



CAREER MAJORS (CIP CODES)

Steel Center offers 18 career majors. Each major is based on state and/or locally approved curricula, inclusive of written (theoretical) activities, performance tasks, demonstration of work ethic, and professionalism. For each major, students may earn three (3) or more Carnegie Units (credits) per year, depending on local sending school district policies for credit acquisition. Students may also earn industry certifications and college credit in their respective programs. Steel Center's career majors are as follows, listed alphabetically by local title and accompanied by Pennsylvania Classification of Instructional Program (CIP) codes:

Advertising & Design (Program of Study)

Grades 10-12

CIP Code: 50.0402, 3 or more credits/year.

Industry Certifications Available: Adobe Certified Associate CS6 Photoshop, InDesign, Illustrator, & Pennsylvania Skills Certification

An instructional program in the applied visual arts that prepares individuals to use artistic techniques to effectively communicate ideas and information to business and consumer audiences via illustrations and other forms of printed media. This program includes instruction in concept design, layout, paste-up and techniques such as engraving, etching, silkscreen, lithography, offset, drawing and cartooning, painting, collage and computer graphics.

Automotive Technology (Program of Study)

Grades 10-12

CIP Code: 47.0604, 3 or more credits/year.

Industry Certifications Available: Pennsylvania State Automotive Safety Inspection, Pennsylvania State Emissions Inspection and EPA, & Pennsylvania Skills Certification

An instructional program that prepares individuals to apply technical knowledge and skills to engage in the servicing and maintenance of all types of automobiles and light trucks. This program includes instruction in the diagnosis and testing, including computer analysis, of malfunctions in and repair of engines, fuel, electrical, cooling and brake systems and drive train and suspension systems. Instruction is also given in the adjustment and repair of individual components and systems such as cooling systems, drive trains, fuel system components and air conditioning and includes the use of technical repair information and the state inspection procedures.

Baking/Pastry Chef (Program of Study)

Grades 10-12

CIP Code: 12.0501, 3 or more credits/year.

Industry Certifications Available: ServSafe Manager Food Safety, ServSafe Food Handler, S/P2 Culinary Safety and Pollution Prevention, & Pennsylvania Skills Certification

Specialized classroom and practical work experiences associated with the preparation of breads, crackers, cakes, pies, pastries and other bakery products for retail distribution, for consumption in a commercial food service establishment or for special functions. Instruction includes making, freezing and handling of bake products; decorating; counter display; and packaging of merchandise. This is a comprehensive program to prepare individuals for employment in a variety of occupations in the baking industry.

Building Trades Maintenance (Program of Study)

Grades 10-12

CIP Code: 46.0401, 3 or more credits/year.

Industry Certifications Available: Pennsylvania Builder's Association Certification (PBA), OSHA-10 Hour Training CareerSafe, & Pennsylvania Skills Certification

An instructional program that prepares individuals to apply technical knowledge and skills to keep a building functioning, and to serve a variety of structures including commercial and industrial buildings and mobile homes. Instruction includes the basics of carpentry, millwork, plumbing, painting, glazing, electricity, plastering, welding, minor sheet metal, concreting, bricklaying, tile setting, hardware usage, heating, ventilation, waterproofing, roofing and record keeping.

Carpentry (Program of Study)

Grades 10-12

CIP Code: 46.0201, 3 or more credits/year.

Industry Certifications Available: Pennsylvania Builder's Association Certification (PBA), OSHA 10 Hour Training CareerSafe, & Pennsylvania Skills Certification

An instructional program that prepares individuals to apply technical knowledge and skills to lay out, fabricate, erect, install and repair structures and fixtures using hand and power tools. This program includes instruction in common systems of framing, construction materials, estimating, blueprint reading and finish carpentry techniques.

Collision Repair and Refinishing (Program of Study)

Grades 10-12

CIP Code: 47.0603, 3 or more credits/year.

Industry Certifications Available: S/P2 Collision Safety and Pollution Prevention, & Pennsylvania Skills Certification

An instructional program that prepares individuals to apply technical knowledge and skills to repair damaged automotive vehicles such as automobiles and light trucks. Students learn to examine damaged vehicles and estimate cost of repairs; remove, repair and replace upholstery, accessories, electrical and hydraulic window and seat operating equipment and trim to gain access to vehicle body and fenders; remove and replace glass; repair dented areas; replace excessively damaged fenders, panels and grills; straighten bent frames or unibody structures using hydraulic jacks and pulling devices; and file, grind and sand repaired surfaces using power tools and hand tools. Students refinish repaired surfaces by painting with primer and finish coat.

Computer Technology (Program of Study)

Grades 10-12

CIP Code: 15.1202, 3 or more credits/year.

Industry Certifications Available: A+ Certification, Network+ Certification, & Pennsylvania Skills Certification

An instructional program that prepares individuals to apply basic engineering principles and technical skills in support of professionals who use computer systems. This program includes instruction in basic computer design and architecture, programming, problems of specific computer application, component and system maintenance and inspection procedures, hardware and software problem diagnosis and repair and report preparation.

Cosmetology Career & Technical Articulation Agreement with Douglas Education Center)

Grades 10-12

CIP Code: 12.0401, 3 or more credits/year.

Industry Certifications Available: Cosmetology License, Manicurist, Esthetician, & Pennsylvania Skills Certification

An instructional program that prepares individuals to apply technical knowledge and skills related to experiences in a variety of beauty treatments including the care and beautification of the hair, complexion and hands. Instruction includes training in giving shampoos, rinses and scalp treatments; hair styling, setting, cutting, dyeing, tinting and bleaching; permanent waving; facials; manicuring; and hand and arm massaging. Bacteriology, anatomy, hygiene, sanitation, salon management including record keeping and customer relations are also emphasized. Instruction is designed to qualify pupils for the licensing examination.

Culinary Arts (Program of Study)

Grades 10-12

CIP Code: 12.0508, 3 or more credits/year.

Industry Certifications Available: ServSafe Manager Food Safety, ServSafe Food Handler, S/P2 Culinary Safety and Pollution Prevention, & Pennsylvania Skills Certification

An instructional program that prepares students for employment related to institutional, commercial or self-owned food establishments or other food industry occupations. Instruction and specialized learning experiences include theory, laboratory and work experience related to planning, selecting, preparing and serving of quantity food and food products; nutritive values; use and care of commercial equipment; safety; and sanitation precautions. Instruction skills are provided to individuals desiring to become employed in all areas of the food service industry at entry level.

Diesel Technology (Program of Study)

Grades 10-12

CIP Code: 47.0613, 3 or more credits/year.

Industry Certifications Available: Pennsylvania State Automotive Safety Inspection, Pennsylvania State Emissions Inspection and EPA, SP/2 Heavy Duty Safety and Pollution Prevention, & Pennsylvania Skills Certification

A program that prepares individuals to apply technical knowledge and skills to the specialized maintenance and repair of trucks, buses, and other commercial and industrial vehicles. Includes instruction in diesel engine

mechanics, suspension and steering, brake systems, electrical and electronic systems, preventive maintenance inspections, drive trains, HVAC systems, and auxiliary equipment installation and repair.

Electrical Construction (Program of Study)

Grades 10-12

CIP Code: 46.0399, 3 or more credit/year.

Industry Certifications Available: Pennsylvania Builder's Association Certification (PBA) & Pennsylvania Skills Certification

An instructional program that prepares individuals to apply technical knowledge and skills necessary to install, operate, maintain and repair electrically-energized residential, commercial and industrial systems, and DC and AC motors, controls and electrical distribution panels. Instruction emphasizes practical application of mathematics, science, circuit diagrams and use of electrical codes and includes blueprint reading, sketching and other subjects essential for employment in the electrical occupations. Reading and interpretation of commercial and residential construction wiring codes and specifications, installation and maintenance of wiring, service and distribution networks within large construction complexes are also critical components of the program.

Exercise Science and Rehabilitation Services (Career & Technical) – NEW 2021-2022 SCHOOL YEAR **Grades 10-12**

CIP Code: 51.2604, 3 or more credits/year.

Industry Certifications Available: To be determined, but may include the following: American Heart Association (AHA) Heartsaver First Aid, AHA CPR, HIPAA Certification, American Medication Certification Association (AMCA) Physical Therapy Aide, & Pennsylvania Skills Certification

A program that prepares individuals to assist in rehabilitation services under the supervision of physical therapists, occupational therapists, speech-language pathologists, and other therapeutic professionals, and to perform routine functions in support of rehabilitation. Includes instruction in roles and responsibilities of rehabilitation providers, basic function of the human body, disabling conditions, therapeutic skills, client management, and communication skills.

Health Assistants (Program of Study)

Grades 10-12

CIP Code: 51.0899, 3 or more credits/year.

Industry Certifications Available: Patient Care Technician/PCT, Basic Life Support Health Care Providers, & Pennsylvania Skills Certification

A cluster program with a combination of subject matter and experiences designed to prepare individuals for entry-level employment in a minimum of three related health occupations under the supervision of a licensed health care professional. Instruction consists of core course content with clinical experiences in one or two health related occupations. The core curriculum consists of planned courses for introduction of health careers, basic anatomy and physiology, medical terminology, legal and ethical aspects of health care and communications and at least three planned courses for the knowledge and skills for the occupational area such as medical assisting, ward clerk, nursing assisting, etc.

Heating, Ventilation, Air Conditioning & Refrigeration (Program of Study)**Grades 10-12*****CIP Code: 47.0201, 3 or more credits/year.***

Industry Certifications Available: EPA 608 Technician Certification, Pennsylvania Builder's Association Certification (PBA), & Pennsylvania Skills Certification

An instructional program that prepares individuals to apply technical knowledge and skills to install, repair and maintain commercial and domestic heating, air conditioning and refrigeration systems. Instruction includes theory and application of basic principles involved in conditioning of air (cooling and heating); filtering and controlling humidity; operating characteristics of various units and parts; blueprint reading; use of technical reference manuals; the diagnosis of malfunctions; overhaul, repair and adjustment of units and parts such as pumps, compressors, valves, springs and connections; and repair of electric/electronic and pneumatic control systems.

Medical Professions (Program of Study) – NEW 2021-2022 SCHOOL YEAR**Grades 10-12*****CIP Code: 51.9999, 3 or more credits/year.***

Industry Certifications Available: To be determined, but may include the following: Basic Life Support (BLS), Pharmacy Technician (CPhT), EKG Technician (CET), Phlebotomy Technician (CPT), Nurse Technician (CNT), & Pennsylvania Skills Certification

An instructional program that prepares individuals to apply knowledge and skills in the health occupations. Instruction is provided in the basic skills in a variety of areas associated with health occupations such as health and medical services, pharmaceutical and medical instruments and supplies. Instruction includes but is not limited to foundations of health (medical terminology); anatomy and physiology; legal, ethical and economic aspects of health care; clinical laboratory procedures; basic health occupational skills; aseptic techniques; OSHA regulations; and infection control. Clinical education is an integral part of the program. Science and math taught by certificated science and math teachers will be coordinated and deemed essential for students to successfully reach their career objectives.

Public Safety (Career & Technical Articulation Agreement with Penn Commercial Business/Technical School) Grades 10-12***CIP Code: 51.0904, 3 or more credits/year.***

Industry Certifications Available: Emergency Medication Technician, National Incident Management System, Basic Life Support Health Care Providers & Hazardous Materials Response Awareness

A program that prepares individuals, under the remote supervision of physicians, to recognize, assess, and manage medical emergencies in prehospital settings and to supervise ambulance personnel. Students will learn about basic, intermediate, and advanced EMT procedures; emergency surgical procedures; medical triage; rescue operations; crisis scene management and personnel supervision; equipment operation and maintenance; patient stabilization, monitoring, and care; drug administration; identification and preliminary diagnosis of diseases and injuries; communication and computer operations; basic anatomy, physiology, pathology, and toxicology; and

professional standards and regulations. Students will also learn fundamentals of police operations and fire protection, as well as technical and vehicle rescue. Physical development and self-confidence are emphasized due to the nature of the specific occupation(s) associated with public safety.

Veterinary Assistant (Program of Study) – NEW 2021-2022 SCHOOL YEAR
CIP Code: 01.8301, 3 or more credits/year.

Grades 10-12

Industry Certifications Available: To be determined, but may include the following: OSHA-10 Health Careers, CPR, Pet Tech First Aid, Purina Weight Coach, & Pennsylvania Skills Certification

An instructional program that prepares individuals to support veterinarians by providing assistance during animal examinations, treatment administration and monitoring; by keeping animal and related health record information; and by performing a range of selected practice-related duties. This program is designed to provide instruction in preparing the animal for examination and treatment, sterilizing equipment and performing selected routine laboratory procedures under direct supervision of the veterinarian. Instruction also includes maintaining medical and business records, charting and scheduling activities and a wide range of practice-related duties as applied to animal health care, the biomedical field and the pet industry. The health occupational planned courses include the study of life sciences with emphasis on animal anatomy, physiology, diseases, reproduction, genetics, nutrition, animal laboratory procedures, aseptic technique, OSHA regulations, infection control and procedures. Clinical education is an integral part of the program. Science and math taught by certificated science and math teachers will be coordinated and deemed essential for students to successfully reach their career objectives.

Welding (Program of Study)

Grades 10-12

CIP Code: 48.0508, 3 or more credits/year.

Industry Certifications Available: AWS Certification, SP/2 Welding Safety Pollution and Prevention, & Pennsylvania Skills Certification

An instructional program that prepares individuals to apply technical knowledge and skills in gas, arc, shielded and non-shielded metal arc, brazing, flame cutting and plastic welding. Hand, semi-automatic and automatic welding processes are also included in the instruction. Students learn safety practices and types and uses of electrodes and welding rods; properties of metals; blueprint reading; electrical principles; welding symbols and mechanical drawing; use of equipment for testing welds by ultrasonic methods and destruction and hardness testing; use of manuals and specification charts; use of portable grinders and chemical baths for surface cleaning; positioning and clamping; and welding standards established by the American Welding Society, American Society of Mechanical Engineers and American Bureau of Ships.