

## MS in Civil and Environmental Engineering (Construction Engineering Emphasis)

An MS degree is comprised of a minimum of 45 units of 400/500 level coursework. Level 500 coursework should not be less than 60% of the total units required for graduation. The following flowchart suggests courses consistent with a Construction Engineering Emphasis within the CE/ENVE department. For students on the ***Comprehensive Exam option***, students need to complete the required 45 units while students on the thesis option need to complete 9 units towards their thesis. The flowchart contains department and elective courses within and outside the CE/ENVE Department. It is important to note that courses need to be selected from the list below in consultation with the ***academic advisor***.

	<b>Select <u>ALL</u> courses in this list:</b>
<b>M.S Department Requirements</b>	CE 591 (1) – Graduate Seminar I (F) CE 592 (1) – Graduate Seminar II (W) CE 599 (9)* - Master's Thesis OR CE 596 (1) - Comprehensive Exam ( for project based)
	<b>Electives I</b>
<b>Highly Recommended</b>	CE 415 (2) - Advanced BIM for Civil Engineering CE 457 (4) - Bridge Engineering CE 475 (4) - Civil Infrastructure and Building Systems CE 488 (4) - Engineering Risk Analysis CE 586 (4) - Analysis and Design of Deep Foundations CM 443 (4) - Management of the Construction Firm CM 450 (5) - Integrated Project, Design and Program Management STAT 513 (4) - Applied Experimental Design and Regression Models IME 556 (4) - Technological Project Management IME 544 (4) - Advanced Topics in Engineering Economy
	<b>Electives II</b>
<b>Recommended</b>	CM 413 (5) - Jobsite Construction Management CRP 504 (4) - Sustainable Communities CE 559 (4) - Prestressed Concrete Design CE 557 (4) - Seismic Analysis and Design CRP 458 (4) - Local Hazard Mitigation Planning and Design

1. Students may select civil engineering elective courses from the list or choose courses of the areas of their interest with a consultation with their graduate advisor.
2. For all courses, check availability and required prerequisites with the catalog.