PROJECT LEAD THE WAY® (PLTW)

PLTW IS A HANDS-ON, PROJECT AND PROBLEM-BASED APPROACH THAT ADDS RIGOR TO TRADITIONAL TECHNICAL PROGRAMS AND RELEVANCE TO TRADITIONAL ACADEMICS. 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.

PLTW PROGRAMS:

-MEET NATIONAL STANDARDS FOR MATHEMATICS, SCIENCE, TECHNOLOGY EDUCATION, AND ENGLISH LANGUAGE ARTS.
-OFFER A COMPLETE CAREER/TECHNICAL CONCENTRATION WITH AN EMPHASIS ON BOTH MATHEMATICS AND SCIENCE.
-FOCUS STUDENTS ON ONE PROJECT OVER AN EXTENDED PERIOD OF TIME WHILE WORKING COOPERATIVELY AND EFFECTIVELY AS A CLASS OR IN A SMALL GROUP.
-INTEGRATE MATHEMATICS, SCIENCE, TECHNOLOGY, AND ENGLISH LANGUAGE ARTS SKILLS TO SOLVE COMPLEX PROBLEMS.

ENGINEERING INSTRUCTORS:

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Escambia County Public Schools does not discriminate on the basis of race, color, religion, sex, age, national origin, disability, genetic information, or marital status in its employment practices or in the admission and treatment of students.

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THE WEST FLORIDA WAY

West Florida High School of Advanced Technology is an innovative high school focused on providing a unique, comprehensive, useful education that will lead to lifelong personal, career, and professional accomplishments. WFHS is looking for students who are motivated, ambitious, and eager to succeed in college and/or career fields.

WFHS ENGINEERING ACADEMY
ESI SHANNON, PRINCIPAL
150 E. Burgess Road
Pensacola, FL 32503

West Florida High School of Advanced Technology

AEROSPACE ENGINEERING/CIVIL ENGINEERING AND ARCHITECTURE



Civil Engineering & Architecture

Civil Engineering & Architecture (CEA) is a specialization course of study in PLTW's high school pre-engineering program. The course applies and concurrently develops secondary level knowledge and skills in mathematics, science, and technology. Students will explore the fields of civil engineering and architecture, with an emphasis on the interrelationship and dependence of both fields. Topics include the role of civil engineers and architects, project planning, site planning, building design, and project documentation and presentation. Students will have the opportunity to earn certification in Autodesk Certified User Revit for Architecture.

Courses:

- **9th Grade** - Introduction to Engineering Design
- **10th Grade** - Principles of Engineering
- **11th Grade** - Digital Electronics
- **12th Grade** - Civil Engineering & Architecture

Academy Course Offerings:

Introduction to Engineering Design is a course that introduces students to the engineering design process. Students will use 3D design software to design and build course projects and have the opportunity to earn a certification in Autodesk Certified User Fusion 360.

Principles of Engineering is a course that helps students understand the field of engineering and engineering technology.

Digital Electronics is a course in applied logic that encompasses the application of electronic circuits and devices.

Civil Engineering & Architecture is an overview of the fields of Civil Engineering and Architecture. Students will explore various aspects of civil engineering and architecture and will apply their knowledge to the design and development of residential and commercial structures. This course includes an introduction to many of the varied factors involved in building design and the construction of residential and commercial facilities. Students will use 3D design software to design and document solutions for major course projects.

Aerospace Engineering is a specialization course focusing on hands-on engineering projects and problems developed with NASA: students learn about aerodynamics, astronautics, space-life sciences, and system engineering (which includes the study of intelligent vehicles, like Mars Rovers, Sprint, and Opportunity).

Aerospace Engineering

The Aerospace Program curriculum is a rigorous four-year sequence of courses. This program exposes students to the world of aeronautics, flight, and engineering. Students are engaged in engineering design problems related to aerospace information systems, astronautics, rocketry, propulsion, the physics of flight, space life sciences, principles of aeronautics, and systems engineering. 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.

Courses:

- **9th Grade** - Introduction to Engineering Design
- **10th Grade** - Principles of Engineering
- **11th Grade** - Digital Electronics
- **12th Grade** – Aerospace Engineering

