

**Electives in Selected Areas of Emphasis** (0-5 hours for general civil emphasis, 0-4 for environmental emphasis)

To bring the total number of hours to 132, students may take additional courses in Mathematics and Basic Sciences, General Education, Engineering Sciences and Introduction to Design, Engineering Analysis and Design. The following restrictions apply to courses in these areas:

Mathematics and Basic Sciences

Students may take elective courses designated as natural sciences and mathematics (N). Elective courses in mathematics must require MATH 122 as a prerequisite. Physics courses numbered below 211 and chemistry courses numbered below 130 are not accepted as general electives.

General Education Courses

Students may take elective courses designated as humanities (H) and social sciences (S). The humanities and social sciences courses are identified in the online timetable and in the Undergraduate Catalog with the letters H for humanities and S for social science courses. Western Civilization courses count as general electives. English courses taken as general electives must have ENGL 102 as a prerequisite. Any communication studies course (COMS) may be taken as a general elective.

**Other Technical Elective Courses**

In addition to courses in the four areas listed above, students may take technical elective courses adhering to the restrictions outlined in the following. The content of an elective course must differ substantially from the content of any course taken to fulfill a degree requirement.

Suggested Electives (5)

<a href="#">CE 191</a>	Introduction to Civil Engineering	2
<a href="#">ENGL 362</a>	Foundations of Technical Writing	3

Credit for ROTC Courses

A maximum of 6 credit hours of ROTC may be used:

1. 3 hours of ROTC may be substituted for [COMS 130](#).
2. up to 3 hours of ROTC courses related to physical sciences, engineering, social sciences, or humanities in excess of the 21 hours required (for those completing the ROTC program).

Credit for Foreign Language

1. In the civil engineering concentration, up to 16 hours of foreign language with proper planning (usually 6 hours).

2. In the environmental concentration, up to 15 hours of foreign language with proper planning (usually 6 hours).

### Introduction to Engineering Courses

Students who start in the civil engineering program as freshmen normally will complete CE 191, Introduction to Civil Engineering, in their first semester. Credits for CE 191 are counted in area V. Students who transfer to civil engineering after the freshman year may have completed an introductory course in another engineering discipline. Those credits are also counted in area V. However, the credit hours from only one introduction-to-the-profession course may be applied toward graduation.

### Architectural Engineering Courses

Any course number above 300 is acceptable.

### Architecture Courses

Up to five credit-hours of building technology and site planning courses numbered 250 or above may be taken as general electives.

### Business Courses

Any course offered by the KU School of Business is acceptable. Business courses offered at other colleges or universities will be accepted only if the courses are substantially equivalent to business courses taught at KU.

### Urban Planning Courses

Any course offered by the KU Department of Urban Planning is acceptable.

### Graduate Courses in Civil and Environmental Engineering

A student who wishes to study a particular civil engineering area in greater depth can take courses at the 600 or 700 level. The 700-level courses are primarily for graduate students but are open to seniors who have completed the prerequisites. The 700-level courses are not recommended for students with low grade point averages. A student not wishing to specialize can attain a broader background in civil engineering design by taking additional courses beyond the minimum requirements in area IV.

### Engineering Courses

Any course offered by the various departments of the School of Engineering is acceptable except AE 241 Private Flight Course and AE 242 Private Flight Aeronautics

### Honors Courses

Courses with the honors program designation (HNRS) will be accepted as general electives.