USC Viterbi
School of Engineering

MS Civil Engineering – General Sample Course Plan

This course plan serves as an example of the program. Program requirements and course offerings are subject to change.

The MS Civil Engineering - General Program is designed to provide students with knowledge from a few disciplines within civil engineering. The program requires students to complete a minimum of 3 units from each of the following areas: Environmental Engineering & Water Resources, Construction & Transportation, Geotechnical Engineering, and Structural Engineering.

Fall 2024 ● Construction & Transportation (4 units) ● Geotechnical Engineering (4 units)	Spring 2024 ● Environmental Engineering & Water Resources (4 units) ● Structural Engineering (4 units)
Fall 2025 ● Elective (4 units) ● Elective (4 units)	Spring 2025 ● Elective (4 units)

Electives (12 units)

Environmental Engineering & Water Resources

- CE 451: Water Resources and Coastal Engineering
- CE 465: Water Supply & Sewage System Design
- CE 476: Design of Hydraulic Systems
- CE 510: Groundwater Management (offered seasonally)
- CE 516: Geohydrology
- CE 520: Ocean and Coastal Engineering (offered seasonally)
- ENE 505: Energy and the Environment
- ENE 535: Applied Air Quality Management

Geotechnical Engineering

- CE 482: Subsurface Foundation Design
- CE 533: Geotechnical Earthquake Engineering
- CE 534: Retaining Structures & Slope Stability

Construction & Transportation

- CE 462: Construction Methods and Equipment
- CE 471: Principles of Transportation Engineering
- CE 501: Architecture, Engineering and Construction Practices
- CE 569: Project Controls
- CE 573: Advanced Technologies in AEC Practices
- CE 579: Introduction to Transportation Planning Law
- CE 583: Design of Transportation Facilities
- CE 585: Traffic Engineering and Control

Structural Engineering

- CE 537: Advanced Reinforced Concrete
- CE 539: Advanced Steel Structures