1. Course number and name
ENGR 696: Engineering Design Project I

2. Credits and contact hours
1 Credit Hour, One 2-hour-45-minute lab session/week.

3. Instructor’s or course coordinator’s name
Instructor: Timothy D’Orazio and Cheng Chen Professor of Civil Engineering
Course coordinator: Timothy D’Orazio, Professor of Civil Engineering

4. Text book, title, author, and year
None

a. other supplemental materials
None

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.

b. prerequisites or co-requisites
Completion of at least 21 upper division units in engineering.

c. indicate whether a required, elective, or selected elective course in the program
Required for Civil Engineering.

6. Specific goals for the course.

• Student utilizes a systematic approach to the different stages of the design process.
• Student uses library (conventional) and electronic means to access technical and component information related to the design project.
• Student is aware of professional engineering societies.
• Student forms a team with other students, prepares a preliminary proposal and secures a faculty advisor for the senior project.
• Student team develops a thorough project description including a time-task schedule, which is detailed in the final proposal.
• Student team describes early project work using oral and written progress reports. Student attends 3 professional seminars and 2 society meetings.
• Student fully participates with the team in making decisions, allocating responsibilities and sharing project work.
• Student submits all homework in the form of engineering technical memos.
• Student prepares and presents effective oral and written presentations describing the project.
• Student recognizes importance of punctuality, participation, communication skills and teamwork in the professional setting.

a. 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): 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
- Career development
- Ethics
- Professionalism