

PRINCIPLES OF ENGINEERING

Principles of Engineering is a course that helps students understand the field of engineering and engineering technology by exploring various technology systems and tackling real-world engineering problems. Students have the opportunity to use different software programs and building materials to solve complex problems. Students learn how engineers and technicians use math, science and technology in an engineering problem solving process to benefit people. The course also includes concerns about social and political consequences of technological change.

Course topics include:

- Engineering Systems
- The Design Process
- Communication and Documentation
- Materials and Materials Testing
- Engineering Quality Control and Reliability

Course prerequisites:

- Algebra I (or higher) math level
- Interest in engineering
- Strong desire to “work with your hands”

*This course is “a-g” approved, meaning it counts as an approved science elective for the UC and CSU Colleges.