# Civil Engineering (Geotechnical Track)

**128 credit hours total**

**YEAR 1**
- **FALL**
  - **MATH 220 (4)**: Analytic Geometry and Calculus I (KSC-3)
  - **MATH 221 (4)**: Analytic Geometry and Calculus II
  - **CHM 210 (4)**: Chemistry I (KSC-4)
  - **ENGL 100 (3)**: Expository Writing I (KSC-1)
  - **CE 202 (3)**: Civil Engineering Graphics
  - **CE 212 (3)**: Elementary Surveying Engineering
  - **DEN 160 (1)**: College of Engineering Orientation

- **SPRING**
  - **CE 333 (3)**: Statics
  - **CE 241 (3)**: Introduction to Civil Engineering Materials
  - **COMM 106 (3)**: Public Speaking (KSC-2)
  - **ENGL 200 (3)**: Expository Writing II
  - **Elective (3)**
  - **Elective (4/5)**

- **YEAR 2**
  - **FALL**
    - **MATH 340 (4)**: Elementary Differential Equations
    - **ME 512 (3)**: Dynamics
    - **CE 333 (3)**: Statics
    - **CE 241 (3)**: Introduction to Civil Engineering Materials
    - **Math/Science**
    - **Elective (3)**

  - **SPRING**
    - **STAT 510 (3)**: Introductory Probability and Statistics I
    - **ME 310 (2)**: Elements of Thermodynamics
    - **CE 537 (3)**: Introduction to Transportation Engineering
    - **ENGL 415 (3)**: Written Communication for Engineers
    - **Elective (3)**

- **YEAR 3**
  - **FALL**
    - **CE 522 (3)**: Soil Mechanics I
    - **CE 534 (1)**: Mechanics of Materials Laboratory
    - **GEOL 100 (3)**: Earth in Action
    - **CE 501 (1)**: Project Economic Evaluation
    - **KEIO 185 (3)**: Engineering Ethics (or DEN 325)

  - **SPRING**
    - **CE 563 (3)**: Environmental Engineering Fundamentals
    - **CE 351 (3)**: Incompressible Fluid Mechanics
    - **PHILO 185 (3)**: Foundation Engineering
    - **CE 502 (1)**: Project Management
    - **Elective (3)**

- **YEAR 4**
  - **FALL**
    - **CE 550 (3)**: Water Resources Engineering (or BAE 560)
    - **CE 553 (3)**: Foundation Engineering
    - **CE 552 (3)**: Civil Engineering Project
    - **CE 503 (1)**: Project Delivery
    - **Elective (3)**

  - **SPRING**
    - **CE 585 (3)**: Civil Engineering Project
    - **CE 588 (3)**: Civil Engineering Project
    - **CE 572 (3)**: Highway Engineering, Planning and Management
    - **CE 571 (3)**: Foundation Engineering
    - **Elective (3)**

**Degree map is for advising purposes only. Students are responsible for complying with University Catalog requirements.**

**KEY**
- **= Prerequisite for another course**
- **PR = Prerequisite requirement**
- **PR/CO = Prerequisite or concurrent requirement**
- **= Class applies for tracks**
- **= K-State Core (KSC) course**
- **= See department approved electives**
- **= Only offered in the semester shown**

EFFECTIVE FALL 2024
Civil Engineering Curriculum Notes

A GPA of at least 2.25 in the four CE Design elective courses used to satisfy their 12 hours of CE design electives in four areas of civil engineering. If more than 12 hours of CE Design electives, the best 12 hours that meet the requirement of four different design areas and the track requirements will be used to compute the CE Design elective GPA.

A resident cumulative GPA of 2.30 or better is required for a change of major from any engineering program to civil engineering.

Electives
- Approved Civil Engineering electives and requirements are available at ce.k-state.edu/undergrad/student-handbooks.
- Math/Science electives are to be selected from the list approved by the department to satisfy the requirements.
- The Design elective courses selected should cover at least four different design areas: Environmental, Geotechnical, Structural, Transportation/Materials and Water Resources.
- CE Track electives are to be selected from the list approved by the department and in consultation with the student’s faculty advisor to satisfy track requirements.

Substitutions
BAE 560 can be substituted for CE 550.
DEN 325 can be substituted for PHILO 185.

K-State Core
The K-State Core (KSC) is the university’s version of the systemwide general education framework established by the Kansas Board of Regents.

KSC requirement 1 – English (6 hours)
KSC requirement 2 – Communications (3 hours)
KSC requirement 3 – Math and Statistics (3 hours)
KSC requirement 4 – Natural and Physical Sciences (4-5 hours)
KSC requirement 5* – Social and Behavioral Sciences (6 hours)
KSC requirement 6* – Arts and Humanities (6 hours)
KSC requirement 7 – Institutional Electives (6 hours)

To view course lists for each requirement, visit k-state.edu/provost/kstate-core.

*Requires two courses from two different subject areas.