CIVIL ENGINEERING

Civil Engineering

The American Society of Civil Engineers (ASCE) defines civil engineering as "the profession in which a knowledge of the mathematical and physical sciences gained by study, experience, and practice is applied with judgment to develop ways to utilize economically, the materials and forces of nature for the progressive well-being of humanity in creating, improving and protecting the environment, in providing facilities for community living, industry and transportation, and in providing structures for the use of humankind". The CE program aims to prepare students with a breadth and depth in the technical knowledge so that they can work immediately in most areas of the profession including geotechnical engineering; hydraulics, hydrology, environmental engineering; structural engineering; and transportation/ traffic engineering.

Program Description:

The program offers the bachelor's degree and the master's degree in civil engineering and participates in the UMKC Interdisciplinary Ph.D. program. The Bachelor of Science in Civil Engineering is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org/.

The Master of Science in Civil Engineering has both thesis and non-thesis options. Students interested in pursuing a doctoral degree in civil engineering may select engineering as a discipline when applying for admission into the Interdisciplinary Ph.D. program.

The civil engineering program has a rich history in Kansas City. The University of Kansas City offered a General Engineering degree in the 1950's. The master's program in civil engineering was started in 1964 and later the undergraduate program was added in the early 1970s. Since 1977, the undergraduate program in civil engineering has been independently accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org/. The program became a part of the School of Computing & Engineering in January 2001 and joined the School of Science and Engineering in July 2022.

Civil Engineering participates in the Interdisciplinary Ph.D. program of the University of Missouri-Kansas City as part of the engineering (http://catalog.umkc.edu/colleges-schools/graduate-studies/engineering/) discipline. Students interested in pursuing a doctoral degree in civil engineering may select engineering as the primary discipline when applying for admission into the Interdisciplinary Ph.D. Program (http://catalog.umkc.edu/colleges-schools/graduate-studies/interdisciplinary-phd-program/). See the School of Graduate Studies (http://catalog.umkc.edu/colleges-schools/graduate-studies/) section of this catalog for general and discipline-specific admission requirements and regulations for Interdisciplinary Ph.D. study with engineering as one of the desired disciplines.

Undergraduate Programs:

- Bachelor of Science in Civil Engineering

Graduate Programs

- Engineering and Construction Project Management Certificate (http://catalog.umkc.edu/colleges-schools/science-engineering/civil-engineering/engineering-construction-project-managment-certificate/)
- Master of Science in Civil Engineering
- Doctor of Philosophy in Civil Engineering

Academic Regulations for Civil Engineering

Minimum Grade Requirement

A grade of "C-" or better must be earned in all major courses required in the civil engineering degree programs.

Audits

A student cannot take a course for audit and later expect to take the same course for credit in the degree program. For that reason, students must not audit any courses required in their program, unless credit has already been established. To audit an elective course, written consent from both the student's advisor and the instructor of the course is required. After the first week of classes, a student cannot change from credit to audit or audit to credit.

Petitions

To receive an exception from stated departmental guidelines or curriculum, the student must file a petition with the academic advisor. For transfer credit taken at another institution that is not articulated, a student may need to submit a petition to receive transfer credit. If the petition is denied by the Civil Engineering Degree Program Committee, the student may appeal the decision to the Dean of the School of Science & Engineering.

Academic Standing

The University tries to assure that students progress satisfactorily toward their goals and receive clear warning when they do not. The Civil Engineering program follows the university policy related to Academic Standing.

Satisfactory Academic Progress

Students will be expected to maintain continuous satisfactory academic progress and can be removed from the civil engineering program after evaluation by the Academic Committee if it finds that satisfactory academic progress is not being made.

Academic Appeals

If a student has become academically ineligible, the student may be allowed to continue academic studies, provided that the student successfully appeals to the Academic Appeals Committee. The primary concern of the Appeals Committee is the likelihood of the student's future success. Accordingly, any appeal should include causes for the student's past poor performance and reasons for expecting better performance in the future. When the Appeals Committee allows a student to re-enroll, it may set conditions such as courses to be taken, minimum grades, total hours, etc. to which the student must adhere.A grade-point average deficiency may be removed by repeating a course or by taking additional courses that qualify as eligible electives in the curriculum.

Career Opportunities

Kansas City is one of the premier centers of engineering design in the country. Numerous civil infrastructure design and construction firms with national and international reputation are headquartered in Kansas City. This offers a unique opportunity to our students, many of whom participate actively as interns or as employees with these firms during the course of their study, thereby, getting a balanced blend of course work and practical experience.

Job opportunities abound for engineering majors. In terms of starting salaries and the number of job offers, engineering graduates compare favorably with all other graduates. In addition, the civil engineering curriculum at UMKC equips the graduate with the analytic decision-making skills necessary to pursue diverse technical, managerial and entrepreneurial career opportunities.

Civil Engineering Specialty Areas

UMKC's Civil Engineering Program has faculty members who are active in research with funding from numerous local and national industries and government agencies.

Research and study are available in the following specialty areas:

- Water and Environmental
- Structural
- Geotechnical and Materials
- Construction Management

For more information, visit our website at http://sse.umkc.edu (http://sce.umkc.edu).

Faculty

Civil Engineering Faculty

ZhiQiang Chen[2,3]; associate professor; B.S. (Southeast University, Nanjing, China); M.S. Michigan Technological University); Ph.D. (University of California-San Diego).

Thiagarajan Ganesh[2,3]; professor; B.Tech., M.Tech. (Indian Institute of Technology-Madras); Ph.D. (Louisiana State University-Baton Rouge).

Ceki Halmen[2,3]; associate professor; B.S. (Bogazici University, Istanbul, Turkey); M.S., Ph.D. (Texas A&M University).

Megan Hart[2,3]; associate professor; B.S. (Western Washington University), B.S., M.S., Ph.D. (Missouri University of Science and Technology); R.G.

John T. Kevern[2,3]; director, Division of Natural and Built Environment, and professor; B.S. (University of Wisconsin-Platteville); M.S., Ph.D. (Iowa State University); LEED AP.

Deborah J. O'Bannon; professor emeritus; B.S. (Massachusetts Institute of Technology); M.Eng. (Manhattan College); Ph.D. (University of Iowa); P.E.

Jerry E. Richardson; associate professor emeritus; B.S., M.S., Ph.D. (Colorado State University); P.E.

Kevin Z. Truman[2]; dean and professor, B.A. (Monmouth College); B.S., M.S. (Washington University); Ph.D. (University of Missouri-Rolla).

Micah Wyssmann; Assistant Professor, BS (University of Arkansas); PhD (University of Tennessee, Knoxville).