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MS ARCHITECTURAL ENGINEERING

Program Learning Objectives

- a. Formulate and solve advanced structural engineering problems.
- **b.** Analyze and model non-linear building response.
- **c.** Design a building system, component, or process to meet desired needs within realistic constraints such as regulatory, economic, environmental and constructability.
- **d.** Function in interdisciplinary teams for the design and construction of buildings.
- e. Communicate effectively.

Required Courses

Total units		45
Electives		11
Approved Electives ²		
or 9 units of approved elective courses in a student's Formal Study Plan and a comprehensive examination		
ARCE 598	Structural Engineering Design Project (3, 3, 3)	
Select from the following: ²		9
ARCH 551	Architectural Design (5, 5) 1	10
ARCE 511	Structural Systems Behavior	3
ARCE 504	Finite Element Method for Building Structures	3
ARCE 503	Nonlinear Structural Behavior II	3
ARCE 502	Nonlinear Structural Behavior I	3
ARCE 501	Advanced Structural Mechanics	3
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- 5 units of ARCH 551 may be replaced with 5 units of approved elective courses for students to collaborate with faculty on teachingscholar research, to pursue electives focused on their masters project, or to broaden their masters coursework where appropriate.
- At least 7 units of Approved Elective courses must be at 500 level.