

The Project Lead The Way (PLTW) curriculum is designed as a four-year high school sequence that is taught in conjunction with traditional math and science courses. The program is divided into five rigorous, relevant, reality-based courses:

9th Grade - Intro to Engineering Design

Students dig deep into the engineering design process, applying math, science, and engineering standards to hands-on projects. They work both individually and in teams to design solutions to a variety of problems using 3-D modeling software and use an engineering notebook to document their work. Below, students visit NASA and learn about the James Webb Space Telescope.



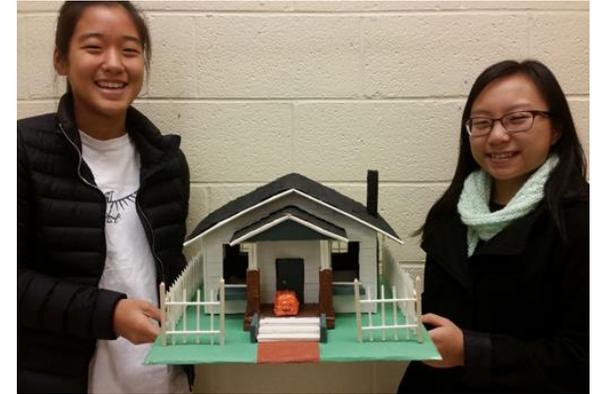
10th Grade - Principles of Engineering

Students explore a broad range of engineering topics, including mechanisms, the strength of structures and materials, and automation through problems that engage and challenge. Students develop skills in problem solving, research, and design while learning strategies for design process documentation, collaboration, and presentation.



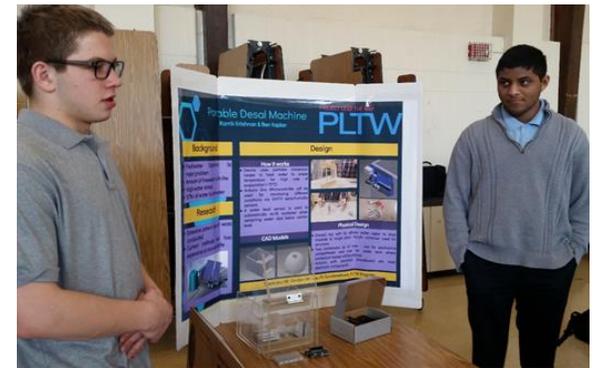
11th Grade - Digital Electronics

This course provides a foundation for students who are interested in electrical engineering, electronics, or circuit design. Students study topics such as combinational and sequential logic and are exposed to circuit design tools used in industry, including logic gates, integrated circuits, and programmable logic devices.



11th Grade - Civil Engineering and Architecture

Students learn important aspects of building and site design and development. They apply math, science, and standard engineering practices to design both residential and commercial projects and document their work using 3D architecture design software.



Senior students present their senior projects during our Engineering Week Celebration in February.

12th Grade - Engineering Design and Development

The knowledge and skills students acquire throughout PLTW Engineering come together as they identify an issue and then research, design, and test a solution, ultimately presenting their solution to a panel of practicing engineers. Students apply the professional skills they have developed to document a design process, and they complete EDD ready to take on any post-secondary program or career.

Institutions where the PLTW Class of 2018 were accepted:

- Arizona State University
- Boston College
- Bucknell University
- Case Western Reserve University
- Christopher Newport University
- Clemson University
- Colorado School of Mines
- Drexel University
- Embry–Riddle Aeronautical University
- Indiana University Bloomington
- Lehigh University
- Michigan State University
- Pennsylvania State University
- Purdue University
- Rensselaer Polytechnic Institute
- Rochester Institute of Technology
- Saint Francis University
- Texas A&M University
- The Ohio State University
- United States Military Academy
- University of Illinois at Urbana-Champaign
- University of Maryland
- University of North Carolina
- University of Pittsburgh

- University of South Carolina
- University of Southern California
- University of Toronto Mississauga
- University of Washington
- Villanova University
- Virginia Polytechnic Institute and State University
- Wesleyan University

The PLTW Program at
Poolesville High School was awarded the
Outstanding Program of Excellence
Award for 2014 from TEEAM
(Technology and Engineering Educators
Association of Maryland)

PLTW students may receive college credit for
high school courses.

Joining PLTW at PHS

Contact your PHS counselor and enroll in
the freshman class,

Introduction to Engineering Design

For more information contact
PHS PLTW Instructors:

Keith Gordon at

Keith_C_Gordon@mcpsmd.org

David Hill at

David_R_Hill @mcpsmd.org

Denita Weber at

Denita_J_Weber@mcpsmd.org

Terry Young at

Terry_W_Young@mcpsmd.org

Also visit: www.pltw.org

Project Lead The Way is a national program
and is the nation's leading provider of K-12
STEM programs.



PHS students visit Fallingwater, a Frank
Lloyd Wright home in Mill Run, PA.

Advanced Engineering Program

At

Poolesville High School
17501 West Willard Road
Poolesville, MD 20837
(240)-740-2400