

Construction Engineering (CoE) Technical Electives

Course	Credits	Prerequisites
CE 404 Reinforced Concrete	3	CE 343
CE 405 Advanced Reinforced Concrete	2	CE 404
CE 408 Water Resources and Supply	3	CHEM 122, CE 309
CE 411 Design of Pre-stressed Concrete	2	CE 404
CE 417 Slope Stability and Retaining Walls	2	CE 316
CE 418 Transportation Engineering	4	CE 204
CE 419 Pavement Design	3	CE 316
CE 421 Open Channel Flow	3	CE 309
CE 430 Timber and Form Design	3	ME 223
CE 441 Finite Element Analysis	2	
CE 442 Matrix Analysis of Structures	2	CE 343
CE 444 Structural Steel Design	3	CE 343
CE 445 Advanced Steel Design	2	CE 444
CE 446 Basic Dynamics of Structures	3	CE 343
CE 451 Advanced Surveying	2	CE 204
CE 454 Geometric Highway Design	3	CE 418
CE 455 Airport Planning and Design	2	CE 418
CE 456 Railroad Planning and Design	2	CE 418
CE 457 Pavement Management Systems	2	CE 418, CE 419
CE 461 Foundation Engineering	2	CE 316
CE 462 Designing with Geosynthetics	2	CE 316
CE 472 Solid Waste Management	3	CE 370, CE 408
CE 473 Air Pollution	3	CE 370
CE 477 Applied Hydrology	3	CE 408
CE 478 Water Quality Management	3	CE 408, CE 410
CE 479 Advanced Water and Wastewater Treatment	3	CE 408, CE 410