

MARQUETTE UNIVERSITY
DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING

Course: **CEEN 189 – Civil Engineering Design**
3 Lectures, 3 hours of Laboratory, 4 Semester Hours.

Catalogue Data: Design of selected civil engineering projects including planning, preliminary analysis and final design. Different projects are selected each year. Students are assigned to project teams with specific tasks under the direction of a faculty course coordinator. Professional engineers from local firms propose projects and act as consultants to each design team. Emphasis is placed on student initiative, responsibility and resourcefulness in an open-ended project. A final written design report and oral presentation are required for each design team. Emphasis on technical communications, professional ethics and engineering practices.

Textbook: None

Coordination: Dr. James A. Crovetti, Associate Professor, EN 260, 288-7382
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Office Hours: Mon & Wed: 1:00 PM – 3:00PM

Goals: Develop the concept of the design process to solve a civil engineering problem. Demonstrate the dynamics of design team interaction and provide an opportunity for students to interact with design professionals in a real-world setting. Promote development of oral, visual and written communications skills. Provide an opportunity to integrate previous course work in the solution of a practical civil engineering problem. Enhance individual engineering skills and develop personal confidence. Encourage student participation in professional activities, including student organizations.

Course Outline:

1. Formation of design teams (Week 1).
2. Prepare Written Statement of Qualifications (Week 1)
3. Team Interviews: 20-30 minute sessions (Week 2 During Lab)
4. Project Assignments (End of Week 2, Jan 25)
5. Team Meetings with Mentor/Client(s) to Negotiate Project Scope and Agreement (Weeks 3 - 4)
6. Project Development and Design (Weeks 5 - 15)
7. Interim Reporting on Design Progress (Weeks 6, 8, 12, 14)
8. Poster Presentation during Open House (Sunday, April 13)
9. Final Oral Presentations (Week 16, April 28 – May 2)
10. Written Design Report (May 2)
11. Exit Interview/Project Evaluation (Finals Week, May 5 – 9)