

Technical Electives- Civil Engineering



Structural Area Courses

Course #	Title	Credit	Department
CE 379	Numerical Methods in Engineering	3	Engineering
CE 468	Experimental Stress Analysis	3	Engineering
CE 475	Design of Steel Structures	3	Engineering
CE 478	Finite Element Analysis	3	Engineering
CE 570	Advanced Structural Mechanics	3	Engineering
MA 510	Vector Calculus (‡)	3	Mathematics

Geoenvironmental Area Courses

Course #	Title	Credit	Department
CE 420	Water Resources	3	Engineering
CE 465	Water and Wastewater Engineering	3	Engineering
CE 480	Foundation Analysis and Design	3	Engineering
GEOL G451	Principles of Hydrogeology (†)	3	Geology
GEOL G406	Introduction to Geochemistry (†)	3	Geology
BIOL 349	Environmental Science (†)	3	Biology

Construction Management Area Courses

Course #	Title	Credit	Department
CE 410	Route and Construction Surveying	3	Engineering
CE 431	Construction Contracting and Specifications	3	Engineering
CE 432	Construction Planning and Scheduling	3	Engineering
SE 520	Engineering Economics	3	Engineering
BUS Z 302	Management of Organizations and People (‡)	3	Business

Transportation Area Courses

Course #	Title	Credit	Department
CE 448	Transportation Planning	3	Engineering
CE 450	Roadway and Pavement Design	3	Engineering
CE 455	Traffic Engineering	3	Engineering
MA 575	Graph Theory (‡)	3	Mathematics

Special Topics

Course #	Title	Credit	Department
CE 412	Geographic Information Systems in Engineering	3	Engineering
CE 435	Introduction to Engineering Systems Design	3	Engineering
CE 490	Selected Topics in Civil Engineering	3	Engineering
STAT 512	Applied Regression Analysis (‡)	3	Mathematics

(†) At least one technical elective course shall be taken from this group.

(‡) Only one technical elective course may be taken from this group.

A maximum of two elective courses can be taken from non-civil engineering courses.