THE OHIO STATE UNIVERSITY
COLLEGE OF ENGINEERING

Civil Engineering Capstone II

CIVILEN 4002

Credit Hours:
2.00

Course Levels:
Undergraduate (1000-5000 level)

Course Components:
Lecture
Lab

Course Description:
Part 2 of the two semester course sequence for the culminating design component in the curriculum for students in Civil Engineering. Must be taken in semester immediately following 4001, with sequence completed as close to graduation as possible.

Prerequisites and Co-requisites:
Prereq: 4000.01 or 4001.

Course Goals / Objectives:

- an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
- an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
- an ability to communicate effectively with a range of audiences.
- an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
- an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
- an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.
- a) GE Reflctn Booknd LO: Engaged Citiznshp & Intercultural Competency: Studnts consider public health, safety, welfare, global, cultural, social, environmental, & econ factors in applying eng design to produce solutions meeting specified needs.
- b) GE Reflctn Booknd LO: Personal & Professional Development: Students individually assess and pursue personal professional growth in concert with project requirements and personal career goals.
- c) GE Reflctn Booknd LO: Cultivate Engineering Mindset: Students develop an engineering mindset that demonstrates constant curiosity, makes connections between disparate bodies of information, and seeks opportunities to create value.

Course Topics:

- Students work in a group environment with the instructor serving in the role of an outside consultant interacting in a professional manner with the groups

---

Designation:
Required