Civil engineering emphasizes infrastructure—geotechnical, water resources, environmental, transportation, construction and structural engineering, as well as other related fields. Our program allows students to discover which area (or combination of areas) of civil engineering is right for them. We emphasize more than classroom learning. For example, the Kentucky Transportation Center, Kentucky Water Resources Research Institute and Environmental Research and Training Laboratories are housed within the Department of Civil Engineering, which also offers one of the nation’s few railroad engineering programs. Our graduates are properly equipped to meet the infrastructure challenges of today and tomorrow.

Pursuing Civil Engineering at UK
Students interested in the broad field of civil engineering must have a solid foundation in physics, chemistry and mathematics as well as excellent communication skills. They must be effective members of teams and implement interdisciplinary solutions to technical and socioeconomic problems of an increasingly complex world. All of our students have both a professional and a faculty advisor to help them plan their academic program and career.

Students may directly enroll as pre-engineering students; however, there are minimum admission requirements. Minimum freshman entry requirements are an ACT math score of 23 or higher or a SAT Math score of 540 or higher. Additionally, students must also meet the minimum Kentucky statewide academic readiness requirements for reading and writing. If you do not meet the initial admission requirements, please refer to the University of Kentucky Bulletin for alternative routes to admission to the College of Engineering.

Program Educational Objectives
The civil engineering program prepares graduates to use their technical teamwork and communication skills along with leadership principles to pursue educational endeavors and advance in their professional careers. It prepares graduates to function ethically in a variety of professional civil engineering roles, and use their broad education as a foundation for professional licensure and life-long learning.

Experiential Education
Growth and learning also happen outside the classroom. It happens in research labs working alongside professors and graduate students. It happens on student design teams in the capstone design courses. It happens on cooperative education rotations and internships with companies all over the country. There are also numerous study abroad programs.

Many undergraduate students conduct research with civil engineering faculty members. These “Research Experiences for Undergraduates” or REUs allow undergraduate students to perform hands-on research in our structures, environmental, hydrosystems, soils and materials laboratories. REUs often perform site visits and collect research data in the field using state-of-the-art research instrumentation such as innovative sensors for infrastructure and environmental monitoring.

The Engineering Career Development Office can assist you with developing job, co-op and internship search skills, participation in education abroad programs, participation in research endeavors and building career networks so you can secure a rewarding career in your chosen field of study.

Student Involvement
Student organizations are an outgrowth of student interest and serve the needs of a variety of students. Many provide programs that supplement the classroom experience and extend into areas of service for the community. All provide learning and leadership training for participating students.

Student organizations that are typically of interest to civil engineering students include: RailCats, American Society of Civil Engineers, Chi Epsilon, Institute for Transportation Engineers, the Kentucky Society of Professional Engineers, the National Society of Black Engineers, the Society of Women Engineers and Tau Beta Pi.

Honors & Scholarship Opportunities
Civil engineering students may also choose to participate in the UK Honors program. The College of Engineering, along with the Gatton College of Business and Economics, offers the Scholars in
### Civil Engineering Curriculum Sample

This is a sample list of classes a student will take to pursue a degree in civil engineering. In addition to the civil engineering curriculum, students must complete the pre-engineering requirements and general education coursework, called UK Core.

Note: This sample represents one of several paths to a College of Engineering degree. Consult the departmental websites for details on specific paths.

#### Freshman Year
- Intro to Civil Engineering: 1
- Calculus I and II: 8
- Composition & Communication I: 3
- Chemistry I: 4
- Physics I and lab: 5
- Computer Graphics and Comm.: 3
- UK Core courses: 6
- **Total hours**: 30

#### Sophomore Year
- Surveying: 4
- Composition & Communication II: 3
- Chemistry II: 3
- Statics: 3
- Calculus III and IV: 7
- Physics II and lab: 5
- Principles of Physical Geology: 4
- Deformable Solids and lab: 4
- **Total hours**: 33

#### Junior Year
- Technical Writing: 3
- Intro to Construction Engineering: 3
- Intro to Fluid Mechanics: 4
- Civil Engineering Materials: 3
- Engineering Statistics: 3
- Computer Science for Engineers: 2
- Transportation Engineering: 3
- Intro to Environmental Engineering: 3
- Structural Analysis: 3
- Engineering Science elective: 3
- Math or Science elective: 3
- UK Core course: 3
- **Total hours**: 36

#### Senior Year
- Water Resources Engineering: 4
- Soil Mechanics: 4
- Structures elective: 3
- Technical Design electives: 6
- Civil Engineering Seminar: 1
- Systems Design: 3
- Technical elective: 3
- Supportive elective: 3
- UK Core courses: 6
- **Total hours**: 33

The University of Kentucky’s Civil Engineering program is accredited by the Engineering Accreditation Commission of ABET, www.abet.org.

Revised August 2015. Information subject to change. For the most up-to-date information on the UK College of Engineering, visit www.engr.uky.edu.