## 1. Course number and name ENGR 697: Engineering Design Project II

- Credits and contact hours
   Credit hours; three 50-minute lecture sessions/week, or two 1-hr-15-minute lecture sessions/week, depending on semester
- 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