

UNIVERSITY CURRICULUM COMMITTEE

DATE OF OPEN HEARING (if necessary) 2/9/99 (college level only)

APPROVED
 NOT APPROVED
COMMENTS:

Jane K. K... 3/4/99
SIGNATURE DATE

SENATE

Date announced at Senate 2/23/99

Voted upon at Senate: Approved Not Approved Date:

EXECUTIVE VICE PRESIDENT/PROVOST

APPROVED
 NOT APPROVED If no, reasons are as follows:

STUDENT CREDIT HOURS _____ FACULTY LOAD HOURS _____ EQUALIZED CREDIT HOURS _____

OFFICIAL COPY & APPROVAL SHEET FILED (DATE): _____

DATE/SIGNATURE EXECUTIVE VICE PRESIDENT/PROVOST [Signature]

REGISTRAR

DATE APPROVED COURSE DESCRIPTION RECEIVED _____

HEGIS TAXONOMY & COURSE NUMBER ASSIGNED C908 441

DATE/SIGNATURE OF REGISTRAR Robert A. Kubat 3/25/99

NOTIFICATION FORWARD:

- SENATE CURRICULUM COMMITTEE CHAIRPERSON
- DEPARTMENT CHAIRPERSONS
- ACADEMIC DEAN(S)
- REGISTRAR
- SPONSOR(S)

TMA 3/31/99

Course Proposal:

1. Details:

- a) Course Title: Civil Engineering Design Project I
- b) Sponsor: Civil Engineering Curriculum Committee
- c) Credit Hours: 2 credit hours
- d) Course Level: Senior (0908.491)
- e) Curricular Effect: Required course for all undergraduate civil engineering students
- f) Prerequisites: Civil Engineering Systems (0908.305)
- g) Suggested Time/Scale of Implementation: Approximately 6 project teams will be sponsored per semester
- h) Resources:

Faculty: Existing faculty will teach this course.

Library: Library acquisitions may be required on a project-by-project basis.

Equipment: Laboratory supplies may be required on a project-by-project basis.

Computers: Computer access will be required for most project. Acquisition, training, and utilization of professional software packages may be required on a project-by-project basis.

2. Rationale:

The goal of this sequence of two senior-level courses is to give civil engineering students a meaningful, leading-edge, team-based design experience. This sequence will satisfy the Accreditation Board for Engineering and Technology which requires that all civil engineering programs include a significant design experience at the senior year. While this experience was originally planned to be part of the Senior Engineering Clinics, the decision was made by the civil engineering faculty to separate these experiences to allow civil engineering students to work in pure civil engineering teams, which is much more consistent with the real-world practice of civil engineering.

3. Essence of the Course:

a) Objectives:

Upon completion of these two senior-level courses, civil engineering students working in design teams and guided by two or more faculty advisors will be able to do the following:

- conduct a thorough literature search and review
- prepare a clear and concise problem statement
- consult with other faculty and professional experts
- develop and implement a detailed design plan
- prepare weekly oral and/or written progress reports
- make a final written report and oral presentation

b) Topical Outline:

The design project will be chosen by the faculty advisors to give the student project teams the most meaningful civil engineering design experience possible. This sequence of two senior-level courses will include the following components:

- a thorough literature search and review
- a clear and concise problem statement
- a record of consultations with industry experts
- a design plan developed and implemented in close collaboration with faculty and industry mentors
- a record of project development and execution including weekly progress reports
- a final written report and oral presentation

c) Evaluation and Grading Procedure of Students:

Evaluation of team progress will be made on a weekly basis by the civil engineering faculty advisors and on a semester basis by all of the civil engineering faculty.

d) Course Evaluation:

The proposed course will be evaluated based on student evaluations and reviews conducted by civil engineering faculty.

4. Results of Consultations:

The course is consistent with the civil engineering curricula that were approved by the University Senate in December 1994, the revised curricula that were approved in June 1996, and the latest curricula approved by the civil engineering faculty.

Catalog Description:

Civil Engineering Design Project I (0908.491)

Prerequisites: Civil Engineering Systems (0908.305)

This is the first course in a sequence of two courses that will provide a meaningful design experience for teams of undergraduate civil engineering students under the direction of two or more faculty advisors. The sequence will include a thorough literature search and review, the development of a clear and concise problem statement, consultations with other faculty and industry experts, and the derivation of publishable results. The project will culminate in a final written report and oral presentation.