

# ENGR 49: ENGINEERING PROFESSION

## Foothill College Course Outline of Record

Heading	Value
<b>Units:</b>	1
<b>Hours:</b>	1 lecture per week (12 total per quarter)
<b>Advisory:</b>	UC will accept for transfer credit either ENGR 10 or ENGR 49, not both.
<b>Degree &amp; Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU/UC
<b>Grade Type:</b>	Letter Grade (Request for Pass/No Pass)
<b>Repeatability:</b>	Not Repeatable

## Student Learning Outcomes

- An understanding of professional, ethical, legal, security, and social issues and responsibilities
- Identify one's interest in a engineer field(s) via self analysis and career research.

## Description

A study of the engineering profession, its requirements, opportunities and responsibilities. Exposure to engineers and their educational, personal, and career paths. Review of engineering ethics. Students formulate a career plan.

## Course Objectives

The student will be able to:

- understand the variety of career options with a degree in engineering.
- understand the ethical issues prevalent in the engineering field.
- understand the pathways to engineering career options.
- practice professionalism in the classroom setting.
- create a plan for pursuing an engineering career.

## Course Content

- The differences between an engineer and a scientist or a technician.
- Short term and long term career potential of engineers.
- Discussions of the various engineering fields.
- Legal and ethical responsibilities of an engineer.
- Adjustments to college.
- Selected engineering problems from actual case studies.

## Lab Content

Not applicable.

## Special Facilities and/or Equipment

None.

## Method(s) of Evaluation

- Attending lectures and talks by guest speakers.

- Participating in discussions and asking questions of guest speakers.
- Writing an essay.

## Method(s) of Instruction

- Lecture
- Guest lecture
- Class discussion
- Question and answer sessions

## Representative Text(s) and Other Materials

Moaveni, Saeed. Engineering Fundamentals: An Introduction to Engineering. 5th ed. Cengage Learning US, 2016.

## Types and/or Examples of Required Reading, Writing, and Outside of Class Assignments

- Reading assignments from text and outside sources.

## Discipline(s)

Engineering