



Civil Engineering Educational Outcomes

GRADUATES FROM THE BSCE PROGRAM IN CIVIL ENGINEERING WILL HAVE:

- An appropriate fundamental understanding of mathematics, physics, chemistry, geology, and other basic sciences.
- Basic computer skills consistent with applications to civil engineering problem solving.
- Basic engineering knowledge across a range of subjects including mechanics, mechanics of materials, engineering construction materials, statics, dynamics, fluid mechanics, and CADD.
- An understanding of basic economics, together with approaches to economics based decision making.
- A working knowledge of probability and statistics as applied to civil engineering problems.
- Basic technical proficiency in at least four of the recognized civil engineering focus areas.
- An understanding of the intradisciplinary approach in Civil Engineering problem solving and design at the design project level through a capstone design project experience.
- Experience with individual and team based approaches to civil engineering problem solving in the classroom, laboratory, and through an integrated capstone design project experience.
- Practical and hands-on laboratory experience solving Civil Engineering problems involving measuring physical phenomena and interpreting results.
- An understanding of ethics of engineering activities, professional standards and responsibilities, the relationships between engineering and society in general, and the necessity for life-long learning.
- Well-developed written communication skills, and experience with oral communications both individually and on teams.
- A broad understanding and global perspective of society in general by exposure to fine arts, literature, letters, foreign language or culture, social science, and English communication.
- An opportunity to: obtain membership and become active in the student chapter of the ASCE; develop teamwork and leadership skills; participate in service activities related to the local community and the civil engineering professional society.

Fall, 2006