



## Tustin High School Technology & Engineering

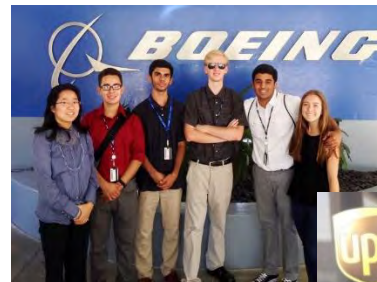


[www.TustinEngineering.com](http://www.TustinEngineering.com)



THS 2017 Lemelson-MIT InvenTeam

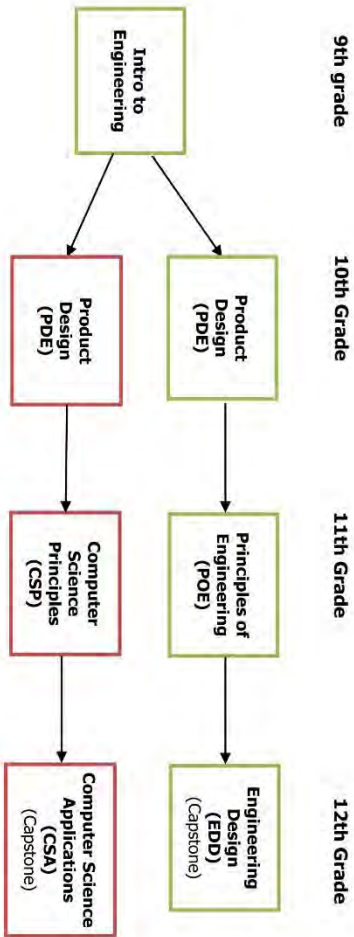
Tustin High School's T-Tech Academy of Technology and Engineering is considered to be one of the best STEM programs in Orange County. The academy provides students with hands-on experiences using the most advanced tools in education and industry. T-Tech is partnered with *PLTW*, a leader in STEM curricula, and *Coastline ROP* for the best in career technical education.



T-Tech students in the 11<sup>th</sup> grade have the unique opportunity to apply for a number of summer internships at actual engineering companies like EON Reality, Boeing, UPS and more. Interns work 7-10 weeks in the summer alongside professional engineers and scientists - an opportunity of a lifetime!



### Tustin High School T-Tech Pathways (beta)



After the 10<sup>th</sup> grade, T-Tech students have a choice of two educational pathways:

Engineering (Hardware)  
Pre-Engineering  
Or  
Computer Science

Computer Science (Software)

# T-Tech Course Listing

## 9<sup>th</sup> Grade

### **Introduction to Engineering**

Hands-on introduction to basic engineering and technology principles. Intro also consists of one full semester of Computer Science.

## 10<sup>th</sup> Grade

### **Product Design & Engineering**

2D Drafting, 3D Computer Aided Design & Modeling with SolidWorks™, 3D Printing and manufacturing using state of the art equipment.

## 11<sup>th</sup> Grade

### **Principles of Engineering**

Advanced science and technology academic curriculum with hands-on lab activities, robotics, computer simulations and more.

### **Computer Science Principles**

Fast-paced introductory course in software engineering. Basics of coding, app and game development, Python, Arduino, and more.

## 12<sup>th</sup> Grade

### **Engineering Design & Development**

Senior Hardware Project Design Class. Project-based curriculum with emphasis on advanced engineering skills, communication and teamwork.

### **Computer Science A**

Aligned with AP CSA Framework. Project-based curriculum with emphasis on advanced software and programming skills, communication and teamwork.

Tustin High School's T-Tech Academy is a four-year elective program where science, math and technology are brought to life. Choosing from one of two pathways, T-Tech students are enrolled in one STEM class for each year of the program, culminating with a project-based Senior Capstone course. By the end of the program, all T-Tech students will have a portfolio, resume, and a wealth of hands-on technical knowledge and expertise not available anywhere else. After all, over 85% of all new jobs in the coming years will require STEM skills!

Whether you are interested in a traditional four-year college path, community college, vocational training, or simply love technology, T-Tech is for you!

See your counselor for more details.

**All T-Tech classes are UC-Approved!**

T-Tech is led by Mr. Ed Hernandez, a math and engineering teacher with a degree in Electrical and Computer Engineering from UC Irvine and California's 2015 CTE Teacher of the Year. He may be contacted directly by phone at (714) 730-7414 extension x526 or via email at [ehernandez@tustin.k12.ca.us](mailto:ehernandez@tustin.k12.ca.us)

