



VEX Robotics

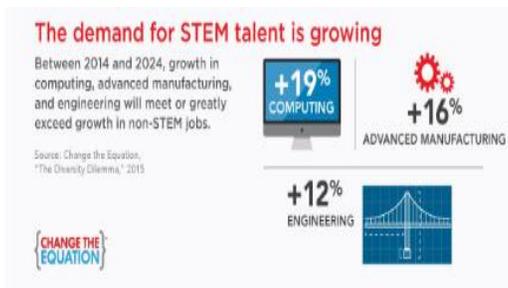
## AP + PLTW = Student Recognition

If a student completes three courses in a pathway — one AP course; one PLTW course; and a third course, either AP or PLTW — and earn a score of 3 or higher on the AP Exam(s) and a score of Proficient or higher on the PLTW End of Course (EoC) assessment(s), he/she has earned the AP + PLTW student recognition for that pathway.

## College Articulation

Students can earn Irvine Valley College credit by taking UNITE engineering classes. Read the details of articulation agreement and fill out the IVC CTE credit request form online.

## Why STEM? Why Now?



# Who We Are

## About Us

UNI\_Technology&Engineering (UNITE) is a schoolwide STEM program. We offer PLTW Engineering courses and STEM projects for students to work on beyond the school day.

## Contact Us

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UNI\_Technology&Engineering



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**UNI\_TECHNOLOGY &ENGINEERING (UNITE)**

*See what happens next.*



Intro to Engineering Design

## What is UNITE?

UNITE stands for UNI\_Technology &Engineering -- a schoolwide STEM program. We offer PLTW Engineering classes and STEM projects for students to work on beyond the school day. **Girls are welcome** -- no experience or background required. By working in a STEM project-based learning environment, students develop and practice 21st-century skills needed in a world that values collaboration, initiative, perseverance, flexibility, empathy, curiosity, and creativity. We have a laser-like focus on providing students with authentic, real-world learning experiences and setting up the right conditions for them to **develop skills and practice habits** that enable college/career success many years down the road. We take an iterative approach to projects whereby students learn by **DOING, MAKING, and CREATING**. We have a relentless pursuit of learning new things and a passion for work-based learning.

## PLTW Engineering Courses

Intro to Engineering Design

Principles of Engineering

Future addition: Specialization Course (e.g. Digital Electronics, Computer Integrated Manufacturing)

Future addition: Engineering Design & Development

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*“UNITE is a high tech hub where all things seem possible for our students... It is fertile ground of relevant learning.”*  
 -- UNITE parent

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## UNITE STEM Projects

Irvine CubeSat

Hydrogen Horizon Automotive Challenge (H2AC)

OC Maker Challenge

C-STEM Linkbots

UCI Rescue Robotics

VEX Robotics

World Education Robot

GAMA Build-A-Plane Aviation Design



World Educational Robot

## UNITE Program Objectives

- \* Increase female enrollment and participation to be on par with boys
- \* Prepare students for college entry as engineering majors
- \* Prepare students for technical work in high demand, high wage entry-level STEM jobs right out of high school -- educate for employability
- \* Unlock student potential and build agency in the areas of technical ability, innovation, communication and entrepreneurship
- \* Form connections and a network with education and industry partners -- strengthen these relationships
- \* Engage with the community through STEM-related events
- \* Connect students to industry and business/industry professionals through work-based learning, internship, apprenticeship, and mentorship -- we champion the dignity of work in all its forms
- \* Align STEM offerings to current and future labor market trends
- \* Participate in STEM project-based learning in an authentic, real-world context