REQUEST FOR A NEW PROGRAM AT IOWA STATE UNIVERSITY:
MASTER OF ENGINEERING PROGRAM IN CIVIL ENGINEERING

Action Requested: Consider approval of the request by Iowa State University to establish a new Master of Engineering Program in Civil Engineering which will be administered by the Department of Civil, Construction, and Environmental Engineering in the College of Engineering.

Executive Summary: The proposed program will provide an option for students who seek advanced study in civil engineering but are not interested in conducting the research required for the existing Master of Science Program in Civil Engineering. This proposal was reviewed by the Board Office and the Council of Provosts and is recommended for approval. No concerns were raised when it was presented to the Iowa Coordinating Council for Post-High School Education. The proposed program addresses the Board of Regents Strategic Plan priority (1.0) to “ensure high-quality educational opportunities for students.”

Background:

- Description of proposed program. The proposed program is a coursework only version of the Master of Science Program in Civil Engineering offered by the department. Graduates from this program will be employable in government, private, and academic sectors. The proposed program will require completion of 30 credits of graduate work without a thesis.

- Relationship to existing programs. Currently, the department offers a Master of Science Program in Civil Engineering with areas of specialization in structural engineering, environmental engineering, construction engineering and management, geotechnical engineering, civil engineering materials, and transportation engineering. The existing program requires completion of 30 credits of graduate work, including preparation of a thesis or creative component.

- Duplication. There are no other institutions of higher education in Iowa that offer a Master of Engineering Program in Civil Engineering.

- Student demand. The Department of Civil, Construction, and Environmental Engineering examined the enrollment categories of peer institutions and concluded that approximately 30% of the graduate students in this discipline are pursuing a coursework only degree option. The proposed program is expected to appeal to current and future students who also want to pursue a coursework only degree option.

- Projected enrollment. The projected enrollment is five students in Year 1, increasing to 40 students per year by Year 7. The proposed program will be offered primarily through distance education and will appeal to place-bound students. It is also anticipated that the proposed program will appeal to undergraduate students who qualify to undertake a concurrent graduate program.
Unique features. ISU is a national leader in the area of civil engineering as evidenced by the program’s consistent national ranking in the top 25 graduate programs.\(^1\) The proposed program will build on existing strengths and will be competitive with peer institutions that offer a similar program.

Need for proposed program. Discussions are currently occurring between the American Society of Civil Engineers and the National Council of Examiners for Engineering and Surveying to encourage state licensing authorities to require 30 credits of graduate level education beyond a bachelor’s degree as a prerequisite for professional licensure in civil engineering. If this BS+30 model is adopted, ISU will be positioned to address the requirement for advanced study.

Resources. The University anticipates that no new resources will be needed to establish the proposed program. The proposed program will use existing courses, faculty, and facilities for graduate education in civil engineering.

Cost. The University anticipates that the proposed program will not incur new costs.

Link to institutional strategic plan. The proposed program addresses ISU’s Strategic Plan priority “to strengthen undergraduate, graduate, and professional education to enhance student success at ISU and beyond.”

\(^1\) 2009 U.S. News and World Report.