

The Engineering Pathway provides foundational knowledge in engineering and career exploration in the field of engineering and technology. Furthermore, it explores engineering in the career fields of Aviation, Architectural Design, Alternative Energy, Biotechnology, Communications Technology, Digital Technology, Environmental Technology, Manufacturing Technology, and Robotics & Automation.

Students engage in an instructional program that integrates academic and technical preparation, focusing on career awareness, career exploration, and career preparation in the engineering fields.

**To sign up for an Engineering Pathway course,
contact your Canyon counselor today!**

***“The Engineering
Pathway is a good
way to explore
different engineering
fields and learn
programs used in real
-life jobs.”***

D. Y.

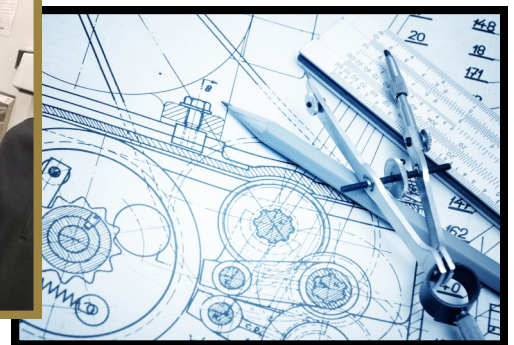
Class of 2022

Engineering Industry Partners:

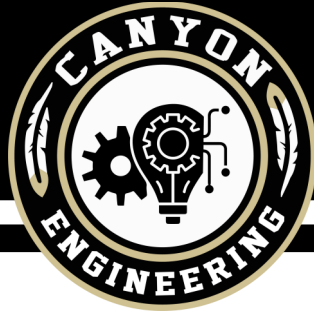
Paxton Patterson, Solid Professor, Airwolf, Safran
Passenger Innovations/Zodiac Flight Entertainment,
CPR: Cell Phone Repair, Rock & Road Cyclery,
City of Anaheim Public Works—Civil Engineering

Engineering Guest Speakers/Field Trips:

Canyon Career Tech; Santiago Career Coach;
Matt Bennett, Motivational Speaker



For more information, visit www.canyonhighschool.org or contact
Engineering Pathway teacher Miss Zipporah Robertson, zrobertson@orangeusd.org.



Sample Four-Year Plan

The table below represents a sample four-year plan sequencing the required courses to be an Engineering Pathway completer. Students must complete a level 02 & 03 course to be a pathway completer and earn a tassel to wear at graduation. Students should work closely with their counselors to incorporate appropriate honors, IB and AP courses, as well as other graduation and A-G required courses.

Course Type	9th Grade	10th Grade	11th Grade	12th Grade
Engineering	Foundations of Engineering & Technology	Advanced Engineering and Technology (May take in 10th or 11th grade)		Professional Internship

Engineering Pathway Course Descriptions:

Foundations of Engineering & Technology UC-G (02): This is an introductory course to the field of Engineering. It focuses on exploring the specific types of engineering fields, including Aviation, Architectural Design, Alternative Energy, Biotechnology, Communications Technology, Digital Technology, Environmental Technology, Manufacturing Technology, and Robotics & Automation. Each engineering field has a learning module to educate students about the fundamentals of each engineering type. This class allows students to explore and determine which engineering career they would like to pursue.

Advanced Engineering & Technology UC-G (03): This class is open to Sophomores, Juniors, and Seniors who have successfully completed Foundations of Technology & Engineering. It focuses on the application of fundamentals and prior knowledge learned in the previous course utilizing project-based learning, and hands-on experiments. Students will use SolidWorks to complete drawings, centered on Computer-Aided Design (CAD). This class builds student portfolios by providing experiences, advancing their skills in CAD, and developing 21st century employability skills.

Professional Internship (03): Allows students to apply academic knowledge and demonstrate technical 21st-century skills in a workplace setting. Students will prepare job readiness documents and will interview at an assigned site before interning with a local Canyon Business Partner.

Engineering Pathway Teacher:



Miss Zipporah Robertson

Email: zrobertson@orangeusd.org

Miss Robertson has her BS in Electrical Engineering from Cal Poly Pomona. She comes to Canyon with industry experience in Solar Installation, Electrical Wiring, Electronics & Computer Repairs, Computer Numerical Control Routing, 3D Printing, and other various engineering and computer science expertise. Miss Robertson teaches AP Computer Science, Foundations of Engineering & Technology, and Advanced Foundations of Engineering & Technology.

To learn more visit: <https://tinyurl.com/EngineeringScholars>