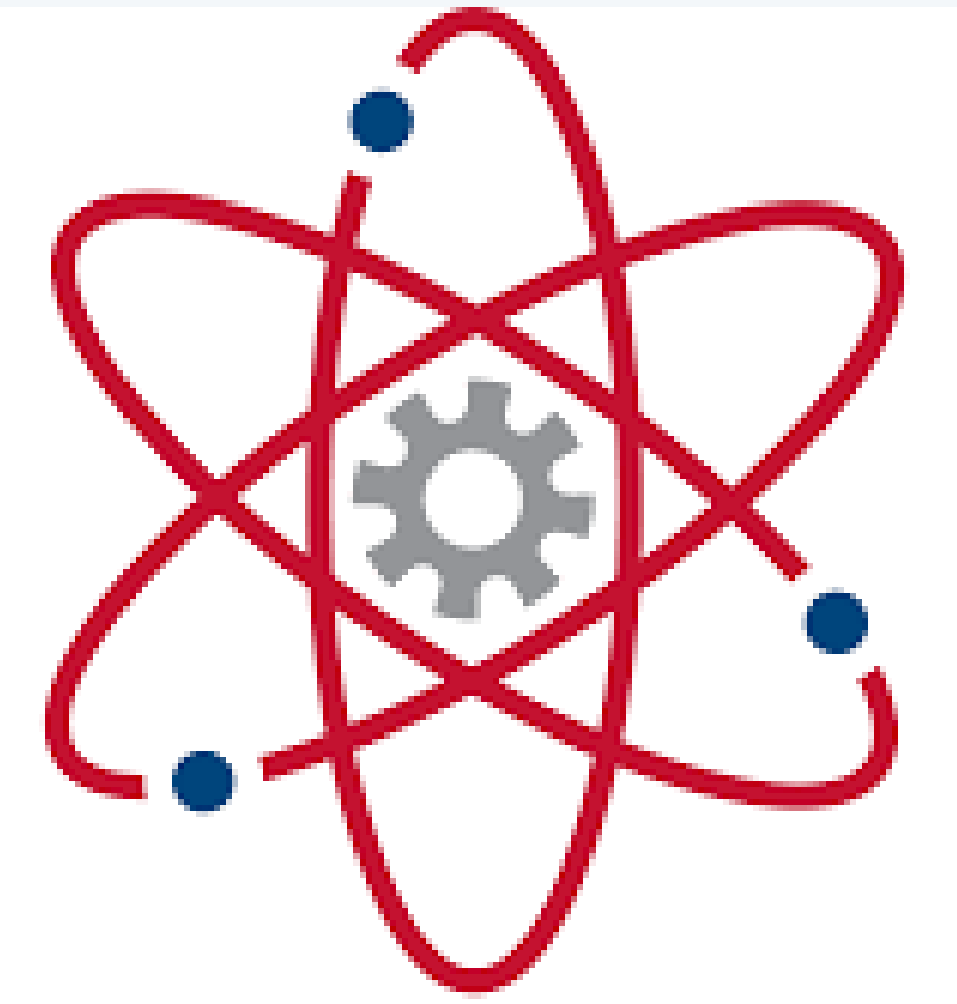


OLYMPIC HEIGHTS ENGINEERING ACADEMY

The engineering academy is affiliated with Project Lead the Way (PLTW), the leading national provider of rigorous STEM education programs in grades K-12.

9TH GRADE: INTRO TO ENG DESIGN

- Overview of the engineering design process and introduction to engineering communication
- Assembly design and reverse engineering with models
- Focus on responsible design and mechanisms connected with motion
- AutoDesk Inventor industry certification training and exam



PROJECT LEAD THE WAY
PLTW

 **AUTODESK
INVENTOR**

 **AUTODESK
REVIT Structures**

10TH GRADE: PRINCIPLES OF ENGINEERING

- Explores a broad range of engineering disciplines and careers to help students identify individual interests and strengths
- Calculations include: mechanisms, thermodynamics, trusses, material properties, fluids, statistics, and kinematics
- Content builds towards REC Foundation Pre-Engineering industry certification exam

11TH GRADE: CIVIL ENGINEERING & ARCHITECTURE

- Residential: explore design and construction; cost and efficiency; design an affordable home
- Commercial: building systems; structures; services and utilities; site considerations; design a commercial facility
- AutoDesk REVIT industry certification training and exam



12TH GRADE: AP COMPUTER SCIENCE PRINCIPLES

- 5 main ideas: creative development; data; algorithms and programming; computer systems and networks; impact of computing; text programming using Python
- Information Technology Specialists industry certification in Python
- College credit available through AP exam at end of year


python

CLUBS, COMPETITIONS, & ELECTIVES

- Clubs: SECME, Coding Club, Cybersecurity Club, Vex Robotics, Sea Perch Underwater Robotics (Sub Club)
- Competitions: AWWA Water Tower and ASCE Bridge Designer
- Aerospace Engineering elective available for senior year
- Advisory Board supports scholarships, speakers, and field trips



Engineering Academy core principles include teaching college level content infused with computer science, providing hands-on real world learning, empowering students through teamwork and collaboration, and supporting students for post-secondary success!