAM OVERVIEW:

The Collision Repair Technology course is based on an occupational analysis of the auto body field and reflects the entry-level job



requirements of Inter-Industry Conference on Auto Collision Repair (I-CAR) and the Automotive Collision Technology standards. The Collision Repair Technology program is designed to give each student the knowledge, understanding and training needed to secure a position in the collision repair field and/or enter a post-secondary institution. Using state-of-the-art equipment, students

are taught metal arc welding/cutting, metal repair, corrosion protection, masking, refinishing, structural analysis, and detailing. They are also taught safety compliance, proper use of tools, and equipment identification. Additionally, students learn details of electrical systems and suspensions, and continuously review safety resources, refinishing, and basic welding.

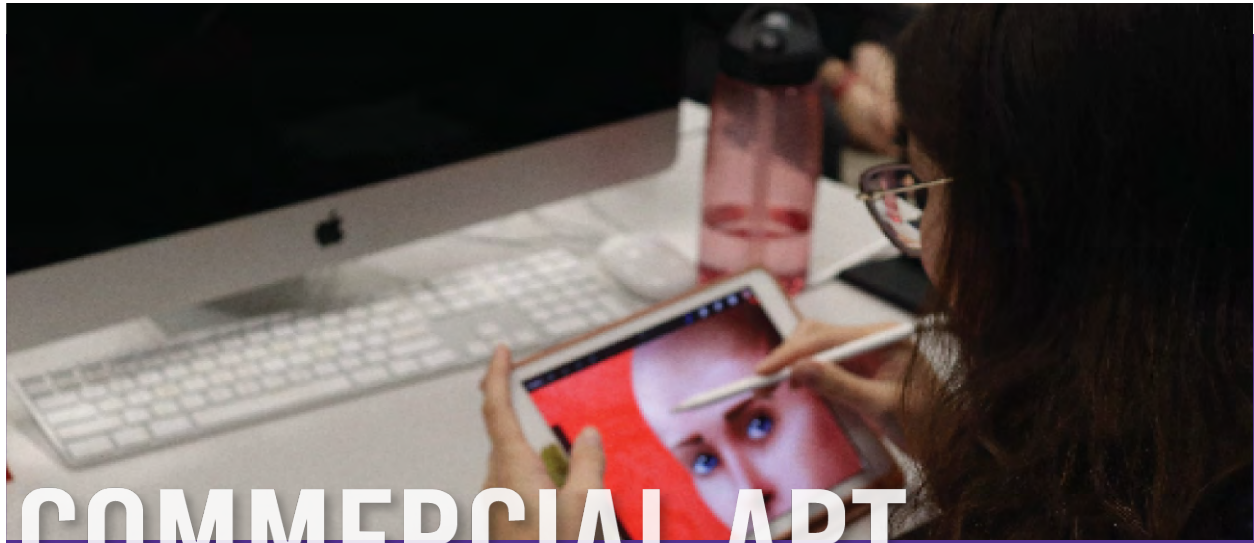
POTENTIAL INDUSTRY CERTIFICATIONS:

- » S/P2 Safety & Pollution Prevention
- » S/P2 Collision Repair & Refinish Safety
- » I-CAR (26 different certifications available)
- » Refrigerant Recycling and Recovery
- » CareerSafe: Employability Interviewing Skills
- » OSHA 10-Hour General Industry (Automotive)



INTERESTED IN THIS CAREER? THINGS TO CONSIDER

- » Are you interested in paint and body finishes?
- » Do you pay close attention to detail?
- » Do you have a creative and/or artistic side?



COMMERCIAL ART

CIP CODE: 50.0402

dcts.org/commercial-art/

PROGRAM OVERVIEW:

This program introduces students to visual design, graphic design, and the interactive design industry. In a world where commercial art has never been more relevant, DCTS Commercial Art offers students a community in which



to develop the conceptual foundation and skills needed for admission to a post-secondary institution to refine their skills.

Students learn the fundamentals as they finish each project and work to build a professional portfolio. They are introduced to the Adobe Creative Cloud and explore media messages for print and digital.

Students explore graphic design, advertising, print design, illustration, digital photography, and video production. Students gain an exceptional amount of knowledge and understanding of creative software such as Photoshop, Illustrator, InDesign and Premiere Pro.

POTENTIAL INDUSTRY CERTIFICATIONS:

- » Adobe Certified Associate in Graphic Design & Illustration using Adobe Illustrator
- » Adobe Certified Associate in Print & Digital Media Publication using Adobe InDesign
- » Adobe Certified Associate in Visual Design using Photoshop
- » Adobe Certified Associate in Digital Video using Adobe Premiere Pro
- » Employability: Interviewing Skills
- » OSHA-10



INTERESTED IN THIS CAREER? THINGS TO CONSIDER

- » Do you have a strong interest in art?
- » Do you enjoy being creative?
- » Are you interested in the advertising or marketing career fields?
- » Do you enjoy exploring different types of artistic medias?

COMPUTER NETWORKING TECHNOLOGY

CIP CODE: 11.0901

dcts.org/computer-networking-technology/

PROGRAM OVERVIEW:

The Computer Networking program centers on networks and the computer devices that comprise a typical network. This includes building, maintaining, and supporting computer network systems. Completion of



this program provides the foundation for beginning a career in Information Technology (IT). With a solid understanding of network fundamentals, a variety of careers related to information technology are possible. These careers include desktop support, network engineering and administration, computer forensics, and IT security.

Industry certifications align with

CompTIA including A+, Network+ and Security+. Students also have the opportunity to pursue the Cisco Certified Networking Associate (CCNA) certification through the Cisco Networking Academy.

POTENTIAL INDUSTRY CERTIFICATIONS:

- » CCNA
- » Cisco Certified Network Support Technician
- » CompTIA IT Fundamentals
- » CompTIA Network+
- » CompTIA A+
- » CompTIA Security+
- » TestOut IT Fundamentals Pro
- » TestOut Client Pro
- » TestOut PC Pro
- » TestOut Network Pro
- » TestOut Security Pro
- » Employability: Interviewing Skills
- » OSHA-10



INTERESTED IN THIS CAREER? THINGS TO CONSIDER

- » Do you have a strong interest in technology?
- » Are you logical and curious about computers?
- » Are you interested in developing, installing, and maintaining computer networks?
- » Are you organized and attentive to details?



COSMETOLOGY

CIP CODE: 12.0401

dcts.org/cosmetology/

PROGRAM OVERVIEW:

The Cosmetology program focuses on the fundamentals of the profession. This enables students to confidently begin working with hair, skin and nails

early in their training. Technical skill development blends with applied sciences to guide them toward a successful career as a salon professional.

During this three-year, 1250-hour training program, students learn hair sculpture, color application, chemical texture, and skin and nail procedures.

Students study a wide variety of scientific applications, such as the chemistry of cosmetics, biology, human

anatomy, and physiology. Upon completion, graduates are fully prepared to take the Pennsylvania State Board of Cosmetology examination. Students learn the history and career opportunities of Cosmetology.



POTENTIAL INDUSTRY CERTIFICATIONS:

- » Cosmetology License
- » Barbicide Certification
- » CareerSafe: Employability Interviewing Skills
- » OSHA 10-Hour General Industry (Cosmetology)



INTERESTED IN THIS CAREER? THINGS TO CONSIDER

- » Do you enjoy math and science?
- » Do you enjoy making people feel better about themselves?
- » Are you creative?
- » Are you interested in the fundamentals of cosmetology?



CULINARY ARTS

CIP CODE: 12.0508

dcts.org/culinary-arts/

PROGRAM OVERVIEW:

The Culinary Arts program prepares students for careers in today's foodservice and hospitality industries. Successful graduates are ready for high-demand positions as prep cooks, line cooks, pastry cooks, cake decorators, or fine-dining servers, and can aspire to positions as chefs, pastry chefs, and restaurant managers. Curriculum



comprises safety and sanitation; knife skills; measurement; salads; sandwiches; breakfast foods; stocks and soups; fabrication and cooking of meat, poultry and seafood; breads, cakes and pastries; and much more. Advanced skills include fine-dining restaurant service, line cooking, menu and recipe development, foodservice financial math, and nutrition. Students also have the opportunity to participate in work-based learning experiences such as internships, and co-op at local restaurants.

Senior students operate DC Taste, our full-service, fine-dining restaurant that is open to the public for lunch on selected days. Seniors rotate through all stations and positions, including grill, sauté, garde manger, baking, pastry, host, server, barista, and cashier. Culinary Arts graduates are ready for immediate employment in restaurants, catering companies, institutional kitchens, or retail foodservice venues. Many choose to further their education through post-secondary training in culinary arts, baking and pastry arts, business, or hospitality management.

POTENTIAL INDUSTRY CERTIFICATIONS:

- » National Restaurant Association ServSafe Food Handler
- » National Restaurant Association ServSafe Allergens
- » National Restaurant Association ServSafe Manager
- » National Restaurant Association ProStart Program
- » American Culinary Federation: Certified Fundamentals Cook
- » CareerSafe: Employability Interviewing Skills
- » OSHA-10 hour (Culinary Arts)



INTERESTED IN THIS CAREER? THINGS TO CONSIDER

- » Do you have an adventurous palate? Are you excited about experiencing new flavors?
- » Can you work with shape, color, and texture to design attractive plate presentations & pastry creations?
- » Will you thrive in a fast-paced, detail-oriented, teamwork-driven environment? Do you enjoy working with the public?



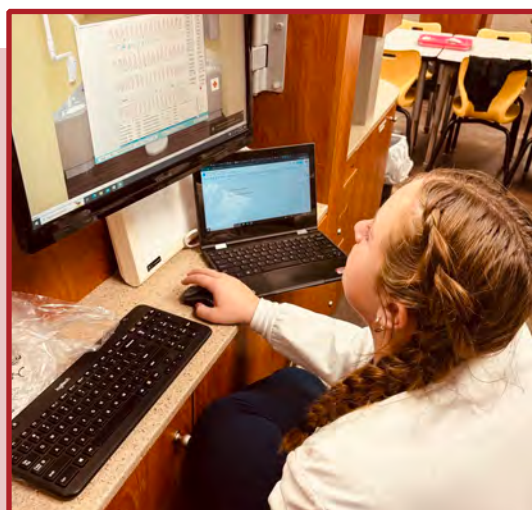
DENTAL ASSISTANT

CIP CODE: 51.0601

dcts.org/dental-assistant/

PROGRAM OVERVIEW:

Students who enroll in the Dental Occupations Program learn a variety of skills that will enable them to become a dental assistant, dental laboratory technician, and/or pursue a career as an Expanded Function Dental



Assistant (EFDA), Registered Dental Hygienist or dentist. There is a focus on patient-centered care in support of improving oral health as a key to personal health and well-being. The major areas of study in this program include: dental radiology, oral pathology, chair-side dental assisting, anatomy and physiology, dental materials, sterilization, and dental office business procedures. Students will

be introduced to Dental Anatomy, Dental Charting Systems, Infection Control Procedures, Dental Instruments and Procedures for General Dentistry, Chair-side Assisting Techniques, and Radiology Basics. As students continue in this program, they receive more lectures on advanced dental anatomy, dental software programs, dental specialties, prep for certified dental assisting and radiology Board Exams.

POTENTIAL INDUSTRY CERTIFICATIONS:

- » CPR/AED
- » Prepare to obtain State Board Radiology License
- » Prepare to obtain Infection Control Certification
- » Prepare to obtain Certified Dental Assistant (CDA) Dental Assisting National Board (DANB) certification
- » CareerSafe: Employability Interviewing Skills
- » OSHA 10-Hour General Industry (Healthcare)



INTERESTED IN THIS CAREER? THINGS TO CONSIDER

- » Do you have the ability to successfully study science?
- » Do you have strong hand-eye coordination?
- » Are you personable and friendly?
- » Are you patient and able to handle repetitive tasks?



DIESEL TECHNOLOGY

CIP CODE: 47.0613

dcts.org/diesel-technology/

PROGRAM OVERVIEW:

As the diesel equipment industry continues to expand, the demand for technicians to repair and maintain diesel equipment grows. Students in the Diesel Technology program will receive training in the maintenance,



servicing, and repair of medium-duty and heavy-duty transportation equipment.

The Diesel Technology curriculum is designed to instruct students to work in the 21st century on the diesel engines that power vehicles like tractor/trailers, buses, and trucks. Areas of study include the use of technical manuals, a variety of power and hand tools,

instruction in diagnosis and malfunction of computer controls, and parts inspection, repair and replacement. You will also receive training on other systems like brakes, drive trains, heating/air conditioning, and hydraulics. The program emphasizes the skills necessary to maintain all types of equipment, and how to repair and maintain both on- and off-road use vehicles. Instruction will be provided in oxyacetylene and AC/DC welding operations. Co-op opportunities exist for qualified students at dealerships, truck repair facilities, trucking companies, and construction equipment repair facilities.



POTENTIAL INDUSTRY CERTIFICATIONS:

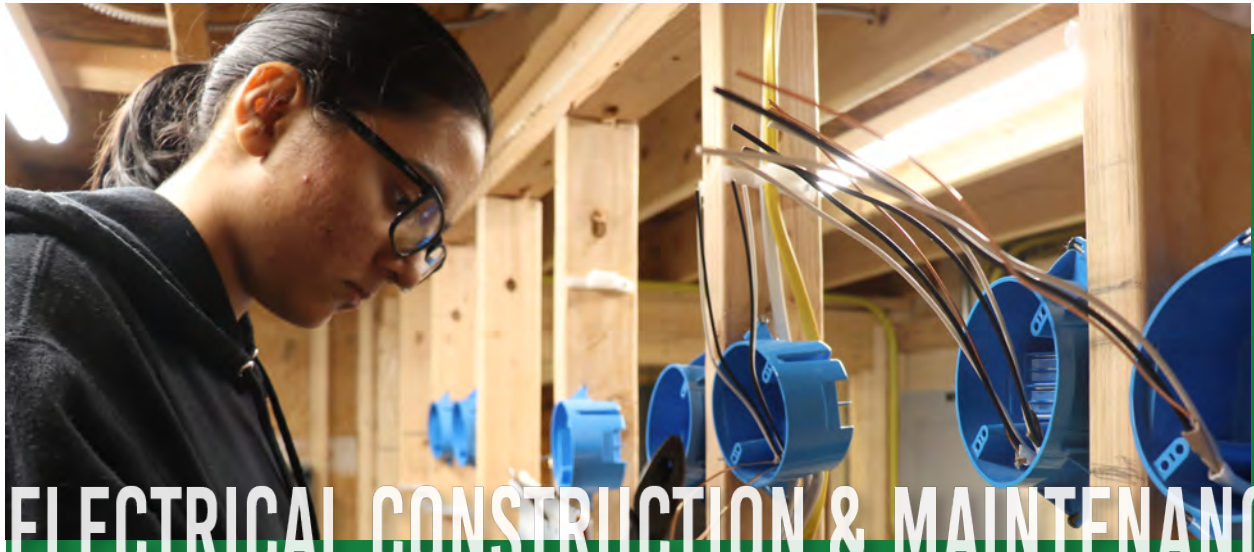
- » PA Safety Inspection & PA Emissions Inspector Certifications
- » OSHA 10-Hour General Industry (Automotive)
- » Forklift Operator Certification
- » CareerSafe: Employability Interviewing Skills



- » Snap-On NC3 Certifications: Hand Tool Identification; Multimeter Training; Pro-Link Ultra Scanner; Precision Measuring; Torque Calibration
- » S/P2 Training
- » Cummins Certifications
- » Get Ahead Program Certification (through Daimler, Freightliner, and WesternStar)

INTERESTED IN IS THIS CAREER? THINGS TO CONSIDER

- » Do you have a general interest in large trucks?
- » Do you have a mechanical aptitude?
- » Do you feel comfortable working with large tools and equipment?
- » Are you interested in learning the engineering and design aspects of heavy-duty diesel technology?



ELECTRICAL CONSTRUCTION & MAINTENANCE

CIP CODE: 46.0399

dcts.org/electrical-construction-maintenance/

PROGRAM OVERVIEW:

This program provides students with an introduction to the basic concepts of residential and commercial wiring. With an emphasis on safety, students install circuits, switches, conductors, circuit breakers, and other electrical devices.

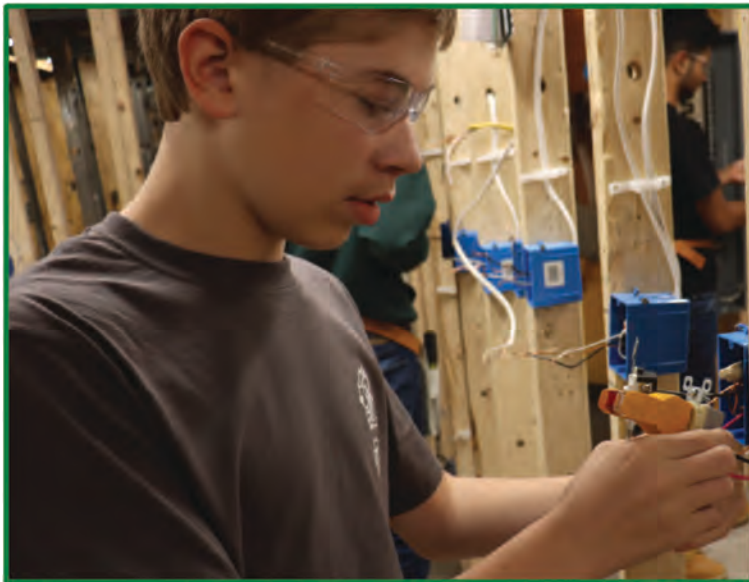


Topics covered include selecting and ordering materials, key supplies and tools, codes, blueprint reading, and low voltage wiring. Students are taught in compliance with the National Electrical Code (NEC) and the Residential Construction Academy (RCA) industry standards.

Students begin working toward their RCA and OSHA 10 certifications. Students exploring this program will first learn safety, tools, residential wiring, blueprints, circuitry, devices, raceways, bending, OHM's Law, and will complete OSHA 10. As students continue in the program, they gain more in-depth knowledge with respect to safety and tools, commercial wiring, review of blueprints, devices, raceways, bending, panels, disconnects, and circuitry. Eligible students also have the opportunity to enroll in an apprenticeship program during their senior year as well!

POTENTIAL INDUSTRY CERTIFICATIONS:

- » Ladder Safety Training provided by the American Ladder Institute
- » S/P2 – Construction
- » CareerSafe: Employability Interviewing Skills
- » OSHA 10-Hour Construction



INTERESTED IN THIS CAREER?

THINGS TO CONSIDER

- » **Attention to Detail:** This program requires being careful about detail and thorough in completing work tasks.
- » **Innovation:** are you creative and interested in alternative thinking to develop new ideas?
- » **Working in teams:** are you able to develop the skills necessary to work in teams?



ELECTROMECHANICAL ENGINEERING TECHNOLOGY

CIP CODE: 15.0403

dcts.org/electromechanical-engineering-technology/

PROGRAM OVERVIEW:

The Electromechanical Engineering Technology program prepares students to apply basic engineering principles and technical skills in support of engineers engaged in developing and testing automated, servo-



mechanical, and other electromechanical systems. Includes instruction in prototype testing, manufacturing and operational testing, systems analysis and maintenance procedures, and report preparation. This program prepares students for high-demand, life sustaining, STEM careers in the maintenance, manufacturing automation, and engineering fields. Students will learn how

to break down large, seemingly impossible challenges into doable steps using the engineering design process. Electromechanical Engineering Technology's comprehensive curriculum covers topics such as engineering philosophy, principles, ethics, safety and quality control. Students learn a wide variety of skills, including hydraulics, power transmissions, pneumatics, programming, robotics, and precision measurement.

POTENTIAL INDUSTRY CERTIFICATIONS:

- » NC3 - Fundamentals of Electricity AC/DC
- » NC3 - Fundamentals of Fluid Power-Pneumatics/Hydraulics
- » NC3 - Fundamentals of Mechanical Systems
- » NC3 - Fundamentals of PLCs-Allen Bradley/Siemens
- » NC3 - Fundamentals of Sensor Technology



- » AM/IST Level I
- » Snap-On: Meter Certification
- » CareerSafe: Employability Interview Skills
- » OSHA 10-Hour General Industry

INTERESTED IN THIS CAREER?

THINGS TO CONSIDER

- » Are you logical and mechanical?
- » Are you good at problem solving?
- » Do you practice critical-thinking skills?
- » Do you prefer project-based learning or activities?



EMERGENCY & PROTECTIVE SERVICES

CIP CODE: 43.9999

dcts.org/emergency-protective-services/

PROGRAM OVERVIEW:

Every year, fires and other emergencies take thousands of lives and destroy property worth billions of dollars. Firefighters and emergency services workers help protect the public against these dangers by rapidly responding to a



variety of emergencies. They are frequently the first emergency personnel at the scene of a traffic accident or medical emergency and may be called upon to put out a fire, treat injuries or perform other vital functions.

The Emergency and Protective Services program offers a comprehensive public safety education to students interested in pursuing a career or volunteering in the emergency medical, law enforcement, fire,

security, industrial safety or emergency management services.

Students work with protective service professionals to gain first-hand experience in all areas of these exciting professions. Units of study include cadet firefighting, law enforcement, emergency medical services, communications and report writing, public speaking and physical training.

POTENTIAL INDUSTRY CERTIFICATIONS:

- » American Heart Association CPR/AED
- » American Heart Association First Aid
- » Emergency Medical Responder (EMR)
- » National Incident Management Systems Certification (NIMS 100, 200, 700 & 800)



- » National Incident Management Systems Certification (NIMS 904, 905, & 907 - Active Shooter)
- » Hazardous Materials (HAZMAT) First Responder Awareness
- » OSHA 10-Hour General Industry (Public Safety)
- » Traffic Incident Management (TIMS)

INTERESTED IN THIS CAREER?

THINGS TO CONSIDER

- » Do you work well under pressure?
- » Do you have a passion for helping people?
- » Are you a good problem solver?
- » Can you see yourself working in public service-related fields such as law enforcement, emergency, or fire rescue?



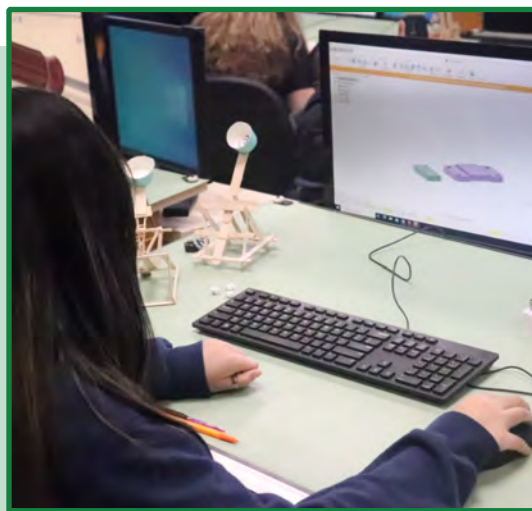
ENGINEERING & DRAFTING DESIGN

CIP CODE: 15.9999

dcts.org/engineering-drafting-design/

PROGRAM OVERVIEW:

This course is for students who think outside the box. Students learn to create the technical drawings and plans used to build/manufacture everything.



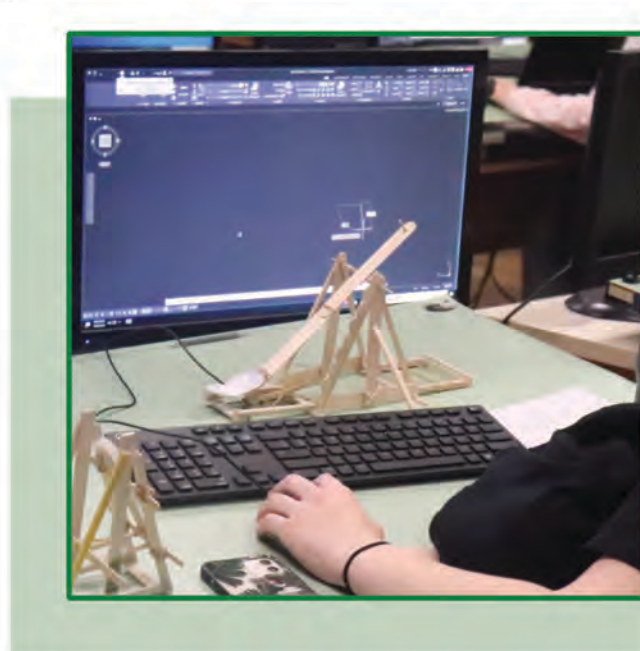
Products range from electronics, machinery, and roads to structures such as houses, office buildings, and bridges. The drawings are very specific and show measurements, sizes, materials, and instructions.

Students learn the basics of pencil and board drafting and then put their creativity and imagination using computer-aided drafting (CAD), solid modeling and 3-D printing.

Attention to detail, visualization and creative problem-solving are all useful for stimulating work on such projects as machine parts, houses and maps. Graduates go on to become drafters, CAD operators, designers, engineers and architects.

POTENTIAL INDUSTRY CERTIFICATIONS:

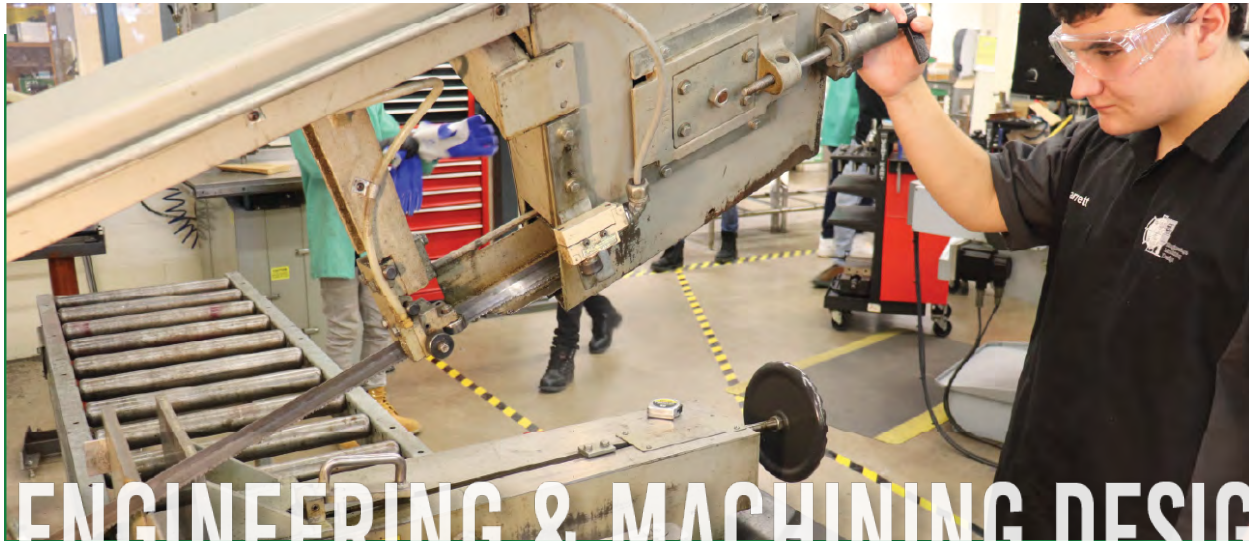
- » American Design Drafting Association
- » Apprentice Drafter Classification
- » Program Certification
- » CareerSafe: Employability Interviewing Skills
- » OSHA 10-Hour General Industry



INTERESTED IN THIS CAREER?

THINGS TO CONSIDER

- » Do you have a strong interest in architecture?
- » Are you interested in learning how to use CAD?
- » Are you interested in 3-D printing?
- » Are you organized and attentive to details?
- » Do you like to design and draw?



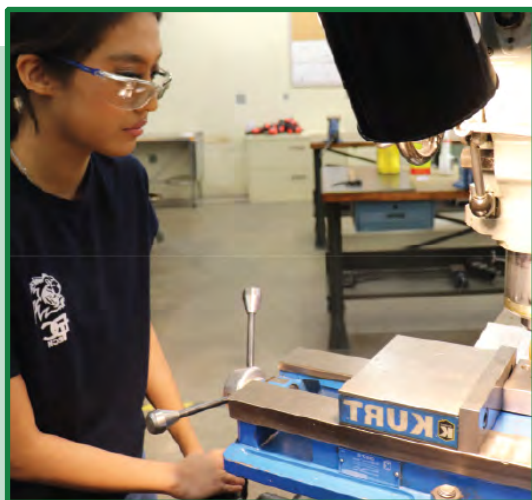
ENGINEERING & MACHINING DESIGN

CIP CODE: 48.0501

dcts.org/engineering-machining-design/

PROGRAM OVERVIEW:

This program is in the field of manufacturing. Entering into the Engineering & Machining Design (EMD) program, students learn tasks through theory and shop based lessons such as part layout, bench-



work, and use of measuring tools. From there they receive instruction on manual and computer controlled (CNC) machinery and experience using drill presses, milling machines, lathes, precision grinders and CNC equipment. Along the way, students create shop based projects such as bolt gauges, C-clamps and steam engine models. Students also work

toward NIMS (National Institute for Metalworking Skills) certification in several machining areas. With additional post-secondary training, students can use their knowledge to pursue machine design or mechanical engineering.

POTENTIAL INDUSTRY CERTIFICATIONS:

- » National Institute for Metalworking Skills (NIMS) Certification
- » OSHA 10-Hour General Industry (Manufacturing)
- » Career Safe: Employability Interview Skills



INTERESTED IN THIS CAREER?

THINGS TO CONSIDER

- » Do you have good eye-hand coordination?
- » Do you have strong attention to detail?
- » Is math one of your favorite subjects?
- » Are you comfortable using tools that require strong attention to safety?



EXERCISE & SPORTS SCIENCE

CIP CODE: 51.2604

dcts.org/exercise-sports-science/

PROGRAM OVERVIEW:

This program of study is designed to introduce and prepare a pathway for students to enter the physical therapy, exercise science, athletic trainer or sports medicine healthcare fields. Students will be able to apply technical knowledge and understanding of organizational and professional health and well being; legal and ethical issues; emergency

care and infection control; injury prevention and protection; treatment, rehabilitation and clinical skills; nutrition and hydration; exercise science and prescription; and human development and mental health.

Our EXS program provides both a theoretical and lab component and is designed for those students whose career objective includes college and



a career within the Sports Medicine, Athletic Training, Physical Therapy, Occupational Therapy, Exercise Physiology, Fitness Therapy, and/or Nutrition fields.

POTENTIAL INDUSTRY CERTIFICATIONS:

- » Cardiacwise- Sports Safety International
- » Concussionwise- Sports Safety International
- » NSPA Personal Trainer Certification
- » CPR
- » First Aid
- » OSHA 10-General Industry (Healthcare)
- » CareerSafe: Employability Interviewing Skills



INTERESTED IN THIS CAREER?

THINGS TO CONSIDER

- » Are you interested in fitness and athletics?
- » Do you have a passion for helping people?
- » Are you personable and patient?
- » Do you like learning about anatomy and nutrition?



HEATING, VENTILATION & AIR CONDITIONING

CIP CODE: 47.0201

dcts.org/heating-ventilation-air-conditioning/

PROGRAM OVERVIEW:

HVAC professionals are instrumental in ensuring that homes and buildings function properly on a daily basis. The HVAC program introduces students to the basic concepts of residential and

commercial work.

With an emphasis on safety, students work with copper, black pipe, electric, and full HVAC systems. Topics covered include selecting and ordering materials, supplies, tools, codes, blueprint reading, and low voltage wiring.

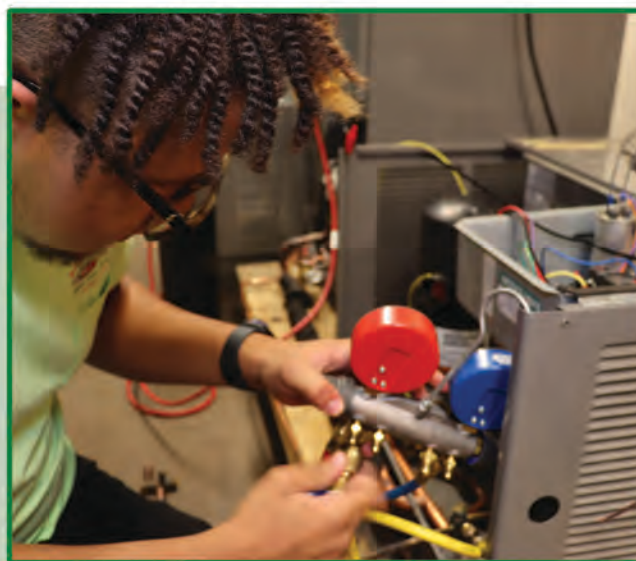
Students learn about safety, tools, residential work, blueprints, and

basic HVAC systems. Students are taught in compliance with the International Code Council (ICC) Mechanical, Fuel Gas Code and the Residential Construction Academy (RCA) industry standards.



POTENTIAL INDUSTRY CERTIFICATIONS:

- » EPA 608 – Environmental Protection Agency Certification
- » Universal R-410-A Safety & Training, Ladder Certifications provided by the American Ladder Institute
- » S/P2 – Construction
- » CareerSafe: Employability Interviewing Skills
- » OSHA 10-Hour Construction Industry



INTERESTED IN THIS CAREER?

THINGS TO CONSIDER

- » Do you have strong attention to detail?
- » Is math one of your favorite subjects?
- » Do you like doing repair work and connecting different components to existing systems?



LANDSCAPING & GREENHOUSE PRODUCTION

CIP CODE: 01.0601

dcts.org/landscaping-greenhouse-production/

PROGRAM OVERVIEW:

This program focuses on improving the appearance of the outdoors as well as producing and caring for plants. Plant biology and botany are included in the curriculum in addition to pesticide education, horticulture



business, and plant identification.

Students have the opportunity to work in our 3,000 square foot greenhouse propagating plants through a variety of methods. Aquaponics, hydroponics, and aeroponics are also part of the program. Students in this program must also be able to read blueprints, understand building codes, and be knowledgeable of industry safety requirements.

Landscaping and hardscape design, installation, and maintenance will be a primary focus of study in this program. If you have a passion for growing and caring for plants and ultimately our planet, the Landscaping & Greenhouse Production program is the place for you!

POTENTIAL INDUSTRY CERTIFICATIONS:

- » Pennsylvania Certified Horticulturist (PCH)
- » Pennsylvania Pesticide Applicator Certification
- » CareerSafe: Employability Interviewing Skills
- » OSHA 10-Hour General Industry



INTERESTED IN THIS CAREER?

THINGS TO CONSIDER

- » Do you like working outdoors?
- » Are you interested in how plants grow?
- » Are you interested in exploring landscape design?
- » Do you enjoy being creative?



MASONRY

CIP CODE: 46.0101

dcts.org/masonry/

PROGRAM OVERVIEW:

A successful mason is determined, creative, goal-oriented, energetic and a natural leader. Masons work with brick, concrete block and glass block,



tile, concrete, stucco, and stone. The work requires precision, stamina and is very physically demanding. It involves the use of hand tools, power tools, scaffolding, and material moving equipment. The materials are laid by hand, requiring the skill of a craftsman, a true artist. Students in this program must also be able to read blueprints,

understand building codes, and be

knowledgeable of industry safety requirements. Masonry is a growing field and opens doors to many other opportunities.

POTENTIAL INDUSTRY CERTIFICATIONS:

- » NCCER Credentials
- » Forklift Operator Certification, Class I, III, IV
- » Rough Terrain Forklift Operator Certification, Class 7
- » CareerSafe: Employability Interviewing Skills
- » OSHA 10-Hour Construction Industry



INTERESTED IN THIS CAREER?

THINGS TO CONSIDER

- » Do you like working outdoors?
- » Do you have an “eye” for detail?
- » Are you good with basic math and measuring skills?
- » Would you enjoy working everyday with blocks, bricks, and stone?



MEDICAL ASSISTANT

CIP CODE: 51.0801

dcts.org/medical-assistant/

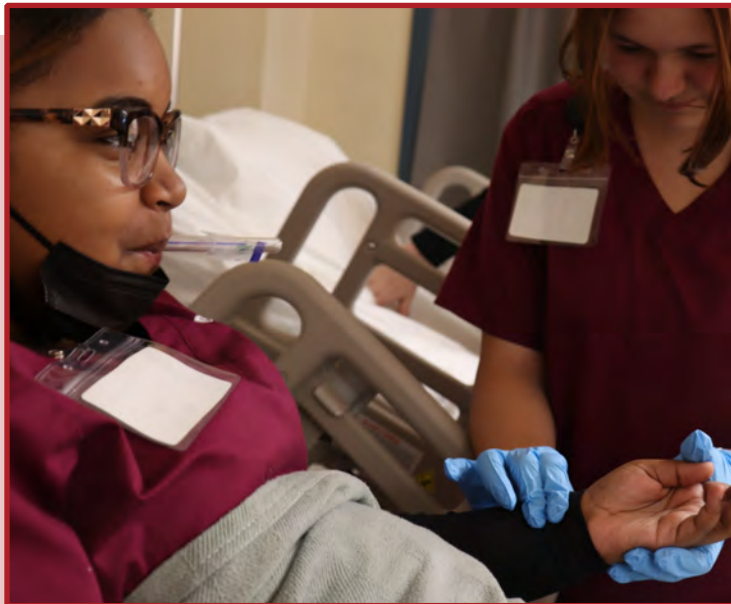
PROGRAM OVERVIEW:

Medical Assistants work in the offices of physicians, podiatrists, urgent care center, chiropractors, and other health practitioners.

They assist doctors and physicians, take patient history, assist with procedures, manage online medical records, measure vital signs, give

injections, schedule appointments and administer laboratory tests.

In addition to obtaining a Medical Assistant certification, this program offers the hands on skills that prepare students to pursue careers in medicine, nursing and other allied health professions.



POTENTIAL INDUSTRY CERTIFICATIONS:

- » CCMA (Certified Clinical Medical Assistant)
- » CET (Certified EKG Technician)
- » CareerSafe: Employability Interview Skills
- » OSHA 10-Hour General Industry (Healthcare)
- » Blood Borne Pathogen
- » AHA First Aid
- » AHA BLS CPR



INTERESTED IN THIS CAREER?

THINGS TO CONSIDER

- » Are you adaptable?
- » Do you have a passion for helping people?
- » Are you personable and patient?
- » Are you able to manage multiple tasks at the same time?



NURSING FOUNDATIONS

CIP CODE: 51.9999

dcts.org/nursing-foundations/

PROGRAM OVERVIEW:

In the Nursing Foundations program students explore a variety of health professions to develop an awareness of job opportunities in hospitals, skilled



nursing facilities and other healthcare settings. Students develop skills needed to perform effectively in entry-level positions and receive a solid foundation for continued studies in the fields of Nursing, Respiratory Therapy, Rehabilitation Therapies, and Diagnostic Technologies to name just a few. Students learn patient care, CPR/first aid, laboratory skills and medical terminology.

There is a strong emphasis placed on

anatomy & physiology, clinical procedures, infection control, bedside tests (EKGs and specimen testing), and therapeutic communication skills.

Students have the opportunity to choose pathways that can lead to certifications in Patient Care Technician, Healthcare Provider CPR, Stop the Bleed, OSHA Healthcare, CareSafe HIPPA, CareerSafe PPE, and OSHA Blood borne Pathogens. The Nursing Foundations program also offers college credits in Medical Terminology.

POTENTIAL INDUSTRY CERTIFICATIONS:

- » HIPAA
- » Stop the Bleed
- » CPR
- » Patient Care Technician (PCT)
- » OSHA 10-Hour General Industry - Healthcare
- » CS 12003 - Bloodborne Pathogens (Healthcare)
- » CareerSafe: Employability Interview Skills



INTERESTED IN THIS CAREER?

THINGS TO CONSIDER

- » Are you able to accurately manage multi-tasking?
- » Do you have a passion for helping people?
- » Are you personable and patient?
- » Are you interested in a career in healthcare?



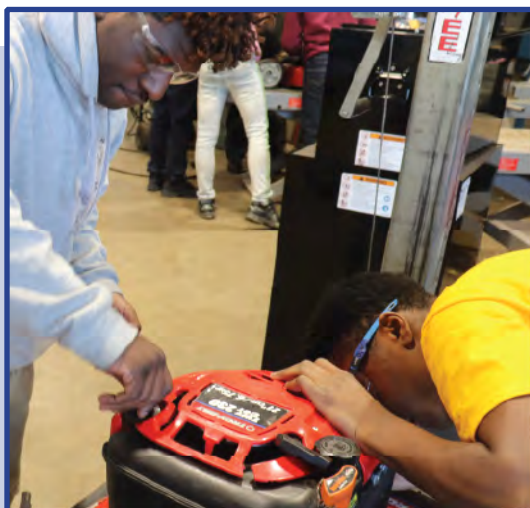
SMALL ENGINE EQUIPMENT TECHNOLOGY

CIP CODE: 47.0699

dcts.org/small-engine-equipment-technology/

PROGRAM OVERVIEW:

This program is divided into two areas of training: Outdoor power equipment and motorcycles. Students in the 9th-12th grades are guided through a progressive, educational competency environment. Some of the



competencies covered are safety, carburetor theory and the maintenance and repair of two and four stroke engines. In the fully equipped laboratory, the students apply the skills they have acquired by dismantling and reassembling L-head and overhead valve engines. As students' progress through the curriculum, they learn to diagnose, service and repair lawn and garden

equipment such as lawn mowers, riding mowers, chain saws, line trimmers and leaf blowers. The SEET facility and curriculum content is certified by the Equipment and Engine Training council (EETC) which is the only nationally recognized certification body for the outdoor power equipment programs in colleges and high schools.



POTENTIAL INDUSTRY CERTIFICATIONS:

- » PA Safety Inspection Certification
- » PA Emissions Inspector Certification
- » OPEESA Certifications for two and four stroke engines, hydraulics systems, and electrical
- » Briggs & Stratton Engine Master Technician Certification
- » OSHA 10-Hour General Industry (Automotive)
- » CareerSafe: Employability Interviewing Skills



INTERESTED IN IS THIS CAREER? THINGS TO CONSIDER

- » Do you have an organized & precision-oriented mindset?
- » Do you enjoy riding/testing equipment for proper operation?
- » Do you enjoy working on mechanical equipment?
- » Do you enjoy troubleshooting mechanical & electrical systems?
- » Do you enjoy using computers to analyze electrical systems and engine components?



VETERINARY ASSISTANT

CIP CODE: 01.8301

dcts.org/veterinary-assistant/

PROGRAM OVERVIEW:

Do you want to turn your love and dedication for animals into a career? If you have a sincere devotion to promoting and aiding in the well-being of animals, this field might be for you! The Veterinary Assistant Program will prepare students for working in the Veterinary industry as a Veterinary Assistant through theory and hands-on learning to develop the



knowledge and skills necessary for taking care of small and large animals. This program affords students with the opportunity of working with live animals daily. Seniors will have the opportunity to become Nationally Accredited as a Veterinary Assistant by NAVTA (The National Association of Veterinary Technicians in America) and earn a Certificate of achievement from PVMA (The Pennsylvania

Veterinary Medical Association). Upon graduation, students can be working in a veterinary facility as a Veterinary Assistant or students have the opportunity to continue their education in a Veterinary Technology Degree Program or a Pre-Veterinary Degree Program

POTENTIAL INDUSTRY CERTIFICATIONS:

- » PVMA Certification
- » Basic Animal First Aid
- » NAVTA Certification
- » PA Skills Certificate (NOCTI)
- » OSHA 10-Hour General Industry (Veterinary)
- » CareerSafe: Employability Interview Skills



INTERESTED IN THIS CAREER?

THINGS TO CONSIDER

- » Are you good at working with animals?
- » Do you have an interest in the health of animals?
- » Do you want to learn the proper care of animals?
- » Are you interested in pursuing a career in veterinary medicine or science?



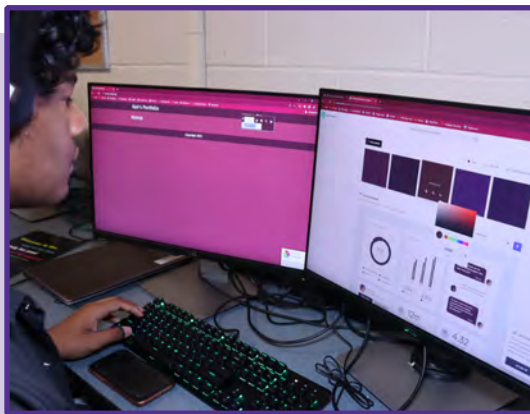
WEB DEVELOPMENT & DESIGN

CIP CODE: 11.0801

dcts.org/web-development-design/

PROGRAM OVERVIEW:

In the Web Development & Design program, students will learn to build, code, and publish standards-based content for a variety of formats including the web, smartphones and tablets. Our instructor will present a disciplined

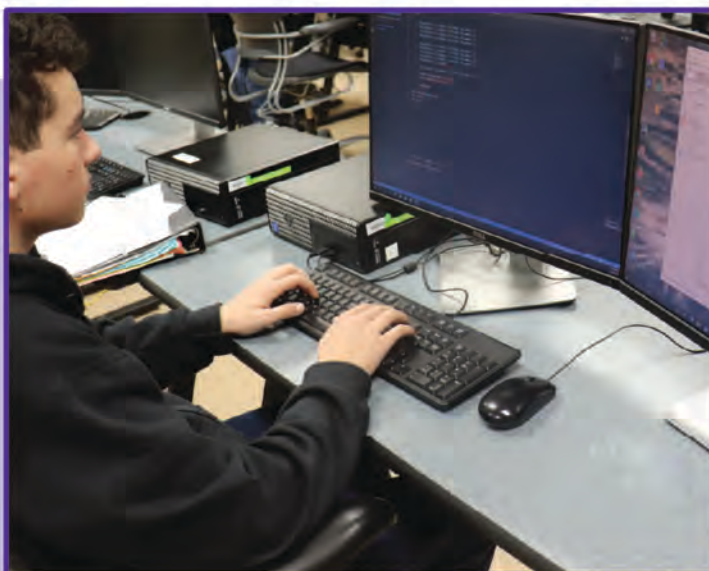


approach to software design and coding with students working to achieve mastery level of multiple languages used in interactive design such as HTML5, CSS, JavaScript, PHP, and more. Students will learn about writing, markup and coding of web sites while gaining theoretical knowledge about current practices and

standards of web informational design. This will prepare students for the daily demands and obligations of the work environment and emphasize the importance of adherence to copyright laws and regulations for web content. Using a practical hands-on approach, Web Development & Design students will develop Web sites and manage content using industry recognized tools. This rigorous program will train students with a focus on back-end Web development, including database integration, programming to produce dynamic content, and constructing web server applications.

POTENTIAL INDUSTRY CERTIFICATIONS:

- » IC3 Digital Literacy Global Standard 6
- » CareerSafe: Employability Interviewing Skills
- » OSHA 10-Hour General Industry



INTERESTED IN THIS CAREER?

THINGS TO CONSIDER

- » Do you have a strong interest in design?
- » Do you enjoy exploring different web page platforms?
- » Are you interested in developing websites?
- » Are you organized and attentive to details?
- » Would you like the ability to apply technology to your creative endeavors?



CIP CODE: 48.0508

dcts.org/welding-technology/

PROGRAM OVERVIEW:

The welding industry can be extremely rewarding due to the fact that employers have a constant need for skilled welders. Welding is used in manufacturing, construction, and many other industries. Students are taught oxy-fuel gas cutting



principles and practices, arc cutting principles and practices, and welding inspection and testing principles. Welding Technology students research careers in the welding field and learn how to weld in all positions. They learn how to interpret blueprints and layout projects from cutting to tacking to full completion of projects. Students learn about precision cuts in steel plates using super-heated gases and learn how steel is formed from a liquid to solid.

Students also gain hands-on training in a variety of welding procedures including shielded metal arc welding (STICK), gas metal arc welding (MIG), flux cored arc welding (FCAW), and gas tungsten arc welding (TIG). In this program, students learn how to use the proper equipment for testing welds, destruction, and hardness testing. They gain experience in reading and understanding manuals and specification charts for the welding process. Students learn how to use grinders and chemical baths for surface cleaning, proper clamping techniques, and welding standards established by the American Welding Society.

POTENTIAL INDUSTRY CERTIFICATIONS:

- » AWS D1.1 – Structural Welding
- » CareerSafe: Employability Interviewing Skills
- » OSHA 10-Hour General Industry (Manufacturing)



INTERESTED IN THIS CAREER?

THINGS TO CONSIDER

- » Do you have good eye-hand coordination?
- » Do you have strong math skills?
- » Are you precise?
- » Are you comfortable using tools that require strong attention to safety?

**HOW DO I KNOW IF
DCTS IS A GOOD
OPTION FOR ME?**





DCTS IS A **GREAT** OPTION IF:

- ☒ You want a head start on your future.
- ☒ You want to earn professional credentials.
- ☒ You want to earn college credits in high school.





FREQUENTLY ASKED QUESTIONS

WHEN CAN A STUDENT APPLY TO DCTS?

The first opportunity to apply to DCTS is during 8th grade for enrollment the following fall as a 9th grade student. Middle school counselors supply interested 8th grade students with the application and assist them in completing it. The application includes written interview questions, teacher recommendation forms, academic, attendance, discipline records, health information, and if applicable, copies of the IEP, GIEP, and/or 504 plan. Current high school students are also welcome to apply to DCTS. High school counselors will assist interested students in obtaining and completing the application in very much the same way described above. Applications are typically due during the first week of February (subject to change). There is no fee to apply. Students who are not accepted immediately are placed on the waiting list and as openings occur, families and sending school districts are notified.

WHAT IS THE COST TO ATTEND DCTS?

Students living in Dauphin County do not pay tuition. As a public school operated through a consortium, DCTS is funded by each member of that consortium. Students may incur other expenses such as uniforms, specialized footwear, or safety gear.

WHAT IF I CHOOSE A PROGRAM BUT CHANGE MY MIND?

All 9th grade students will participate in the Freshmen Rotation, a unique opportunity to experience every CTE program available to DCTS students. Many students, upon experiencing a new program for the first time, discover an innate interest in something they had never considered before. Upon completion of the Freshmen Rotation, students will again have the opportunity to select a full-time program of study. Many students continue with their original plan; however, many decide to follow a new path that only DCTS can offer.

Still, sometimes students do change their mind after beginning a program of study. Students are encouraged to communicate with their families, school counselors, and teachers to determine if a program change is the right move.

MORE QUESTIONS?

If you would like additional information, or would like to visit our school, contact our CTE Outreach Coordinator or your school counselor. They will be happy to answer your questions and set up your visit. Visit our website at www.dcts.org for more information about our school, and our exciting programs we offer as well!



DAUPHIN COUNTY TECHNICAL SCHOOL

6001 LOCUST LANE
HARRISBURG, PA 17109
www.dcts.org



The Dauphin County Technical School does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities. Inquiries may be directed to the Administrative Director, Dr. Karen Pflugh, Title IX Coordinator and the Section 504 Coordinator at 6001 Locust Lane, Harrisburg, PA 17109 or 717.652.3170.