### First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 31</td>
<td>4</td>
<td>Introductory Chemistry</td>
</tr>
<tr>
<td>MATH 21</td>
<td>4</td>
<td>Calculus 1</td>
</tr>
<tr>
<td>PE</td>
<td>1</td>
<td>Physical Education</td>
</tr>
<tr>
<td>ENGS 1</td>
<td>3</td>
<td>Written Expression</td>
</tr>
<tr>
<td>CE 3</td>
<td>2</td>
<td>Intro to Civil &amp; Env Engineering</td>
</tr>
<tr>
<td>HSS</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 31</td>
<td>4</td>
<td>Introductory Physics</td>
</tr>
<tr>
<td>PHYS 21</td>
<td>1</td>
<td>Introductory Physics Lab</td>
</tr>
<tr>
<td>MATH 22</td>
<td>4</td>
<td>Calculus 2</td>
</tr>
<tr>
<td>HSS</td>
<td>3</td>
<td>HSS Elective</td>
</tr>
<tr>
<td>ENGR 2</td>
<td>2</td>
<td>Graphical Communication</td>
</tr>
</tbody>
</table>

### Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 42</td>
<td>4</td>
<td>Electromagnetism</td>
</tr>
<tr>
<td>STAT 143</td>
<td>3</td>
<td>Modern Physics</td>
</tr>
<tr>
<td>MATH 121</td>
<td>4</td>
<td>Calculus 3</td>
</tr>
<tr>
<td>CE 1</td>
<td>3</td>
<td>Statics</td>
</tr>
<tr>
<td>CE 10</td>
<td>4</td>
<td>Geomatics</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 271</td>
<td>3</td>
<td>Applied Math for Engineers</td>
</tr>
<tr>
<td>ME 12</td>
<td>3</td>
<td>Dynamics</td>
</tr>
<tr>
<td>CS 16</td>
<td>4</td>
<td>MATLAB</td>
</tr>
<tr>
<td>CE 130</td>
<td>3</td>
<td>Env/Trans Systems</td>
</tr>
<tr>
<td>HSS</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

### Third Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE 100</td>
<td>3</td>
<td>Mechanics of Materials</td>
</tr>
<tr>
<td>CE 101</td>
<td>1</td>
<td>Materials Testing</td>
</tr>
<tr>
<td>CE 131</td>
<td>3</td>
<td>Dec Analysis in Env/Trans</td>
</tr>
<tr>
<td>CE 160</td>
<td>4</td>
<td>Hydraulics</td>
</tr>
<tr>
<td>SCIENCE</td>
<td>4</td>
<td>Science Elective</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE 132</td>
<td>3</td>
<td>Modeling Env/Trans Systems</td>
</tr>
<tr>
<td>CE 151</td>
<td>3</td>
<td>Water/Wastewater</td>
</tr>
<tr>
<td>CE 170</td>
<td>4</td>
<td>Structural Analysis I</td>
</tr>
<tr>
<td>CE 180</td>
<td>4</td>
<td>Geotechnical Principles</td>
</tr>
<tr>
<td>ME 40</td>
<td>3</td>
<td>Thermodynamics</td>
</tr>
<tr>
<td>ME 44</td>
<td>1</td>
<td>Heat Transfer</td>
</tr>
</tbody>
</table>

### Fourth Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>EE 100</td>
<td>4</td>
<td>Electrical Engineering Concepts</td>
</tr>
<tr>
<td>CE 172</td>
<td>3</td>
<td>Steel Design</td>
</tr>
<tr>
<td>PRO ELEC</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CE 171</td>
<td>3</td>
<td>Structural Analysis II</td>
</tr>
<tr>
<td>HSS</td>
<td>3</td>
<td>HSS Elective</td>
</tr>
<tr>
<td>PE</td>
<td>1</td>
<td>Physical Education</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSS</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CE 173</td>
<td>3</td>
<td>Reinforced Concrete Design</td>
</tr>
<tr>
<td>DES ELEC</td>
<td>3</td>
<td>Senior Design Project</td>
</tr>
<tr>
<td>CE 175</td>
<td>3</td>
<td>Senior Design Seminar</td>
</tr>
<tr>
<td>CE 176</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

1. **HSS Electives (18 credits):** Students must take one HSS course from the list of approved race & culture courses.

2. **Science Elective must be a 4-credit course, with lab, i.e. Geology 1.**


4. **Professional Electives are all Design Electives plus CE 191, 192, any 200-level CE course.**

5. **General Option students must take both CE 172 and CE 173.**

6. **Both CE 175 – Senior Design Project, and CE 176 – Senior Design Seminar are required of all seniors.**

Total Credits: 129 + 2 PE = 131