

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 and Engineering (SCE) in January 2001 and is housed in Flarsheim Hall.

Academic Regulations for Civil and Mechanical Engineering

Minimum Grade Requirement

A grade of "C" (2.0) or better must be earned in all major course required in the civil or mechanical 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 CME Academic Appeals Committee, the student may appeal the decision to the Dean of the School of Computing & Engineering. Academic

Academic Standing

The University tries to assure that students progress satisfactorily toward their goals and receive clear warning when they do not. To this end, engineering adheres to a clear policy, but provides for exceptions in unusual cases. The interest of the student is paramount.

A student is in good academic standing when term and cumulative grade-point averages (GPA) from the University of Missouri system are 2.0 or higher in courses necessary for an engineering degree. Students will be placed on academic probation if, when in good academic standing, they earn a term GPA of less than 2.0 but greater than 1.0. Students may also be placed on academic probation at the time of initial admission or readmission because they do not fully meet the minimum standards. Students earning a term GPA of less than 1.0, or a term GPA of less than 2.0 while on academic probation become ineligible for continuation of studies. The academic standing statements found at the top of semester grade reports are defined as follows:

- Now In Good Standing - Term and cumulative GPA greater than 2.0.
- Now On Probation - Term or cumulative GPA less than 2.0.
- Academically Ineligible - Term GPA less than 1.0 or two consecutive semesters with term or cumulative GPA less than 2.0.
- When a student becomes academically ineligible, the student is not allowed to continue academic studies. Any pre-registration of course work will be canceled. In order to continue academic studies, the student must appeal to the Civil and Mechanical Engineering Department in writing.

Now in Good Standing

A student whose term and cumulative grade-point averages (GPA) from the University of Missouri system are 2.0 or higher in courses necessary for an engineering degree, is in good academic standing. A term is defined as a fall semester, spring semester or summer session.

Now on Probation

A student will be placed on academic probation if, when in good academic standing, the student earns a term GPA of less than 2.0 but greater than 1.0. A student may also be placed on academic probation at the time of initial admission or readmission because the student does not fully meet the minimum requirements.

Probationary Term

After being placed on academic probation, the student's next semester of enrollment (the probationary term) must result in the completion of at least 12 hours of course work necessary for an engineering degree. A student will be returned to good standing if, at the end of the probationary term, the student's term and cumulative GPAs are 2.0 or higher in courses necessary for an engineering degree.

Academically Ineligible

A student will become academically ineligible if any of the following apply:

- The student receives a term GPA of less than 1.0.
- The student receives a term GPA of less than 2.0 for the probationary term.
- The student receives a cumulative GPA of less than 2.0 for the probationary term.
- The student fails to complete at least 12 hours of course work necessary for an engineering degree during the probationary term.

Satisfactory Academic Progress

Students will be expected to maintain continuous satisfactory academic progress and can be removed from the civil or mechanical engineering program after evaluation by the Civil and Mechanical Engineering Academic Committee if it finds that satisfactory academic progress is not being made (see CME Student Handbook for details).

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://sce.umkc.edu>.