

Design Credits from Professional Electives

The CEE department requires that a total of 18 credit hours of design be taken. For the CE degree, through required courses (CE 212; CE 301; CE 310; CE 320; CE 330; CE 340; CE 441 or CE 442; and CE 490 or CE 491 or CE 492) you will have accumulated 13 design credits. Therefore, CE majors will need to obtain the remaining 5 design credits from the professional elective courses (see special notes section). Required courses for the EN major supply 9 or 8 design credits depending whether CE 479 or CE 480 is taken. Therefore additional 9 or 10 design credits must be obtained from the Core Professional Courses and Professional Electives. The following is a list of courses that carry design credits.

Course No.	Course Title	Design Credits
CE 212	Introduction to Engineering Design	1.5
CE 301	Engineering Measurements	1.5
CE 310	Geotechnical Engineering I: Soil Mechanics	1
CE 320	Structural Analysis	1
CE 330	Water Resources Engineering I	1
CE 340	Introduction to Environmental Engineering	1
CE 405	Construction Planning and Management	1
CE 406	Construction Engineering	2
CE 407	Construction Estimating and Scheduling	2
CE 411	Construction Materials Engineering	2
CE 415/515	Geotechnical Engineering II: Foundations	3
CE 421/521	Composite Mechanics and Design	1
CE 430	Water Resources Engineering II	1
CE 433	Human Exposure Analysis	2
CE 441	Reinforced Concrete Design	3
CE 442	Steel Design	3
CE 444/544	Advanced Design of Structural Concrete	3
CE 447	Reinforced Masonry and Timber Design	3
CE 448	Introduction to Architectural Engineering	2
CE 452	Advanced Mechanics of Materials	1
CE 453/553	Properties and Performance of Concrete Materials	1
CE 455/555	Structural Damage Assessment and Repair	1
CE 457/557	Environmental Degradation of Concrete Structures	1
CE 461	Transportation Systems Design	3
CE 468	Traffic Engineering	1.5
CE 478	Solid Waste Management & Landfill Design	2
CE 479	Water and Wastewater Treatment Processes	2
CE 480	Environmental Quality Engineering	1
CE 481/581	Hazardous Waste Management Engineering	1.5
CE 482/582	Environmental Systems Analysis & Design	2
CE 486	Industrial Ecology	1
CE 490/491/492	Senior Design (Structures, Transportation, Geotechnical, or Water Resources/Environmental or Building/Architectural)	3
CH 434	Air Pollution	1
IH 406	Industrial Hygiene Control Methods	2
CE 519	Advanced Foundation Engineering	3
CE 547	Reinforced Masonry and Timber Design	3
CE 582	Environmental Systems Analysis & Design	2
CE 583	Modeling Natural Aquatic Systems	1
CE 584	Chemodynamics	1
CE 586	Introduction to Industrial Ecology	1
ES 432	Risk Analysis	1.5