

STRUCTURAL ENGINEERING, MINOR

More information on the minor may be obtained from the CEAS Office of Student Services (414) 229-4667, EMS Room E386.

Structural engineers focus on the design and physical integrity of buildings and other large structures, assuring they are safe and stable. They frequently work with architects and contractors. In addition to new construction, they often inspect and design plans for maintenance or renovation of existing structures.

The minor in structural engineering is designed especially for students in the following majors:

- Architecture
- Mechanical Engineering
- Industrial and Manufacturing Engineering
- Materials
- Geology
- Physics

This minor is not available to civil engineering majors.

Requirements

The 19-credit minor requires the following:

Code	Title	Credits
Required		
CIV ENG 335	Soil Mechanics	3
CIV ENG 360	Introduction to Structural Analysis	3
CIV ENG 372	Introduction to Structural Design	4
CIV ENG 571	Design of Concrete Structures	3
or CIV ENG 572	Design of Steel Structures	
Electives		
Select two electives (see below)		6
Total Credits		19

Electives

Code	Title	Credits
CIV ENG 401	Intermediate Strength of Materials	3
CIV ENG 431	Materials of Construction	3
CIV ENG 456	Foundation Engineering	3
CIV ENG 463	Introduction to Finite Elements	3
CIV ENG 502	Experimental Stress Analysis	3
CIV ENG 560	Intermediate Structural Analysis	3
CIV ENG 571	Design of Concrete Structures	3
CIV ENG 572	Design of Steel Structures	3
CIV ENG 573	Design of Masonry and Wood Structures	3
CIV ENG 574	Design of Prestressed Concrete Structures	3
CIV ENG 579	Earthquake Engineering	3
ARCH 301	Architecture Systems 1	3
ARCH 510	Survey of Structural Analysis and Design	3
ARCH 516	Building Construction	3