**STRUCTURAL ENGINEERING, MINOR**

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:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Required</strong></td>
<td></td>
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</tr>
<tr>
<td>CIV ENG 335</td>
<td>Soil Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>CIV ENG 360</td>
<td>Introduction to Structural Analysis</td>
<td>3</td>
</tr>
<tr>
<td>CIV ENG 372</td>
<td>Introduction to Structural Design</td>
<td>4</td>
</tr>
<tr>
<td>CIV ENG 571</td>
<td>Design of Concrete Structures</td>
<td>3</td>
</tr>
<tr>
<td>or CIV ENG 572</td>
<td>Design of Steel Structures</td>
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<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td><strong>Electives</strong></td>
<td></td>
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</tr>
<tr>
<td>Select two electives (see below)</td>
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**Total Credits**

19

<table>
<thead>
<tr>
<th>Code</th>
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<th>Credits</th>
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<tbody>
<tr>
<td><strong>Electives</strong></td>
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<tr>
<td>CIV ENG 401</td>
<td>Intermediate Strength of Materials</td>
<td>3</td>
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<tr>
<td>CIV ENG 431</td>
<td>Materials of Construction</td>
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<tr>
<td>CIV ENG 456</td>
<td>Foundation Engineering</td>
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<tr>
<td>CIV ENG 463</td>
<td>Introduction to Finite Elements</td>
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<tr>
<td>CIV ENG 502</td>
<td>Experimental Stress Analysis</td>
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<tr>
<td>CIV ENG 560</td>
<td>Intermediate Structural Analysis</td>
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<tr>
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<tr>
<td>CIV ENG 572</td>
<td>Design of Steel Structures</td>
<td>3</td>
</tr>
<tr>
<td>CIV ENG 573</td>
<td>Design of Masonry Structures</td>
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<tr>
<td>CIV ENG 574</td>
<td>Design of Prestressed Concrete Structures</td>
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<td>CIV ENG 579</td>
<td>Earthquake Engineering</td>
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<tr>
<td>ARCH 301</td>
<td>Architecture Systems 1</td>
<td>3</td>
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<td>ARCH 510</td>
<td>Survey of Structural Analysis and Design</td>
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<td>ARCH 516</td>
<td>Building Construction</td>
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More information on the minor may be obtained from the CEAS Office of Student Services (414) 229-4667, EMS Room E386.