

Discover PLTW – ENGINEERING

Program 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.

This Engineering Pathway offered by Butler Tech at MHS is a follow-up to the entry-level STEM classes that were offered at MMS.

bt Butler
Tech
in Middletown City
Schools

Coursework

- Introduction to Engineering Design
- Principles of Engineering
- Computer Integrated Manufacturing
- Computer Engineering and Architecture



"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



Butler Tech PTLW – Engineering Course offerings at Middletown

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.

Principles of Engineering

Principles of Engineering exposes students to some of the major concepts in a college level engineering course of study. Go beyond “myth-busting” to solution building. As students master the basic concepts needed to continue their education in engineering or engineering technology, they will apply them, tackling real world challenges. Students will team up to test and share their developing skills through hands-on projects and presentations.

Computer Integrated Manufacturing

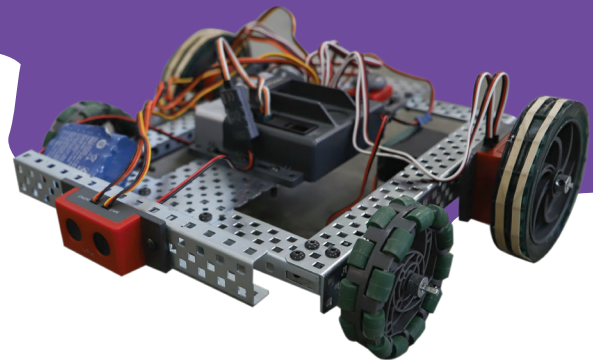
Computer Integrated Manufacturing is the study of manufacturing planning, integration, and implementation of automation. The course explores manufacturing history, individual processes, systems, and careers. In addition to technical concepts, the course incorporates finance, ethics, and engineering design. This reflects an integrated approach that leading manufacturers have adopted to improve safety, quality, and efficiency.

Computer 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.

“I’ve learned so much in this class and have a great idea of what I want to pursue in my future.”

Student, PLTW – Engineering



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.

Discover

PLTW – Engineering through Butler Tech and pursue a career that’s right for you.



See your guidance counselor for registration information.

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