

Master of Science in Civil Engineering/PhD Engineering
 Area of Emphasis – Structural Engineering and Structural Mechanics

Course Requirements

B.S. in Civil Engineering or must take sequence of required undergraduate courses first.

Required for Degree: 32 credits total – 24 credits coursework, 6 credits thesis, 2 credits seminar.

Suggested Courses:

Course Number	Course Name	Credits
CE 501 or ME 501	Advanced Mechanics of Materials	3
CE 502	Finite Element Methods in Solid Mechanics	3
CE 521	Structural Dynamics & Earthquake Engineering	3
CE 562*	Foundation Engineering I	3
CE 691	Graduate Seminar (2 semesters, 1 credit each)	2
CE 599	Thesis – Major Advisor	6

Structures Electives:

Course Number	Course Name	Credits
Math 312**	Partial Differential Equations for Engineering	3
ME 512	Introduction to Continuum Mechanics	3
ME 540	Elasticity	3
CE 503	Composite Materials	3
CE 506	Prestressed Concrete	3
CE 511	Reinforced Concrete Design	3
CE 513	Timber and Masonry Design	3
CE 518	Theory of Structural Stability	3
CE 524	Structural Design in Metals	3
CE 538	Sustainable Engineering	3
CE 548	Fuzzy Logic and Applications	3
CE 551	Problems	1 - 3
CE 567	Foundation Engineering II	3
CE 571	Sustainable Design and Construction	3
CE 578	Design of Temporary Support Structures	3

*CE 360L is a prerequisite for CE 562.

**Available for graduate credit except for graduate majors in the department.

Students must work with their faculty advisor to identify other appropriate elective courses for this degree program.

Note: Course offerings are subject to change each semester based on enrollment and instructor availability.

Revised September 2015