Bachelor of Science in Construction Management Program

Mission Statement

The Mission of the Construction Management program is to educate and prepare students to succeed in the construction management profession by providing them with essential technical, managerial and communication skills and tools, which will enable them to perform current and future construction management tasks and to promote the need for life-long learning.

Educational Objectives

The Construction Management program educational objectives are to produce graduates, who after entering the construction management practice with a fundamental knowledge of construction management principles and current technologies, communication skills and practical construction experience, will:

- 1. Provide substantial contributions to the construction industry
- 2. Pursue life-long learning through continuing education and/or advanced degrees in construction management or other related fields.
- 3. Continue to develop professionally through participation in professional organizations and/or participation in professional development activities in the industry.
- 4. Progress toward professional certifications.

Program Strategic Goals

In addition to the above Program Educational Objectives and the 20 Student Learning Outcomes, the CM Program has established the following 5 Strategic Goals:

- G1. Integration of current technologies into the CM curriculum The achievement of this goal will be measured by the number and extent that information technology is integrated into the CM curriculum. Appropriate software will be identified and integrated into current courses.
- G2. Continuous enhancement of the quality of undergraduate program The achievement of this goal will be measured by the implementation of our continuous quality improvement plan.
- G3. Professional development of faculty The achievement of this goal will be measured by relevant data obtained from faculty annual reports. CEM faculty will be encouraged to participate annually in national and international events including conferences and publications.
- G4. Industry partnerships The achievement of this goal will be measured by relevant data obtained from CECEM-ADC reports. A CECEM Advisory and Development Council (CECEM-ADC) has been established to help the CECEM program keep the curriculum up-to-date and high quality.
- G5. Global objective The achievement of this goal will be measured by relevant data obtained from faculty annual reports. The Program will explore opportunities for students/faculty participate in global activities.

Program Learning Outcomes

The CM Program adopted the ACCE-Student Learning Outcomes as the Program Learning Outcomes, which have been linked to the Course Learning Outcomes/Objectives of all CEM courses. Specifically, the CEM courses in Construction category have the learning outcomes that address the ACCE-Student Learning Outcomes including the following abilities:

- 1. Create written communications appropriate to the construction discipline.
- 2. Create oral presentations appropriate to the construction discipline.
- 3. Create a construction project safety plan
- 4. Create construction project cost estimates.
- 5. Create construction project schedules.
- 6. Analyze professional decisions based on ethical principles.
- 7. Analyze construction documents for planning and management of construction processes.
- 8. Analyze methods, materials, and equipment used to construct projects.
- 9. Understand construction management skills as a member of a multi-disciplinary team.
- 10. Apply electronic-based technology to manage the construction process.
- 11. Apply basic surveying techniques for construction layout and control
- 12. Understand different methods of project delivery and the roles and responsibilities of all constituencies involved in the design and construction process
- 13. Understand construction risk management.
- 14. Understand construction accounting and cost control.
- 15. Understand construction quality assurance and control.
- 16. Understand construction project control processes.
- 17. Understand the legal implications of contract, common, and regulatory law to manage a construction project
- 18. Understand the basic principles of sustainable construction.
- 19. Understand the basic principles of structural behavior.
- 20. Understand the basic principles of mechanical, electrical and piping systems.