STEM

Science - Technology - Engineering - Math

Engineering & Architecture

PROJECT LEAD THE WAY

PLTW

Innovation

Engineering for High Schools

Igniting Innovation through imagination and learning.

Project Lead The Way (PLTW) prepares students to be the most innovative and productive leaders in science, technology, engineering, and mathematics (STEM) and to make meaningful, pioneering contributions to our world. PLTW partners with middle schools and high schools to provide a rigorous, relevant STEM education. Through an engaging, hands-on curriculum, PLTW encourages the development of problem-solving skills, critical thinking, creative and innovative reasoning, and a love for learning. The PLTW middle and high school STEM education programs give students a brighter future by providing them with a foundation and proven path to college and career success in STEM-related fields. STEM education is at the heart of today's high-tech, high-skill global economy.

For more information contact your school counselor or the Engineering & Architecture instructor at your high school.

RECOMMENDED COURSES FOR 9TH GRADE STUDENTS

Introduction to Engineering & Architecture
1 Term - PLTW (IED A) #04110

CAD (Computer-Aided Design)
1 Term - PLTW (IED B) #04130

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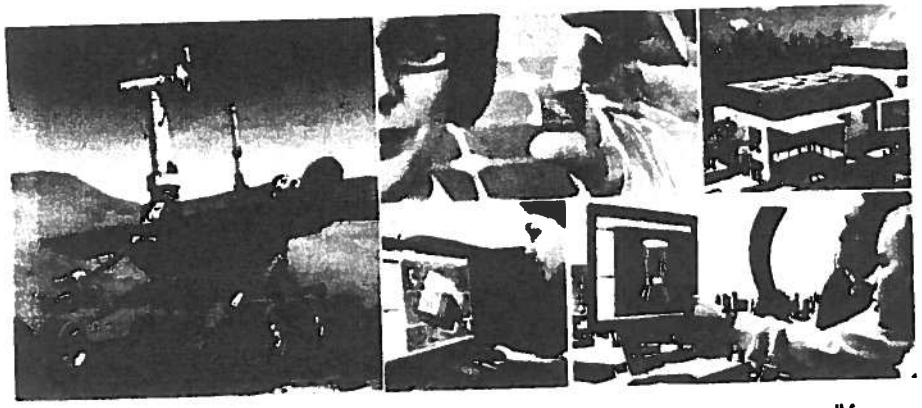
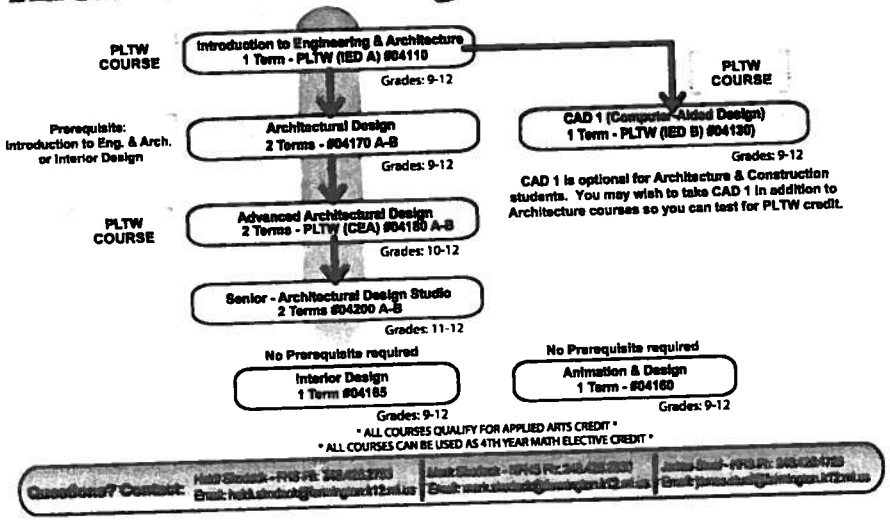


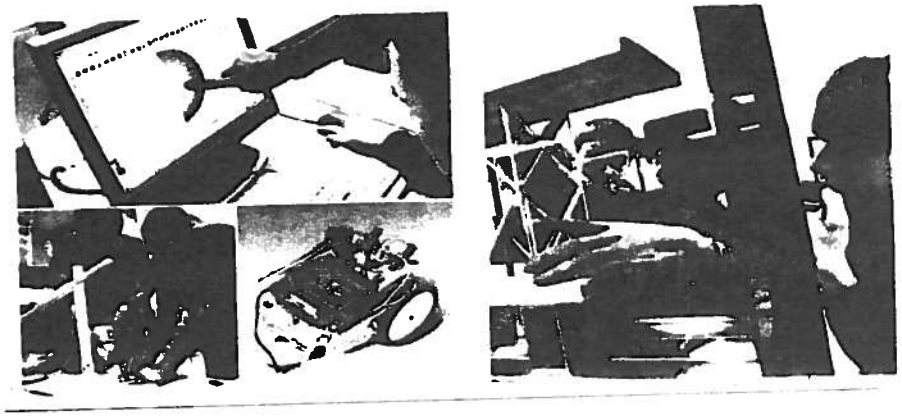
The PLTW Pathway To Engineering Program is a curriculum that is designed to encompass all four years of high school. Foundation courses are supplemented by a number of electives to create rigorous, relevant, reality-based courses. Activities are hands-on and project-based. Students learn how to use the same industry-leading 3D design software that's used by companies like Intel, Lockheed Martin and Pixar. They explore aerodynamics, astronautics and space life sciences. Hello, NASA. They apply biological and engineering concepts related to biomechanics – think robotics. Students design, test, and actually construct circuits and devices such as smart phones and tablets, and work collaboratively on a culminating capstone project. Some PLTW students have even received US patents. Explore the world of Architecture and design through model building and 3-D software used in industry. Create new and innovate stuructures using the latest in laser and computer technologies. - Design houses and buildings that change the world!

S.T.E.M.

Science - Technology - Engineering - Math

Architectural Design & Construction





IED — Introduction to Engineering & Arch Design
3D computer modeling software; study of the design process.

POE — Principles Of Engineering
Exploration of technology systems and engineering processes.

CEA — Civil Engineering & Architecture
Students collaborate on the development of community-based building projects.

CIM — Computer Integrated Manufacturing
Robotics and automated manufacturing; production of 3-D designs.

S.T.E.M.

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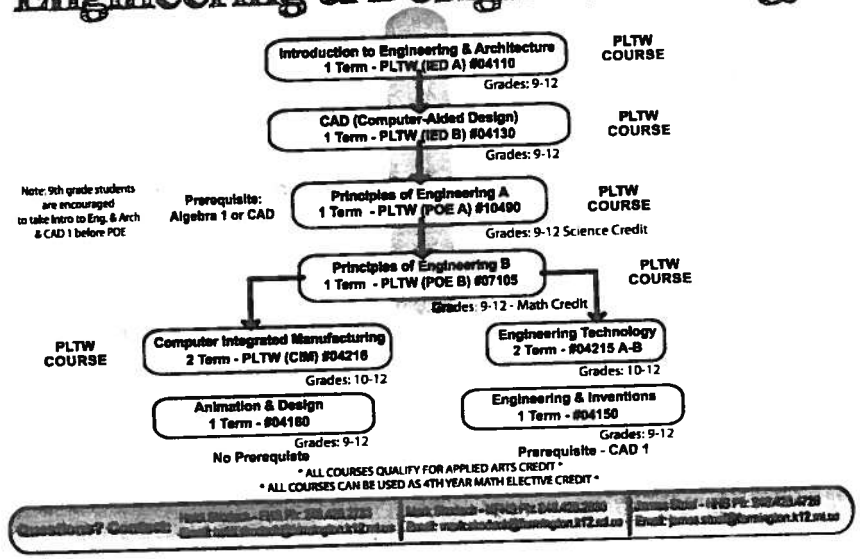
Engineering & Design Technology