

GRAPHIC DESIGN	
CREDIT: 3	MEETINGS PER WEEK: 5
GRADE(S): 10 - 12	LENGTH: Full Year

Graphic Design is a three-year program where students will be introduced to a variety of graphic production and advertising techniques and will utilize design concepts used in a commercial or industrial setting. These skills will prepare students to create an artistic rendering of a client's idea. Learning the production fundamentals of the graphic design industry will include utilization of visual media programs such as Adobe Illustrator, Adobe InDesign and Adobe Photoshop; design and production of screen printing; design, production and use of laser etching and cutting tools; vinyl graphic design and production; digital portfolio photography; individual portfolio design, production, and review; and the use of binding, stitching, and cutting tools used in printing production. Other essential elements of the curriculum include: photography, design, basic animation, typography, embroidery, computer illustration, and electronic photo manipulation.

Students are eligible for Adobe Certified Associate (ACA) for Adobe Photoshop CS5 and Adobe Illustrator and S/P2 Soft Skills certifications. Additional industry recognized certifications include: Adobe Certified Associate-Visual Communication Using Adobe Illustrator/Certiport; Adobe Certified Associate-Visual Communication Using Adobe Photoshop/Certiport; Adobe Certified Associate-Graphic Design & Illustration Using Adobe Illustration/Certiport; Adobe Certified Associate-Print & Design Media Publication Using Adobe Indesign/Certiport; and OSHA CareerSafe/(OSHA). Accreditations are offered through PrintED.

PREREQUISITE(S): Students must purchase a grey hooded sweatshirt, USB drive and supplies as prescribed by the school.

AIR CONDITIONING/HEATING	
CREDIT: 3	MEETINGS PER WEEK: 5
GRADE(S): 10 - 12	LENGTH: Full Year

Air Conditioning/Heating/Electrical is a three-year program where students will be introduced to careers centering on the installation, maintenance and repair of heating, ventilation, and air conditioning equipment. The student will also gain enough residential and commercial electrical knowledge to choose entrance to electrical/electrical skilled careers. Skills learned in the classroom will include working with compressors, relays, and thermostats, recovering and recycling refrigerants, learning related plumbing and electrical skills, fabricating sheet metal, following electrical and building codes, and installing, servicing, and maintaining residential or commercial heating, refrigeration, ventilation, and air conditioning systems.

Certifications offered at BCAVTS include: Industry Competency Exam/Air Conditioning & Refrigeration Institute; Industry Competency Exam-Light Commercial Air Conditioning and Heating; Industry Competency Exam-Residential Air Conditioning and Heating; EPA 608 Refrigerant Recovery/ESCO Group; Student Outcome Assessment/HVAC Excellence; and S/P2 Construction/S/P2. Additional details include ESCO 609 Automotive; Mainstream Engineering Preventive Maintenance; Mainstream Engineering 410 A Safety Certification; CSST Certification; and S/P2 Soft Skills.

COLLISION REPAIR	
CREDIT: 3	MEETINGS PER WEEK: 5
GRADE(S): 10 - 12	LENGTH: Full Year

Collision Repair is a three-year program where students will be introduced to careers centering on the replacement and repair of automobile and light truck bodies and body parts. Modern technologies that include the use of PPG Invirobase water-based paint, a touch-mix computerized paint mixing system, resistance welder, aluminum welder, paint gun cleaner, paint recycling system, fresh air breathing system for the paint booth, hydraulic lift, and a cost estimating area will be used daily by students. Instruction utilizes the Inter-Industry Conference on Auto Collision Repair (I-CAR) curriculum presented through theory and application/practical skills with assessment of both portions reflected in each student's grade.

Certifications offered at BCAVTS include: ALLVIS (laser frame measuring system); Aluminum Welding; Mig Welding; EPA Refrigerant Recovery (auto a/c); LORD Fusor Bumper Repair; SP/2 Soft Skills, and S/P2 Supervisor's Course. The I-Car accreditation is offered in this program.

Additional certifications include: Bolted-On Exterior Panels-Part I/I-CAR; Hazardous Material Storage and Disposal/I-CAR; I-CAR Certification(s)/I-CAR; Intro to Collision Repair Process Overview/I-CAR; Intro to Refinishing and Corrosion Protection-Part 1/I-CAR; Intro to Refinishing and Corrosion Protection-Part 2/I-CAR; Intro to Safety Systems/I-CAR; Intro to Tools, Equipment and Attachment Methods-Part 2/I-CAR; Intro to Tools, Equipment and Attachment Methods-Part 1/I-CAR; Intro to Vehicle Parts Terminology-Part 1/I-CAR; Refinishing Equipment/I-CAR; Removing and Installing Exterior Trim, Pinstripes and Decals/I-CAR; Removing and Installing Hardware Interior Trim/I-CAR; Surface Preparation and Masking/I-CAR; S/P2 Automotive/S/P2; and S/P2 Safety and Pollution Prevention/S/P2.

AUTOMOTIVE TECH	
CREDIT: 3	MEETINGS PER WEEK: 5
GRADE(S): 10 - 12	LENGTH: Full Year

Automotive Technology is a three-year program where students will be introduced to the highly technical careers centering on the repair of automobiles and light trucks. Rigorous evaluation by the National Automotive Technicians Education Foundation (NATEF) and the National Institute for Automotive Service Excellence (ASE) has resulted in program certification that assures employers standards of excellence in the areas of instruction, facilities, and equipment are met by BCAVTS. Skill areas include maintenance and light repair of brakes, heating, ventilation and air conditioning systems, automatic transmissions, and electrical/electronic systems for the first year and engine performance, engine repair, suspension and steering, and manual drive train/clutches for the second year of the program.

The following industry recognized certifications are offered at BCAVTS: AYES Certificate/Automotive Youth Educational Systems; Section 609 Cert for Refrigerant Recycling and Recovery/Mobile Air Conditioning Society Worldwide; Automotive Service Excellence Cert (ASE)/Natl Automotive Technicians Education Excellence; Certified Emissions Inspector/PA Department of Transportation; Certified Safety Inspector, Cat I/PA Department of Transportation; Certified Safety Inspector, Cat II/PA Department of Transportation; Certified Safety Inspector, Cat III/PA Department of Transportation; S/P2-Automotive/S/P2; S/P2 Safety and Pollution Prevention/S/P2; Meter Certification/Snap-On; and Motor Oil Certification/Valvoline. Additional details include A1-A8 & G1 under Automotive Service Excellence (ASE), Subaru Level 1 Technician, New Ford Technician Service Training, S/P2 Soft Skills, S/P2 Supervisor's Course.

The Automotive Service Excellence (ASE) Education Foundation, National Coalition of Certification (NC3), and PennDOT accreditations are offered in this program at BCAVTS.

COMP NETWORK/SECURITY	
CREDIT: 3	MEETINGS PER WEEK: 5
GRADE(S): 10 - 12	LENGTH: Full Year

Computer Networking and Security is a three-year program where students will be introduced to the creative technologies related to supporting and networking computer systems in both theory and direct application. The fundamentals of media, topologies, protocols, standards, network implementation, and network support will be presented. Problem solving and analytical skill development are taught and supported within the classroom structure. As an authorized Pearson/VUE Test Center, students are eligible to complete advanced industry certifications right in their classroom.

Certifications offered at BCAVTS include: CompTIA (A+, Network+, IT Fundamentals+, Security+, Server+); Network Pro/Test Out; PC Pro/Test Out; Security Pro/Test Out; OSHA CareerSafe/(OSHA); and S/P2 Soft Skills.

BUILDING CONSTRUCTION	
CREDIT: 3	MEETINGS PER WEEK: 5
GRADE(S): 10 - 12	LENGTH: Full Year

Building Construction is a three-year program where students will be introduced to careers in the residential and commercial building industry. Each student will receive training in carpentry, electrical, masonry, Roofing, interior finishes, and plumbing. Students will learn about building codes, blueprint reading and following proper safety procedures. The students in Building Construction will develop their skills and understanding through small community projects and building skill trainers as part of the curriculum.

Building Construction students are also eligible for the following certifications: Forklift Operator/National Safety Council; S/P2 Soft Skills; and S/P2-Construction/S/P2. Additional and details to industry recognized certifications include: Power Actuated Fasteners Certification, JLG AWPT in Arial Work Platforms, All Terrain Telehandler and Telehandler Rough Terrain Truck. The Butler County AVTS Building Construction program also offers an articulation with the KML Carpenters Apprenticeship and Training Program.

CARPENTRY	
CREDIT: 3	MEETINGS PER WEEK: 5
GRADE(S): 10 - 12	LENGTH: Full Year

Carpentry is a three-year program where students will be introduced to careers for general carpenters, wood workers, and fine cabinetmakers. Classroom learning will include measuring, use of power tools, use of hand tools, types of fasteners, types of adhesives, rough carpentry skills, cabinetmaking skills, blueprint reading skills, programming/operation of the CNC (computerized numerical control) lathe, router, lasers, and moving gantry router. The Butler County AVTS Carpentry program also offers and articulation with the KML Carpenters Apprenticeship and Training Program. The Forklift Operator/National Safety Council, S/P2 Construction/S/P2 certifications are available as well as accreditations offered through the S/P2 Soft Skills.

COSMETOLOGY	
CREDIT: 3	MEETINGS PER WEEK: 5
GRADE(S): 10 - 12	LENGTH: Full Year

Cosmetology is a three-year program where students will be introduced to the skills surrounding careers in the beauty industry. Competence in hair care, skin care, and nail care are obtained through learning techniques and practice on mannequins. Advanced practice on classmates and then clients will take place in the school's salon, Salon 7. All hours earned during daily class and evening class are applied to the 1250 hours of instruction needed for the PA State Board of Cosmetology State Board Certification test. State licensing can be pursued once the required number of hours is obtained.

Certifications offered at BCAVTS include: Cosmetologist/PA Department of State, State Board of Cosmetology; S/P2-Cosmetology/S/P2; Nova Lash Eye Lash Extension Certification; and S/P2 Soft Skills.

PREREQUISITE(S): Students must purchase uniforms, equipment, and supplies as prescribed by the school.

CULINARY ARTS	
CREDIT: 3	MEETINGS PER WEEK: 5
GRADE(S): 10 - 12	LENGTH: Full Year

Culinary Arts is a three-year program where students will work in areas such as dining room operations, cooking, bakeshop, and pastry making. Students will be expected to work individually, in groups, and in a professional kitchen brigade preparing food for the school's restaurant, The Eatery, to experience a wide range of learning experiences in keeping with industry expectations. The food service industry is one of the nation's largest employers, and job opportunities abound for preparation cooks, sous chefs, executive chefs, bakers, pastry chefs, and front of the house positions including wait staff, managers, and food and beverage directors.

Students have the opportunity to earn ServSafe/Manager Food Safety Certification/National Restaurant Association; ServSafe Food Handler Certification/ServSafe; S/P2 Culinary/S/P2; S/P2 Culinary-Food Safety; and S/P2 Soft Skills certifications.

Additional details to certifications include: National Restaurant Association (On Cooking and On Baking) and American Culinary Federation (Intro to Hospitality-Food Service Industry; Intro to Hospitality-Baking & Pastry; Business & Math Skills; Food Prep; Garde Manager; Basic Baking; Bakery Planning & Preparation; Advanced Baking & Pastry; Basic Dining Room Service; Menu Planning; Purchasing & Receiving; Nutrition; Human Relations Management; and Environmental Sustainability).

PREREQUISITE(S): Students must purchase uniforms, equipment, and supplies as prescribed by the school.

DIVERSIFIED OCCUPATIONS	
CREDIT: 3	MEETINGS PER WEEK: 1
GRADE(S): 12	LENGTH: Full Year, or at least 150 Days

Diversified Occupations is a one-year, senior only class designed specifically for students to obtain transferable job skills across any discipline. While there are 15 other programs of study at BCAVTS, Diversified Occupations allows us to work with students to set up cooperative education placements in fields not offered at BCAVTS or when a program is fully enrolled. For example, we do not offer a program related to dental hygienists, however, we can place a student at a dental office under diversified occupations. Rather than focusing on the specific job skills needed to be a hygienist, the class itself focuses on subjects such as time management, understanding criticism, and budgeting. Unlike capstone, which is a co-op placement within a program of study we offer at BCAVTS, this class meets weekly on Tuesdays. All other days/shifts should reach at least 20 hours Monday through Friday, while still in accordance with state law. Time not spent at BCAVTS in this program is reserved for completing core coursework for graduation.

Certifications included in this program: S/P2 Training Certification in Human Resources and Soft Skills.

PREREQUISITE(S): Student should have a job prepared or lined up before signing up for this class, consistent transportation to and from work (license preferred), and a strong work ethic.

HEALTH ASSISTANT	
CREDIT: 3	MEETINGS PER WEEK: 5
GRADE(S): 10 - 12	LENGTH: Full Year

Health Assistant is a three-year program where students will be introduced to the field of health care with an emphasis on direct patient care. Instructional areas will include: anatomy; physiology; medical terminology; infection control; emergency procedures; patient care; and technological advancements in patient care. The expanded overview of the health care field allows students to explore, refine, and choose an area of specialization in health care after field trips, job shadowing experiences, and clinical rotations are taken.

Students who complete the Health Assistant program will have the opportunity to earn the following certifications: American Heart Association/BLS for Healthcare Providers; Heartsaver First Aid/American Heart Association; Medical Assisting Clinical and Clerical/American Medical Certification Association; Patient Care Technician/American Medical Certification Association; Certified Pharmacy Technician (CPhT)/National Healthcareer Association; Personal Care Home Direct Care Staff; Certificate/Pennsylvania Department of Human Services; Billing and Coding Specialist/American Medical Certification Association; and OSHA Occ Safety and Health Admin/(OSHA). Additional details to the certifications include: Department of Health Feeding Assistant; National Restaurant Association Educational Foundation Nutrition; Dean Vaughn Medical Terminology; American Medical Certification Association (Nursing Assistant and Medical Administrative Assistant); and S/P2 Soft Skills.

Students also have the opportunity to earn college credits though Butler County Community College. Accreditations are available through the American Medical Certification Association and National Healthcare Association.

HEAVY EQUIPMENT	
CREDIT: 3	MEETINGS PER WEEK: 5
GRADE(S): 10 - 12	LENGTH: Full Year

Heavy Equipment Repair is a three-year program where students will be introduced to maintenance and repair of medium/heavy duty trucks and construction equipment using state of the art mobile truck lifts and computer diagnostic software. Students will be given the opportunity to study a variety of repair scenarios on equipment, diesel and gasoline engine, transmissions, drivelines, differentials, steering and brake systems, as well as electrical, pneumatic, and hydraulic systems through both in-class learning and hand-on experience.

Students have the opportunity to obtain the following certifications: Section 609 Certification for Refrigerant Recycling and Recovery/Mobile Air Conditioning Society Worldwide; Certified Safety Inspector, Cat I/PA Department of Transportation; Certified Safety Inspector, Cat III/PA Department of Transportation; S/P2 Heavy Duty/S/P2; S/P2 Safety and Pollution Prevention/S/P2.

MACHINE TECHNOLOGY	
CREDIT: 3	MEETINGS PER WEEK: 5
GRADE(S): 10 - 12	LENGTH: Full Year

Machine Technology is a three-year program where students will be introduced to the skills used in the precision metalworking industry. Students will be instructed on how to develop a process plan, how to produce and/or repair parts, how parts fit and work together, how to use a variety of metal working equipment, how to program and produce products on the computer numerical controlled (CNC) machines, and how to make accurate quality control inspections. Skills obtained in this area can secure a high-paying career in manufacturing as well as transfer into four-year college engineering degrees. Machine Technology offers ten nationally recognized credentials through the National Institute for Metalworking Skills (NIMS) as well as up to 15 college credits from the Butler County Community College.

NIMS certifications include: CNC Milling: Programming Setup & Operations/National Institute for Metalworking Skills, Inc; CNC Turning: Programming Setup & Operations/ National Institute for Metalworking Skills, Inc; and Machining Level I (National Institute for Metalworking Skills, Inc, CNC Milling/ National Institute for Metalworking Skills, CNC Turning/ National Institute for Metalworking Skills, Manual Drill Press Operations/ National Institute for Metalworking Skills, Manual Milling/ National Institute for Metalworking Skills, Manual Surface Grinding/ National Institute for Metalworking Skills, Manual Turning Between Centers/ National Institute for Metalworking Skills, Manual Turning with Chucking/ National Institute for Metalworking Skills, Measurement, Materials and Safety/ National Institute for Metalworking Skills, Job Planning, Benchwork, Layout/ National Institute for Metalworking Skills).

PROTECTIVE SERVICES	
CREDIT: 3	MEETINGS PER WEEK: 5
GRADE(S): 10 - 12	LENGTH: Full Year

Protective Services is a three-year program where students will acquire knowledge and skills from the public safety areas of firefighting, emergency medical services, vehicle, rope, and confined space rescue, and law enforcement. Students can expect to receive instruction, participate in practical applications and situational learning experiences; and prepare to test for national, state, and local certifications. Through exploration and physical practice of skills presented in the curriculum, students can refine personal career opportunities and choose a specialization area in public safety.

Certifications include: BLS Healthcare Provider/American Heart Association; NIMS IS 100 Series/Emergency Management Institute; NIMS IS 200 Series/Emergency Management Institute; NIMS IS 700 Series/Emergency Management Institute; NIMS IS 800 Series/Emergency Management Institute; EMT/Pennsylvania Department of Health; Certificate of Training-Basic Rigging for Rope Rescue/Pennsylvania State Fire Academy; Certificate of Training-Basic Vehicle Rescue Awareness/ Pennsylvania State Fire Academy; Certificate of Training-Basic Vehicle Rescue Operations/ Pennsylvania State Fire Academy; Certificate of Training-Hazardous Materials First Responder Awareness/ Pennsylvania State Fire Academy; Certificate of Training-PA Essentials of Firefighting/ Pennsylvania State Fire Academy; Certificate of Training-Rope Rescue I/ Pennsylvania State Fire Academy; Certificate of Training-Rope Rescue II/ Pennsylvania State Fire Academy; OSHA Occ Safety and Health Admin/(OSHA) and S/P2 Soft Skills.

SPORTS MEDICINE	
CREDIT: 3	MEETINGS PER WEEK: 5
GRADE(S): 10 - 12	LENGTH: Full Year

Sports Medicine is a three-year program that will prepare students with a solid foundation in physical therapy, occupational therapy, and sports medicine. Students will develop skills in prevention, recognition, assessment, management, and rehabilitation of injuries. Students will learn the principles of designing exercise programs for healthy individuals and those who are in a rehabilitation phase after an accident or injury. Students will also learn how to develop proper diets through the essentials of nutrition. Upon successful completion, students will be prepared to assess injuries and illnesses, provide immediate and long-term care, determine the outlook, and design a basic rehabilitation program.

Students also have the opportunity to earn college credits through Butler County Community College, California University of Pennsylvania, Duquesne University, and Waynesburg University.

Certifications offered in this program are as follows: BLS Healthcare Provider (American Heart Association), Heartsaver First Aid (American Heart Association) ACSM Personal Trainer, AMCA Physical Therapy Aide, Concussion Wise-Sport Safety International, Bloodborne and Airborne Pathogens (National Safety Council) and S/P2 Professional Skills Training by Fusion.

WELDING	
CREDIT: 3	MEETINGS PER WEEK: 5
GRADE(S): 10 - 12	LENGTH: Full Year

Welding is a three-year program where students will be introduced to the application of technical knowledge and skills in shielded metal, gas tungsten, flux-core, and gas metal arc welding as well as mechanized and manual flame cutting and plasma cutting, along with Carbon Arc Gouging. Students learn safety practices, types and use of electrodes and welding rods, properties of metals, blueprint reading, electrical principals, welding symbols and mechanical drawing, Computer Numerical Control (CNC) programming, use of equipment for testing welds by ultrasonic methods and destruction and harness testing, visual examination of welds, use of manuals and specification charts, use of portable grinders for surface cleaning, positioning and clamping, measurement, shop math, basic fabrication skills and welding standards established by the American Welding Society and The American Petroleum Institute.

Students are eligible for certification from the American Welding Society in mild steel, aluminum, and stainless steel. Certifications offered at BCAVTS include: Certified Welder/American Welding Society; and S/P2 Welding/S/P2. Certifications offered at BCAVTS include Certified Welder/American Welding Society D1.1 SMAW, FCAW GMAW: 1G, 2G, 3G, 4G and Groove without backing. Pipe: SMAW API 1104 & ASME Section VIII., GTAW: ASME Section IX plate to pipe with or without backing., Safety: S/P2 Welding/Safety/Soft Skills, Oxy/Fuel Safety and Operation card and S/P2 Soft Skills.