

1. *Course number and name*

ENGR 696: Engineering Design Project I (EE/CompE)

2. *Credits and contact hours*

1 credit hour; one 2-hr, 45-min session per week

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

Instructor: Tom Holton, Professor

Course coordinator: Tom Holton, Professor

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

(none)

a. other supplemental materials

Various course handouts.

5. *Specific course information*

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

Selection of design project, methods of research, time management, engineering professional practice and ethics. This course is 3rd in a series of courses (ENGR 300, 301, 696, and 697GW) that when completed with a C or better will culminate in the satisfaction of the University Written Eng Proficiency/GWAR.

b. Prerequisites or co-requisites

ENGR 301; 21 units completed in upper-division engineering.

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

Required for Electrical Engineering

Required for Computer 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.

- an ability to apply knowledge of mathematics, science, and engineering
- 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
- an ability to function on multidisciplinary teams
- an ability to identify, formulate, and solve engineering problems
- an understanding of professional and ethical responsibility

- an ability to communicate effectively
- the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
- a recognition of the need for, and an ability to engage in life-long learning
- a knowledge of contemporary issues
- 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, c, d, e, f, g, h, i, j, k.

7. *Brief list of topics to be covered*

- Design process and methodology
- Scheduling and time management
- Literature, resource, and component information gathering
- Oral communication and presentation skills
- Interviewing, resume writing
- Ethics
- Professionalism