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.