Butler Tech In Your School

Discover
PLTW – ENGINEERING

Butler Tech in Ross Local Schools

Industry Overview

Whether a student is curious to understand more about engineering, has decided to pursue a career, or simply wants to think critically, work collaboratively, and explore how math and science work in his or her everyday life, Project Lead The Way's Pathway to Engineering program provides a track for success. Students engage in open-ended problem solving, learn and apply the engineering design process, and develop vital teamwork, communication, and critical-thinking skills.

Throughout the courses, students use the same industry leading technology and software as the world's top companies. These courses provide students who are interested in exploring careers in various types of Engineering and Manufacturing, an avenue in high school to take PLTW courses for high school credit as a preparation for careers or post-secondary study in STEM fields.

Coursework

- Automation and Robotics
- Civil Engineering and Architecture
- Engineering Design
- Introduction to Engineering Design

Butler Tech PTLW – Engineering Course offerings at Ross

Automation and Robotics

Automation and Robotics students trace the history, development, and influence of automation and robotics. They learn about mechanical systems, energy transfer, machine automation and computer control systems. Students use VEX (a robust robotics platform) to design, build, and program a solution to solve an existing problem.

Civil Engineering and Architecture

Civil Engineering and Architecture is the study of the design and construction of residential and commercial building projects. The course includes an introduction to many of the varied factors involved in building design and construction including building components and systems, structural design, storm water management, site design, utilities and services, cost estimation, energy efficiency, and careers in the design and construction industry. The major focus of the CEA course is to expose students to the design and construction of residential and commercial building projects, design teams and teamwork, communication methods, engineering standards, and technical documentation.

Engineering Design

Collaboration makes things happen! In this capstone course, students will work as part of a team to develop a solution to a technical problem of your choosing. They challenges themselves with one of those "don't you hate it when..." issues of the world and try to solve it. Or see a need in their high school or community and find a way to meet that need. They research, design, test, and construct their solution or recommendations, then present it to industry or community partners. They and their team will use what they've already learned to guide them through the process of design and product development.

Introduction to Engineering Design

Introduction to Engineering Design (IED) is a high school level course that is appropriate for students who are interested in design and engineering. The major focus of the IED course is to expose students to design process, research and analysis, teamwork, communication methods, global and human impacts, engineering standards, and technical documentation. IED gives students the opportunity to develop skills and understanding of course concepts through problem-based learning.

"Project-based instruction allows students to learn through hands-on activities. As the students grow, it is exciting to see students take ownership and control of their learning through student selected projects."
Instructor, ***PLTW – Engineering***

Discover PLTW - Engineering through Butler Tech and pursue a career that's right for you.

Butler Tech connects high school students to career technical education in more ways than ever. Complete your traditional academic courses in your school and enhance your educational experience with career-focused labs and on-the-job training. Each moment in a Butler Tech career technical course is a step toward building your future.

Butler Tech

See your guidance counselor for registration information.

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