Department of Civil, Construction and Environmental Engineering

Office: 260 H.M. Comer Hall

Civil, construction and environmental engineers design and build the local communities in which we all live and work. They also work globally to make positive change in the world. Civil, construction and environmental engineers are in high demand and make a difference locally and globally from planning the public parks in our own neighborhoods to providing clean and safe drinking water to children in refugee camps a world away, from designing and constructing modern sports stadiums to environmentally cleaning-up polluted lakes and streams, and from creating new and efficient public transportation networks to developing smart materials for our next generation of infrastructure.

- Majors
  - Civil Engineering (BS)
  - Construction Engineering (BS)
  - Environmental Engineering (BS)
- Minors
  - Architectural Engineering
  - Civil Engineering
  - Construction Engineering
  - Environmental Water and Resources Engineering
  - Structural Engineering
  - Transportation Engineering
- Certificates
  - Construction Management
  - Environmental Engineering

The American Society of Civil Engineers (ASCE) states the following vision for civil, construction and environmental engineers in the year 2025: Entrusted by society to create a sustainable world and enhance the global quality of life, civil engineers serve competently, collaboratively and ethically as master:

- planners, designers, constructors and operators of the built environment
- stewards of the natural environment and its resources
- innovators and integrators of ideas and technology across the public, private and academic sectors
- managers of risk and uncertainty caused by natural events, accidents and other threats
- leaders in discussions and decisions shaping public environmental and infrastructure policy

Civil, construction and environmental engineering provides a full breadth of opportunities for those who, for example, dream of designing and constructing structures from roller coasters to sky scrapers, designing new water purification and distribution systems that provide clean and safe drinking water, or creating tomorrow’s safe and sustainable transportation systems to move people and goods efficiently.

The department’s comprehensive and flexible set of programs provides students with the knowledge, skills and attributes necessary to successfully enter the profession and lead exciting, fulfilling careers. Students may choose between two undergraduate majors, the bachelor of science in civil engineering (BSCE) and the bachelor of science in construction engineering (BSConE). Additionally, students may elect to supplement their degree with one of the department minors: architectural engineering, civil engineering (for non-civil majors), construction engineering (for non-construction majors), environmental and water resources engineering, structural engineering, and transportation engineering.

Departmental Honors Program

The Department of Civil, Construction and Environmental Engineering offers an undergraduate honors program for students who seek to be challenged by both independent and team projects, and who wish to receive additional distinction with their undergraduate degrees. This individually tailored program culminates with awarding of a Department Honors Certificate and recognition at the Honors Day Ceremony in the student’s senior year.

Requirements for the Bachelor of Science Degree with Honors

The requirements for the Bachelor of Science in Civil Engineering with honors and the Bachelor of Science in Construction Engineering with honors are as follows:

1. Completion of the course requirements for the BS degree in civil engineering or construction engineering.
2. Maintenance of at least a 3.3 GPA in all civil engineering courses, as well as a 3.3 cumulative GPA in all undergraduate coursework.
3. Completion of 12 hours of approved civil engineering courses using honors credit. The professor and the honors student enter a contract by which the student agrees to additional work to receive honors credit. The following courses are guaranteed available for honors by contract:
   - CE 260 Civil & Construction Surveying
   - CE 320 Intro Environmental Engineering
   - CE 366 Introduction to Construction Engineering
   - CE 378 Water Resources Engineering
   - CE 433 Reinforcing Concrete Structures

4. While the above courses are available for the Departmental Honors Program, they are not required. Other CE courses are available and can be included as part of the required 12 hours of honors credit by contract. Courses other than those listed above taken for honors credit require instructor and departmental approval. Student should contact the instructor for availability.
5. Completion of an honors undergraduate thesis. Students must work directly with a department faculty member on a problem of common interest. Credit for the thesis work is given through completion of three credit hours of the following course: CE 491 Special Problems. Credit for the honors thesis also is accepted as a CE elective within the civil or construction engineering curriculum.

Students enrolled in the Civil, Construction and Environmental Engineering Departmental Honors Program are also encouraged to participate in one of the three University-wide honors programs (University Honors Program, Computer-Based Honors Program or International Honors Program).

Students interested in the Civil, Construction and Environmental Engineering Departmental Honors Program should contact the department office or their academic advisers for further details.

Department Head
- Back, W. Edward

Director, Undergraduate Programs
- Williamson, Derek G.

Director, Graduate Programs
- Graettinger, Andrew

Director, Environmental Institute
- Ernest, Andrew

Director, Center for Sustainable Infrastructure
- Back, Edward W.

Director, University Transportation Center for Alabama
- Lindly, Jay K.

Director, Large Scale Structures Laboratory
- Kreger, Michael

Professors
- Amirkhanian, Serji
- Back, Edward W.
- Batson, Robert G.
- Durrans, S. Rocky
- Ernest, Andrew
- Fridley, Kenneth J.
- Johnson, Pauline D.
- Kreger, Michael
• Lindly, Jay K.
• Moynihan, Gary P.

Associate Professors
• Graettinger, Andrew
• Johnson, Philip W.
• Jones, Steven, Jr.
• Richardson, James A.
• Tootle, Glenn
• Wang, Jialai
• Williamson, Derek G.

Assistant Professors
• Dao, Thang N.
• Elliott, Mark
• Giannini, Eric
• Hainen, Alexander
• Marks, Eric
• Song, Wei
• Vereen, Stephanie

CE
121
Hours
1
Intro Civil Constrctn Envir Eg
Introduce the student to the areas of professional, civil and environmental engineering practices with exposure to faculty members specializing in each area, solving typical problems in each professional area, learning of the activities of service organizations, and the responsibilities of professional practice.

CE
220
Hours
3
Society Infrastruct & Environm
Permitting, environmental impact statements and other environmental issues associated with human activities and engineering projects.

View All Courses

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