



Hudson School District Curriculum Overview

Wilbur H. Palmer Career & Technical Education Center

Learning at the Wilbur H. Palmer Career & Technical Education Center is designed to go beyond the traditional classroom, teaching students theory, then bringing them out to the lab, workshop or worksite for real-world application. This blend of rigorous academics and applied learning provides students the opportunity to explore their interests, talents, and ambitions in a dynamic and interactive setting.

CTE programs provide students the opportunity to become professionally skilled, college and/or career- (workplace-) ready, focused and engaged in a course of study that develops and assesses their understanding of tools and systems and the ability to problem-solve, and provides opportunities to apply skills and knowledge in a practical and meaningful way.

The Palmer CTE Center offers the following programs of study:

Accounting

This program introduces students to the complete accounting cycle for a merchandising business. Students use a variety of computer software applications to master skills and apply financial concepts. Computerized accounting projects are used to simulate real world applications and the Virtual Business software gives students an opportunity to build and manage their own business from the ground up. This program is strongly recommended for college-bound students planning to major in business.

Culinary Arts

The Palmer Center's Culinary Arts program prepares students for an exciting career in the food service industry. Students learn cooking and baking techniques; creating a balanced menu; and executing customer service skills at the center's brand new "Barnyard Cafe." In this two-year program, students learn about proper storage and sanitation procedures, nutrition, and basic knife skills. Students have the opportunity to become ServSafe certified while in high school. Students have the knowledge and confidence needed to succeed in the workplace or to further their education in culinary arts.

Heavy Duty Mechanics

Prepare to tackle countless mechanical challenges on the job and in everyday life. Learn useful skills in gas and arc welding, hydraulics, and engine overhaul. Using both hand and power tools, investigate the areas of engines, transmissions, power trains, cooling systems, ignition wiring, and fuel systems as students explore preventive maintenance, troubleshooting techniques, and equipment repair on gas and diesel equipment. In the second year of the program students troubleshoot diesel engines with a state of the art diagnostic computer. With a solid experience in mechanics, students are better prepared to continue their education or go right to work after graduation. Students have the opportunity to participate in the OSHA 10 training and become certified.

Air Force JROTC

This program consists of aerospace science, leadership education and wellness. Academic studies include history, space and science. Leadership studies include Air Force management, communication skills, life skills and management studies. Students will participate in wellness activities as well.

Digital Media

In The Palmer Center’s digital media program, students develop a good theoretical understanding of the systems and equipment used in the graphics and web technology design industry. Students work with a variety of programs used to create digital media including Photoshop; Illustrator; InDesign; Dreamweaver; Flash; HTML5; CSS33 and an introduction to digital music mixing and movie creation.

Marketing

In The Palmer Center’s marketing program, students have the opportunity to apply marketing skills in both the classroom and in a variety of retail as well as commercial lab settings. Learn the basics of planning, promotion, financial management, economics, people skills, technology, inventory control, and buying and selling as students practice the real world skills of merchandising and marketing. Students are invited to join DECA, an organization of emerging leaders and entrepreneurs who are studying marketing, finance, hospitality, and management. This organization provides numerous leadership, networking, and professional development opportunities for student members.

Careers in Education

Do you enjoy working with children? If yes, then Alvirne's Careers in Education is the place to be! Students learn through a combination of multi-disciplinary instruction and hands-on learning experiences in classrooms throughout the school district. The goal of the Careers in Education program is to provide students with a variety of experiences to allow them to select a career path before entering college. By the end of the two year program, students can earn 7 college credits which transfer to any college or university. All students participate in the Educators Rising student organization which includes training and service opportunities as well as a chance to compete in local, state and national competitions. Upon graduation, students are ready to make a lasting difference in the lives of those they teach and in the field of education.

Drafting and Design

Students will learn basic and advanced drafting skills using AutoCAD, Inventor and REVIT and manufacture designs with a 3D printer using 3D Parametric software. Students design innovative projects that incorporate structural design and advanced technological design. Students are prepared for college and entry-level careers in drafting, mapping, construction, manufacturing or engineering.

Natural Resources

If students choose to enter a career in the outdoors upon graduation, they are ready with an understanding of natural resource management and conservation, forest ecosystem processes, environmental law and economics, forest health issues, and forest and wildlife ecology. The program utilizes the 100-plus acres of Alvirne's registered tree farm as a laboratory for operating forest equipment, managing, and studying forest ecosystems. Students completing the forest and wildlife management program are well prepared to gain entry-level work in resource conservation or arboriculture, or to continue their education at the postsecondary level in forest and wildlife management, or environmental science and conservation.

Computer Science

Learn fundamental concepts and processes of computer science through fun learning experiences that include graphical and computational programming. Students will learn and apply programming techniques utilizing multiple programming languages and tools to prepare them for a computer science major in college or entry-level jobs in computer programming.

Engineering

Project Lead The Way (PLTW), a national program where students understand the relevance of math and science by engaging in hands-on, real world projects. Students understand how the skills they are learning in the classroom can be applied in everyday life. Students develop many of the skills professionals need to succeed in today's economy. Some examples include problem solving, research and design, and data collection and analysis skills. It also provides study skills for time management as well as resource management. Students gain an understanding of the potential impact their ideas and products may have on society. It is a solid foundation for college study in engineering.

Veterinary Science

The Veterinary Science program prepares students for further education or employment in the animal care field. Students will explore both large and small animal practices in this two year program and gain firsthand experience in safety, animal behavior, handling and restraint techniques, grooming, medical terminology, kennel skills, animal health and disease, and record keeping by working with animals in the small animal facility and large animals on the school farm. Practice advanced skills in areas such as vaccination, deworming, physical exams, nutrition and feed analysis, first aid and veterinary laboratories.

Construction

Exciting careers in construction begin with the skills students learn as part of The Palmer Center's Construction Program. Students learn to estimate materials and perform the layout and construction themselves. This two-year program includes site selection, surveying, excavation, design, foundation work, framing, insulation, plumbing, wiring, drywall, painting and finish trim work. Students leave construction with skills that can put them way ahead of the competition for construction jobs. Students have the opportunity to participate in the OSHA 10 training and become certified.

Health Science and Technology

This two-year program is designed to introduce potential health care workers to the careers available in the health field. Students will learn basic health care skills such as vital signs, taking blood pressures, CPR and first aid. Participate in the Licensed Nursing Assistant program, or choose an area of interest and complete clinical hours, such as physical therapy, dental hygiene, and recreational therapy. Interact with the elderly population at the Gateways Adult Day Service program located at The Palmer Center. Students are members of HOSA (Health Occupation Students of America), participate in blood drives, and are eligible to attend and compete at the State Leadership Conference. With the skills learned in Health Science, students are better prepared for college or employment.

Welding and Fabrication

Students will be prepared for entry level employment or further study in the fields of welding and fabrication. In this two-year program, learn arc, gas, brazing, MIG and TIG welding. Includes OSHA 10 safety training and certification.