

CAPO VALLEY

ENGINEERING PROGRAM

Capistrano Valley High School is proud to offer a comprehensive four-year engineering pathway. Through this innovative program, students are able to gain a comprehensive, in-depth understanding of the principles and concepts of the engineering process. Students will get hands-on experience applying this theoretical knowledge in our state of the art "engineering lab." This lab is equipped with state of the art, professional grade equipment including Six 3D printers, laser cutter, bench mill and two HAAS Automation CNC Machines.

INTRODUCTION TO ENGINEERING DESIGN - 9TH

This introductory course provides learning opportunities for students interested in preparing for careers in design and production in the Engineering field. Engineering scope, content, and professional practices are presented through practical applications. Students in engineering teams apply technology, science, and mathematics concepts and skills to solve engineering design problems and develop innovative designs.

ENGINEERING PRINCIPLES - 10TH

This survey course of engineering exposes students to some of the major concepts they'll encounter in a post-secondary engineering course of study. Students have an opportunity to investigate engineering to develop skills and understanding of course concepts. Students employ engineering and scientific concepts in the solution of engineering design problems. They develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges.

ENGINEERING AND MANUFACTURING TECHNOLOGY - 11TH

This survey course of engineering exposes students to some of the major concepts they'll encounter in a post-secondary engineering course of study. Students have an opportunity to investigate engineering to develop skills and understanding of course concepts. Students employ engineering and scientific concepts in the solution of engineering design problems. They develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges.

ENGINEERING DESIGN AND DEVELOPMENT -12TH

Advanced course in the Engineering Technology pathway, focusing on specialized concepts and/or industries that require post-secondary training in the design, production, or maintenance of mechanical, electrical, electronics or electro mechanical products and systems

HIGH SCHOOL

