1. **Course number and name**  
ENGR 696: Engineering Design Project I (EE/ME)

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 or 302, 696, and 697GW) that when completed with a C or better will culminate in the satisfaction of the University Written Eng Proficiency/GWAR if taken Fall 2009 or later.

   b. **prerequisites or co-requisites**  
   ENGR 302, senior standing with 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 Mechanical 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.

\[ b. \text{ explicitly indicate which of the student outcomes listed in Criterion 3 or any other outcomes are addressed by the course.} \]

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 and written communication
- Costs
- Ethics
- Professionalism