B.S. in Civil Engineering  
Four-Year Plan  
Catalog Year 2013-2014

Below is the *advised sequence* of courses for this degree program.  
The official degree requirements can be found in the University General Catalog.

<table>
<thead>
<tr>
<th>Course Number and Title</th>
<th>Units</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1ST SEMESTER</strong></td>
<td></td>
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<tr>
<td>MATH 122A/B or MATH 125 Calculus I with Applications</td>
<td>5/3</td>
<td>Appropriate Math Placement</td>
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<tr>
<td>CHEM 151 General Chemistry I</td>
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<tr>
<td>ENGL 101 First-Year Composition</td>
<td>3</td>
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<tr>
<td>ENGR 102 Introduction to Engineering</td>
<td>3</td>
<td>Concurrent enrollment or completion of MATH 122B or MATH 125</td>
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<tr>
<td><strong>2ND SEMESTER</strong></td>
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<tr>
<td>MATH 129 Calculus II</td>
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<td>MATH 122B or 125 with C or better</td>
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<tr>
<td>MCB 181R,L Introductory Biology I or GEOS 251 Physical Geology</td>
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<tr>
<td>PHYS 141 Introductory Mechanics</td>
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<td>MATH 122B or MATH 125; Concurrent enrollment in MATH 129</td>
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<tr>
<td>ENGL 102 First-Year Composition</td>
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<td>ENGL 101</td>
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<td><strong>3RD SEMESTER</strong></td>
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<tr>
<td>CE 210 Engineering Graphics</td>
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<tr>
<td>CE 214 Statics</td>
<td>3</td>
<td>PHYS 141; MATH 129</td>
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<tr>
<td>MATH 223 Vector Calculus</td>
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<td>MATH 129 with C or better</td>
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<tr>
<td>PHYS 241 Introductory Electricity and Magnetism or CHEM152 General Chemistry II</td>
<td>4</td>
<td>For PHYS 241: PHYS 141. For CHEM 152: CHEM 151</td>
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<td>Tier I General Education</td>
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<td><strong>4TH SEMESTER</strong></td>
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<tr>
<td>CE 215 Mechanics of Solids</td>
<td>3</td>
<td>CE 214</td>
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<tr>
<td>CE 218 Mechanics of Fluids</td>
<td>3</td>
<td>CE 214</td>
</tr>
<tr>
<td>MATH 254 Intro to Ordinary Differential Equations</td>
<td>3</td>
<td>MATH 129 with C or better</td>
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<tr>
<td>CE 251 Elementary Surveying</td>
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<td>Prerequisites</td>
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<tr>
<td>Advanced Standing is required for 3xx and 4xx courses (See advisor for requirements)</td>
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<td><strong>5TH SEMESTER</strong></td>
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<tr>
<td>CE 301 Engineering Communications</td>
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<tr>
<td>CE 303 Numerical Analysis for Civil Engineers</td>
<td>3</td>
<td>ENGR 102; MATH 129</td>
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<tr>
<td>CE 333 Elementary Structural Analysis</td>
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<td>CE 215</td>
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<tr>
<td>CE 343 Geotechnical Engineering and Design</td>
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<td>CE 363 Transport Engineering and Pavement Design</td>
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<td><strong>6TH SEMESTER</strong></td>
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<tr>
<td>CE 323 Hydraulic Engineering and Design</td>
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<tr>
<td>CE 334 Structural Design in Steel or Technical Elective</td>
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<td>For CE 334: CE 333</td>
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<td>CE 370R Environmental and Water Engineering</td>
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<td>CE 310 Probability and Statistics in Civil Engineering</td>
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<td>MATH 129</td>
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<td><strong>7TH SEMESTER</strong></td>
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<tr>
<td>CE 408A Issues in Civil Engineering Practice</td>
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<td>2 of the following: CE 323, CE 334 or 335, CE 343, CE 363, CE 370R,L</td>
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<td>CE 335 Structural Design in Concrete or Technical Elective</td>
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<td>CE 333</td>
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<tr>
<td>CE Technical Elective</td>
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<tr>
<td>CE Technical Elective</td>
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<tr>
<td>Engineering Science Elective Modules</td>
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<td>CE Lab Elective</td>
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<td><strong>8TH SEMESTER</strong></td>
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<tr>
<td>CE 408B Civil Engineering Senior Capstone Design</td>
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<td>CE 301; CE 408; 4 of the following: CE 323, CE 334 or 335; CE 343, CE 363, CE 370R,L</td>
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<td>CE Technical Elective</td>
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<td>Tier II General Education</td>
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</table>

* Tier I and II General Education Courses must meet University general education requirements. One course must be recognized by the university as meeting the Diversity Requirement.