PROPOSAL 3-04

MINOR IN MUNICIPAL ENGINEERING

Introduction

This proposal recommends establishing a formal 'Minor in Municipal Engineering'. The initial purpose of developing a minor in Municipal Engineering is to meet demands for a distance learning program in civil engineering. The Bachelor of Science in Engineering (BSE) with the "Civil Engineering" technical emphasis complemented by the Minor in Municipal Engineering is the most effective way to satisfy the distance learning needs. Students can complete the BSE degree requirements through a series of courses identified as 1) the Engineering Fundamental Core, 2) a Technical Emphasis Area, and 3) 16 to 19 credits of 'Directed Electives.'

I. **Title of Minor**

Municipal Engineering

II. **Catalog Description**

Municipal engineering is the planning, design, building, and management of facilities vital to the well being of a municipality. This minor focuses on course work that will provide the breadth of information important to a municipal engineer.

III. **Rationale**

As mentioned in the introduction, the reason for the minor in Municipal Engineering is the demand for a distance learning program in civil engineering. The students who will be interested in the program will be those who want to work in municipal engineering related organizations.

IV. **List of Courses**

GE 2000 Understanding the Earth
3 credits

CE 3331 Professional Practice
2 credits

CE 3201 Structural Engineering II
3 credits

CE 4402 Traffic Engineering
3 credits

CE 4508 Wastewater and Drinking Water Treatment
3 credits **or**

CE 4507 Collection and Distribution System Design

3 credits

Elective Courses (Choose 1 course from the following courses. In order to meet the Minor requirement of 6 additional upper division credits beyond the Baccalaureate program (except for free elective credits), additional courses from this list may be necessary.)

MEEM 2700 Dynamics

3 credits

CE 3101 Civil Engineering Materials

3 credits

CE 4231 Timber and Masonry Design

3 credits

CE 4508 Wastewater and Drinking Water Treatment

3 credits **or**

CE 4507 Collection and Distribution System

3 credits

(whichever one was not taken as a required course)

CE 4620 Open Channel Flow

3 credits

CE 4630 Hydraulic Structures

3 credits

SU 2220 Route and Construction Surveying

3 credits

Total Requirements: 17 credits

Estimated Costs

There is no additional cost in introducing a Minor in Municipal Engineering. All courses identified above are either required or elective courses available to all students who satisfy course prerequisites. All courses are offered on a regular basis. The number of on-campus students working toward this minor should be small.

Since the Minor in Municipal Engineering is intended primarily for distance students, the classes will of course need to be offered as distance courses. The distance education model requires that the courses make money for the University so distance offerings will not increase costs.

Adopted by Senate: November 5, 2003
Approved by President: November 25, 2003