

Are You Thinking About a S.T.E.M Career? How about PLTW?

Science, Technology, Engineering, and Mathematics, or **STEM** for short, are the careers that demand the highest salaries now and into the future. Are you hands on? Do you like to think outside the box? Are you imaginative? Do you like to solve problems in unconventional ways? Do you like to apply what you learn to real world problems? If this sounds like you, Project Lead the Way may be an ideal fit for you. PLTW ignites imagination and innovation through learning. There is no other curriculum like it offered in the Cedar Rapids School District. PLTW has many other benefits, too. Here are a few:

- Weighted grade – yes, just like AP, you can reap the benefits of a weighted grade.
- College credit – PLTW offers dual credit: college credit and high school credit simultaneously. Further, if specific grades and test scores are earned in the coursework, credit can be transferrable to colleges and engineering programs throughout the country.
- Skills learned and developed in PLTW are transferrable to any discipline and/or career.
- Curriculum will demand students to develop a different skill set than what is traditionally required in most educational settings. Students will be expected to “think outside the box” and to use their creativity and imagination to solve problems.

Kennedy will offer three courses: Introduction to Engineering Design (IED), Principles of Engineering (POE) and Civil Engineering & Architecture. IED is a prerequisite to POE; both are strongly recommended for CEA. All courses are year-long.

Introduction to Engineering Design (IED)

Prerequisite: Concurrent enrollment in Algebra One and LA 9 is highly recommended for this course.

Description: 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 3D modeling software, and use an engineering notebook to document their work.

Principles of Engineering (POE)

Prerequisite: Introduction of Engineering highly recommended or take concurrently with Principles of Engineering (POE)

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

Civil Engineering & Architecture (CEA)

Prerequisite: Introduction to Engineering Design and Principles of Engineering Design is highly recommended.

Description: 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.

To learn more about PLTW, including the transferability of credits, visit <http://www.pltwiowa.org/> or <http://www.pltw.org/>.