

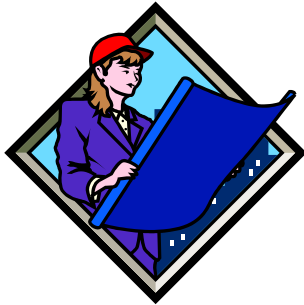
# Engineering Offers Great Opportunities



**Do you like to design things?**



**Do you like to solve problems?**



**Do you think you want to be an engineer or designer?**

**Try these year long electives:  
Introduction to Engineering Design (IED),  
Digital Electronics (DE),  
Principles of Engineering (POE), or  
Civil Engineering, and Architecture (CEA)**

**For more information, look at these websites:**

**PLTW**

<http://www.pltw.org>

**JETS**

<http://www.jets.org>

**Engineer Girl**

<http://www.nae.edu/nae/cwe/egcars.nsf>

**Women in Science** <http://www.sdsc.edu/ScienceWomen/>

**Celebration of Women in Engineering**

<http://www.nae.edu/nae/cwe/cwemain.nsf/>



# *Introduction to Engineering Design*

- learn about what engineers and designers do, and how they do it
- prerequisite course for all other Project Lead the Way classes
- uses 3D solid modeling and rapid prototyping technology
- includes field trips and guest speakers give students an idea of the various fields engineers work in and what they do on the job

Grade Levels: 9-12 \* ATC \*

Prerequisites: Algebra I or concurrent enrollment

# *Digital Electronics*

- Explore different perspective of digital control and design.
- Learn about basic electronic fundamentals including electrons, resistors, and capacitors.
- Boolean algebra is used to design logic circuits.
- Computer simulation software is used to design and test digital circuitry prior to the actual construction of circuits and devices.
- Design, test, and actually construct circuit devices.

• Grade Levels: 9-12 \* Adv Acad \* ATC \*

Prerequisites: Geometry or concurrent enrollment