

Programs of Study

AUTO BODY REPAIR

..is certified by the National Automotive Technology Education Foundation (NATEF) and provides instruction in the most current techniques for repair and replacement of damaged automobile parts. Students learn to repair collision damage and to replace quarter panels, door skins, and fenders. The curriculum also includes painting, MIG welding, collision repair, frame straightening, and damage analysis. Students gain experience in mixing and tinting paint, custom painting, computerized estimating, and auto detailing. Practical experience is also provided through a full service auto body repair shop. Students have the opportunity to earn PPG Blue Level Paint and I-Car MIG Welding certifications. They are also eligible to earn I-CAR Points.

AUTOMOTIVE TECHNOLOGY

..is certified by the National Automotive Technology Education Foundation (NATEF) and affiliated with all the major automotive manufacturers through Automotive Youth Educational Systems (AYES). Students prepare to take the Pennsylvania State Inspection License examination. Students learn basic vehicle maintenance, repair, and replacement of drive trains, brake systems, chassis components, and fuel electrical systems. Special emphasis is placed on troubleshooting an engine performance via the use of state-of-the-art electronic diagnostic equipment. Practical experience is also provided in the auto repair shop. Under the Automotive Youth Educational Systems (AYES) apprenticeship program, students may qualify to become apprentices working under mentor master technicians. Students can earn certifications from AYES, the National Institute for Automotive Service Excellence (ASE) and the Coordinating Committee for Automotive Repair (CCAR).

COSMETOLOGY

...prepares students to perform technical services, including all aspects of hair, skin/nail beautification, and personal maintenance. These skills are supported and reinforced with theoretical background including sanitation, chemistry, anatomy and physiology, as well as structure, function and disorders of the hair, skin, nails and scalp. This program helps students develop into well rounded professionals who practice real-world services in Parkway's salon, which is open to the public two days a week. Utilizing an integrated approach to teaching and learning, students learn about interpersonal relations, professional attitude, and career fundamentals along with technical knowledge and skills. Techniques and abilities are practiced and tested on mannequins, classmates and the general public. Students who are able to attend this program for three to four years will have the opportunity to earn 1,250 hours of state-regulated course requirements to take the state licensing exam to be a licensed cosmetologist, which encompasses providing services to the public for hair, skin and nails.

Students who are able to take one or two years of instruction in this program, may choose from the following specialized licensed fields: **Nail Technician License:** This license requires 200 hours of instruction and can be completed within one year. An individual holding a nail technician license is qualified to perform nail technology services only. **Cosmetology Teacher License:** Prerequisite for this course is having successfully passed at least one of the above licensures. This license requires 500 hours of required studies and can be complete within one year. An individual holding a teacher's license is qualified to perform the functions of a teacher in whichever specialized area the individual has obtained licensure. **CULINARY ARTS**

...provides practical instruction in the preparation of banquet, buffet and a la carte styles of food preparation. Practical experience is provided through the operation and management of an in-house, full service restaurant. Students also provide goods and services for the Parkway West Food Store, where pastries and select meats are sold. Students learn to design cakes and prepare many different types of cuisine. Senior students who have completed at least two years of Culinary Arts will have the opportunity to earn both the National Restaurant Associations, ServSafe certification and the American Culinary Federation certification. Other certifications that can be earned from the Culinary Arts program include: OSHA 10 Culinary, SP2, Heart Saver CPR, and Heart Saver First Aid.

CONSTRUCTION TECHNOLOGY CLUSTER

** Construction Cluster students will spend 9 weeks in each of the programs below. Students will then choose a program concentration after his/her first year. The construction cluster programs include: Carpentry, Electrical Systems Technology, HVAC/R, and Welding Technology.

The four programs are addressed below:

****CARPENTRY**...A student in the Carpentry program will apply technical knowledge and skills to layout, fabricate, erect, install and repair structures and fixtures using hand and power tools, scaffolding and specialty tools used in the construction trade. This program includes instruction in common systems of framing, construction materials, estimating, blueprint reading and finish carpentry techniques. Students will be given the opportunity to earn a 10-hour Occupational Safety and Health Administration (OSHA) Construction card. Students have the potential to earn 17 certifications through NCCER.

****ELECTRICAL SYSTEMS TECHNOLOGY**...teaches students the integral components of the electrical industry for entry level employment in residential, commercial, and/or light industrial locations. The basis of instruction is in the layout, assembly, installation, wiring, maintenance, and trouble-shooting of electrical systems. Understanding programmable logistical controls (PLC's) and how transformers operate are also covered. Students have the opportunity to earn 20 certifications through NCCER.

****HVAC/R**...Heating, Ventilation, Air-Conditioning, and Refrigeration, which has been newly renovated with state-of-the-industry equipment, provides instruction in basic and advanced electrical theory, troubleshooting and repair of residential and commercial heating, air-conditioning, and refrigeration systems. Students will be given the opportunity to earn a 10-hour Occupational Safety and Health Administration (OSHA) Construction Card. Students can earn the NCCER certifications Core, Type 1 and Type 2. They can also earn EPA Section 608 Refrigeration and Gas Tight Certification for CSST pipe.

****WELDING TECHNOLOGY**...covers several types of welding processes by which metal may be bent, cut or welded together, including oxy-fuel, shielded metal arc, gas metal arc, gas tungsten arc, flux core welding, carbon arc, plasma cutting, and oxy-fuel brazing. Students will learn the importance of industry safety, measuring instruments, hand tools, grinders, metallurgy, blueprint reading, electrical principles, layout/design, and fabrication. They will also learn how to prepare materials lists for cost estimates. Students have the opportunity to earn several American Welding Society (AWS) certifications. Students can earn: NCCER Core, Welding Level 1 and OSHA 10.

CYBER SECURITY & NETWORK TECHNOLOGY

...prepares students who are interested in networking and computer diagnostics. It begins with Cisco IT Essentials, PC Hardware and software, and networking operating systems. Students initially prepare for CompTIA A+ and Comp TIA Server + certifications and then, through Cisco CCNA Discovery course, students learn networking concepts based on typical networks that one might encounter in a home or small office, or in larger, more complex enterprise models. Finally, students can prepare for the Cisco CCENT and Cisco CCNA certifications.

DIESEL TECHNOLOGY

...Diesel Technology is part of every aspect of today's transportation, construction, and manufacturing industries. In Diesel Technology, students will learn about the operation, maintenance, and overhaul of diesel powered equipment. Diesel engines are found in military vehicles, trucks, trains, buses, construction and agricultural equipment. As the diesel equipment industry expands, the demand for mechanics and technicians to repair and maintain diesel equipment will continue to grow. Students will learn the fundamentals of hydraulics and have the opportunity to earn an Air Conditioning Recovery Certification. Students can earn certifications from the National Institute for Automotive Service Excellence (ASE), Refrigeration 609, Class I & III State Inspection, Forklift Operations.

GRAPHIC ARTS & PRODUCTION TECHNOLOGY

...Graphic Arts & Production Technology is an instructional program that prepares individuals to apply technical knowledge and skills to plan, prepare and execute commercial and industrial visual image and print products using mechanical and digital graphic and printing equipment. Students learn desktop publishing, layout, composition, digital printing and bindery as well as

photography and other graphic arts techniques. Emphasis is on typographical layout and design using computer graphics, digital printing, bindery and finishing techniques, ink and color preparation. Students will also learn large format digital printing with application of a wide variety of output and vinyl applications including heat press and apparel design.

HEALTHCARE OCCUPATIONS TECHNOLOGY

...students have the opportunity to participate in a wide range of real world clinical and job shadowing experiences at many different healthcare providers. Clinical experiences may include: child care, hospital based settings, long term care facilities, medical records, in and outpatient pharmacy settings, and/or lab testing centers. Students will have the opportunity to earn and complete the American Heart Association "CPR for Healthcare Providers" certification and the following certifications related to the Healthcare Industry: Patient Care Technician Certification, Pharmacy Technician Certification, and/or Phlebotomy Technician Certification. **Patient Care Technician Certification:** Instruction begins with anatomy, physiology, and medical terminology. Special attention is given to medical office examinations, treatments, and patient care. **Pharmacy Technician Certification (CPhT):** After successful completion of this one year, 12th grade course, students will assist the pharmacist in a variety of tasks. Module work includes: controlled substances, laws and regulations, drug classifications, frequently prescribed medications, prescription information, preparing/dispensing prescriptions, calculations, sterile products, unit dose and repackaging. **Phlebotomy Technician Certification (CPT):** This is a one year certification course directed towards 12th grade students. Module and lab work includes: anatomy and physiology, infection control, safety and compliance, patient preparation, collection techniques, and processing collected samples. Students must demonstrate a minimum of 30 successful venipunctures and 10 successful capillary punctures.

POWER MOTORSPORTS

Power Motorsports Technology teaches students to diagnose, maintain and repair utility vehicles, all-terrain vehicles, including side-by-sides, motorcycles, water crafts as well as outdoor power machines, including lawn and garden equipment. Students will learn the principles of engine operation, understand basic electricity, service and maintain fuel and carburetor systems, transmissions, and powertrain systems used on various types of recreational and lawn & garden equipment. Students may have the opportunity to earn the following certifications: PA Emissions Certification; S/P2, OSHA 10.

PUBLIC SAFETY TECHNOLOGY

...focuses on careers relating to emergency medical services, fire fighting, law enforcement, and emergency management services. In order to successfully complete the program, students must meet minimum proficiency levels in all public safety areas. Instruction is provided in disaster situation/management, hazardous materials handling, pre-hospital medical care, map reading, fire fighting, the judicial system, and emergency dispatching. Students have the opportunity to earn the following certifications: Emergency medical technician– Basic (EMT-B), PA Essentials of Firefighting, Hazardous Materials Awareness and Operations, Basic Rigging for Rope Rescue, and Tactical Handcuffing.

SPORTS MEDICINE & REHABILITATION THERAPY TECHNOLOGY (SMARTT)

The Sports Medicine and Rehabilitation Therapy Technology (SMARTT) Program prepares students to work in the field of physical therapy, occupational therapy and sports medicine. Students will develop skills in prevention, assessment, prognosis, and rehabilitation of injuries and other health conditions. Students will learn the principles of developing a plan of care, including: evaluation, interventions, assessment, goal setting and discharge. Students will also learn how to develop a diet for healthy individuals and for special populations through a comprehensive understanding of nutrition. Students will also be prepared to sit for the ACSM certified personal trainer exam and have the opportunity to earn the CPT credential.

VETERINARY ASSISTANT TECHNOLOGY

...students will learn to keep medical records, schedule appointments, offer client education, practice laboratory procedures, assist with nursing duties, prepare animals for surgeries, and assist during routine physical exams. Students will also gain a solid educational base on which to build a post-secondary degree. This program may lead to additional career pathways such as Animal Trainer, Veterinary Assistant, Kennel Assistant, Research Assistant, Groomers, Animal Control Workers, Veterinary Technician, Veterinary Technologist and Veterinarian. Students may earn the following certifications: NAVTA, OSHA 10 Agriculture, OSHA 10 Healthcare, Pet Tech First Aid and CPR.