1. *Course number and name*

**ENGR 696: Engineering Design Project I (EE/ME)**

1. *Credits, contact hours, and categorization of credits in Table 5-1 (math and basic science, engineering topic, and/or other)*

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

1. *Instructor’s or course coordinator’s name*

Instructors: Tom Holton; George Anwar

Course coordinators: Tom Holton; Ed Cheng

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

(none)

1. *other supplemental materials*

Various course handouts.

1. *Specific course information*
2. *brief description of the content of the course (catalog description)*

Selection of design project, methods of research, time management, and engineering professional practice and ethics. ENGR 696 and ENGR 697GW when completed with a C or better satisfy the 3 unit Written English Proficiency/GWAR. Laboratory.

1. *prerequisites or co-requisites*

18 upper-division ENGR units; ENGR 302 (may be taken concurrently) or ENGR 478

1. *indicate whether a required, elective, or selected elective (as per Table 5-1) course in the program*

Required for Electrical Engineering

Required for Mechanical Engineering

1. *Specific goals for the course*
2. *specific outcomes of instruction, ex. The student will be able to explain the significance of current research about a particular topic.* 
   * Student can utilize a systematic approach to carry out different stages of the design process.
   * Student can uses library (conventional) and electronic means to access technical information related to the design project.
   * Student understands the importance of standards, codes, and regulations in engineering design.
   * Student is aware of environmental, sustainability, and other social considerations is the design process.
   * Student is able to prepare a satisfactory design project proposal.
   * Student can develop a schedule for completing the design project, and is aware of tools to assist in scheduling (e.g., Gantt Chart).
   * Student is able to effectively communicate in oral presentations and with written technical memos and reports.
   * Student has knowledge about team-making decisions, allocating responsibilities, and sharing project work.
3. *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): 1, 2, 3, 4, 5, 7.

1. *Brief list of topics to be covered*

* Design process and methodology
* Scheduling and time management
* Literature, resource, and component information gathering
* Oral and written communications
* Costs
* Engineering ethics
* Professionalism
* Career seminars by engineering professionals