

**CEE 100**  
**Introduction to Civil Engineering**

**Catalog data:** 20-CEE-100. Introduction to CEE. 3 cr. ug. Introduction to areas of civil and environmental engineering, basic problem solving skills, ethics, and co-op and curriculum.

**Prerequisites:** None

**Textbook:** None

**References:** None

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**Goals:** This course introduces students to the College of Engineering, the areas of Civil Engineering and discusses basic engineering issues

**Lecture or lab topics:**

1. Getting Started: Welcome to Civil Engineering (1 class)
2. What is Civil Engineering? An introduction to the different areas of CEE. (1 class)
3. FYI: Information on curriculum, advising, petitions, DPAs and other administrative details. (1 class)
4. Getting Wired at UC: Computer Introduction (Office of College Computing). (1 class)
5. Look That Up in Your Funk and Wagnalls: Library introduction. (1 class)
6. The Co-op Experience: Information on the ultimate financial aid package. (1 class)
7. *Over there!*: International Engineering Program. (1 class)
8. Survivor!: Survival skills needed to succeed in engineering at UC. (3 classes)
9. When You Get That Sinking Feeling: College academic help facilities. (1 class)
10. Do They Really Build a Concrete Canoe? Student and professional organizations. (1 class)
11. Do the Right Thing: Ethics and responsibilities in engineering (3 classes)
12. Not Quite Ann Landers: Meet your class advisors. (1 class)
13. Engineering Case Studies (6 classes)
14. How to Not Flunk Physics - Basic vector mechanics (4 classes)
15. Final Project (4 classes)

**Computer usage:** None

**ABET criterion 3:** c, e, f, g, h

**ABET criterion 8:** e

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### **Specific Examples of ABET Criterion 3**

c, e: Students complete a final design project. The project changes from year to year, but past projects have included:

1. Build a 1/8 scale trebuchet (medieval catapult) to throw a golf ball.
2. Using local building codes as a guide, construct a 1/8 scale house foundation.
3. Analyze air pollution data from the EPA.
4. Using a model tank and dye, experimentally determine wall placement in a chlorination tank.
5. Analyze signal timing of the traffic signals in front of the campus.

f: There is a week long unit on ethics. Students read selected texts on ethics. NSPE code of ethics is discussed. The “Ethics Game” (from Lockheed/Martin) is played.

g: Students must write and present a final report on the design project.

h: As part of the discussion on curriculum, the need for General Education courses is discussed.

### **Specific Examples of ABET Criterion 8**

e: There are discussions of the co-operative education program (professional practice) and engineering ethics.