

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

ARCE 501	Advanced Structural Mechanics	3
ARCE 502	Nonlinear Structural Behavior I	3
ARCE 503	Nonlinear Structural Behavior II	3
ARCE 504	Finite Element Method for Building Structures	3
ARCE 511	Structural Systems Behavior	3
ARCH 551	Architectural Design (5, 5) ¹	10
Select from the following: ²		9
ARCE 598	Structural Engineering Design Project (3, 3, 3)	
or 9 units of approved elective courses in a student's Formal Study Plan and a comprehensive examination		
Approved Electives ²		
Electives		11
Total units		45

¹ 5 units of ARCH 551 may be replaced with 5 units of approved elective courses for students to collaborate with faculty on teaching-scholar research, to pursue electives focused on their masters project, or to broaden their masters coursework where appropriate.

² At least 7 units of Approved Elective courses must be at 500 level.