MASTER OF ENGINEERING IN STRUCTURAL ENGINEERING

The Master of Engineering in Structural Engineering provides students with the knowledge needed to design the built environment. Students learn how buildings and bridges may be designed to resist the forces imposed upon them by external loads, gravity, wind, and earthquakes. Up-to-date computer-aided design techniques and the latest national building codes dealing with steel, reinforced concrete, pre-stressed concrete, and masonry structures are treated.

Up to 12 credit hours of 400-level undergraduate coursework may be included in the program with adviser approval. No thesis or comprehensive examination is required for completion of the degree. CAE 431 and CAE 432 do apply towards this program, except for students pursuing a Bachelor of Science in Architectural Engineering in conjunction with an Accelerated Master's of Engineering in Structural Engineering (where two of the three shared courses between the programs can include CAE 431 and CAE 432).

Curriculum

Code	Title	Credit Hours
Required Core Courses		(15)
CAE 503	Advanced Structural Analysis	3
CAE 514	Mathematical Methods for Structural Engineering	3
CAE 518	Advanced Reinforced Concrete	3
CAE 525	Advanced Steel Structures	3
CAE 529	Dynamics of Structures	3
Elective Courses		(15)
Select 15 credit hours ¹		15

Minimum degree credits required: 30

The majority of elective courses should be taken in CAE. Courses from other disciplines including ARCH, EMGT, MMAE, or others are also acceptable with advisor approval.