

1. *Course number and name*

ENGR 697: Engineering Design Project II

2. *Credits and contact hours*

3 credit hours; three 50-minute lecture sessions/week, or two 1-hr-15-minute lecture sessions/week, depending on semester

3. *Instructor's or course coordinator's name*

Instructor: Tom Holton, Instructor

Course coordinator: Tom Holton, Professor of Electrical and Computer Engineering

4. *Text book, title, author, and year*

none.

5. *Specific course information*

a. *Brief description of the content of the course (catalog description)*

Students work in teams to complete projects specified and designed the previous semester in ENGR 696. Work is done with maximum independence under supervision of a faculty advisor. Oral and written project reports required.

b. *prerequisites or co-requisites*

ENGR 696: Engineering Design Project I

c. *indicate whether a required, elective, or selected elective course in the program*

Required for Computer Engineering

Required for Electrical Engineering

6. *Specific goals for the course*

a. *Specific outcomes of instruction, ex. The student will be able to explain the significance of current research about a particular topic.*

- Students will **demonstrate** an ability to apply knowledge of mathematics, science, and engineering
- Students will **demonstrate** an ability to design and conduct experiments, as well as to analyze and interpret data
- Students will **demonstrate an ability** to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability

- Students will **demonstrate** an ability to function on multidisciplinary teams
- Students will **demonstrate** an ability to identify, formulate, and solve engineering problems
- Students will **demonstrate** an understanding of professional and ethical responsibility
- Students will **demonstrate** an ability to communicate effectively
- Students will **demonstrate** the possess the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
- Students will **demonstrate** a recognition of the need for, and an ability to engage in life-long learning
- Students will **demonstrate** a knowledge of contemporary issues
- Students will **demonstrate** an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

b. Explicitly indicate which of the student outcomes listed in Criterion 3 or any other outcomes are addressed by the course.

Course addresses ABET Student Outcome(s): a, b, c, d, e, f, g, h, i, j, k.

7. Brief list of topics to be covered