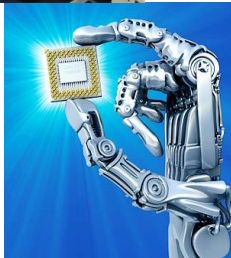


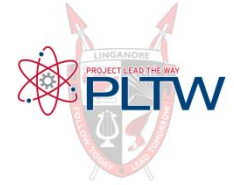
Welcome to the innovation zone

The **PLTW Innovation Zone** (the classroom) is an engaging and thought-provoking place, where students develop critical thinking skills through hands-on project based learning, preparing them to take on real-world challenges.

Students will have the opportunity to create, design and build things like robots and bridges, applying what they are learning in math and science to the world's grand challenges.



Not just an innovative and rigorous STEM course but a pathway to the future

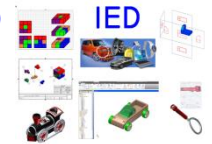


Engineering

The **PLTW Pathway to Engineering Program** is a curriculum that is designed to encompass all four years of high school. Foundation courses are supplemented by capstone courses. Activities are hands-on and project based.

IED (course #497011) foundation course (*Meets State Technology Credit & weighted course*) **Introduction to Engineering Design**

Students use 3D modeling software to design solutions through a process to solve proposed problems. They will learn how to document and communicate their solutions.



POE (course #497000) foundation course (*weighted course*) **Principles of Engineering**

This survey course of engineering exposes students to some of the major concepts they'll encounter in postsecondary engineering courses. Students employ engineering and scientific concepts in the solution of engineering design problems.



DE (course #4970301) specialized (*weighted course*) **Digital Electronics**

This course is the study of electronic circuits that are used to process and control digital signals that are used in all modern electronic devices. The major focus is to expose students to the process of combinational and sequential logic.



CEA (course #4970401) specialized (*weighted course*) **Civil Engineering and Architecture**

The major focus of this course is completing long-term projects that involve the development of property sites as a simulation and as a model. Students work in teams to learn the characteristics of civil engineering and architecture.



EDD (course #497001) capstone (*weighted course*) **Engineering Design and Development**

This capstone course allows students to design a solution to a technical problem of their choosing. Students will learn the research process of engineering and how to patent a design once it has been proven. This course allows students to apply all of their acquired skills from previous courses.



Get ready to ignite the most powerful thing you have
your imagination

The PLTW high school STEM education program provides the inspiration for a new generation of innovators, the practical skills and hands-on experience to make students' knowledge count in the real world, and the basis for the next generation of leadership in the sciences, technology, engineering, and mathematics.

PLTW develops motivated, well rounded students by instilling confidence, stressing the importance of self-discovery, encouraging innovative problem solving and critical thinking, teaching team building, and rewarding creativity.



SUCCESS

Students will develop skills essential for achievement in the classroom and success in college and at future employment.

PLTW students achieve significantly **higher scores** in reading, mathematics, and science.

PLTW graduates earn **higher GPAs** as college freshmen.

PLTW **graduates** are 5 to 10 times more likely to study engineering and technology.

PLTW program qualifies as a **completer program** for graduation.

PLTW program offers **college credit** for each class.

PLTW courses are all weighted as honors

CERTIFIED INSTRUCTORS

Mark Lastova (Dept. Chair): **IED, CEA, EDD**
240-566-9812 **Master IED Instructor**

Patrick Greene: **IED, POE, DE**
240-566-9744

Contact the Guidance Counselors at:
240-566-9730

LINGANORE HIGH SCHOOL HIGH SCHOOL

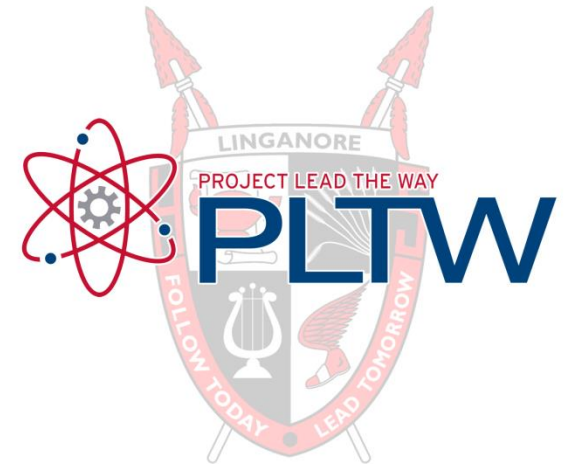
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**PROJECT LEAD THE WAY
Honors Academy**

at

LINGANORE HIGH SCHOOL

Igniting Imagination and Innovation Through Learning



Educating Today for Tomorrow's Future

