### B.S. in CIVIL ENGINEERING

**Suggested 4-Year Academic Flowchart**

**Legend:**
- **Major (72)**
- **Support (74-76)**
- **GE (4)**
- **Graduation Writing Requirement (GWR)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FRESHMAN</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td>Computer Aided Drafting in Civil Engineering</td>
<td><strong>CE 113 (2)</strong></td>
<td><strong>CE 114 (1)</strong></td>
</tr>
<tr>
<td>Winter</td>
<td>Design Principles in CE</td>
<td><strong>CE 112 (2)</strong></td>
<td><strong>CE 112 (2)</strong></td>
</tr>
<tr>
<td>Spring</td>
<td>General Chemistry for Physical Science &amp; Engineering I</td>
<td><strong>CHEM 124 (4) [B1 &amp; B3]</strong></td>
<td><strong>CHEM 125 (4) [CHEM 124]</strong></td>
</tr>
<tr>
<td></td>
<td>Calculus I</td>
<td><strong>MATH 141 (4)</strong></td>
<td><strong>MATH 141 (4)</strong></td>
</tr>
<tr>
<td></td>
<td>General Physics I</td>
<td><strong>PHYS 141 (4) [MATH 119]</strong></td>
<td><strong>PHYS 141 (4) [MATH 119]</strong></td>
</tr>
<tr>
<td></td>
<td>Oral Communication</td>
<td><strong>COMS 101/102 (4)</strong></td>
<td><strong>COMS 101/102 (4)</strong></td>
</tr>
<tr>
<td></td>
<td>Expository Writing</td>
<td><strong>ENGL 123/124 (4)</strong> [A2]</td>
<td><strong>ENGL 123/124 (4)</strong> [A2]</td>
</tr>
<tr>
<td><strong>17</strong></td>
<td><strong>18</strong></td>
<td><strong>18</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Title</th>
<th>Course # (Units)</th>
<th>(Prerequisite)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>Computer Aided Drafting in Civil Engineering</td>
<td><strong>CE 113 (2)</strong></td>
<td></td>
</tr>
<tr>
<td>Winter</td>
<td>Design Principles in CE</td>
<td><strong>CE 112 (2)</strong></td>
<td><strong>CE 112 (2)</strong></td>
</tr>
<tr>
<td>Spring</td>
<td>General Chemistry for Physical Science &amp; Engineering I</td>
<td><strong>CHEM 124 (4) [B1 &amp; B3]</strong></td>
<td><strong>CHEM 125 (4) [CHEM 124]</strong></td>
</tr>
<tr>
<td></td>
<td>Calculus I</td>
<td><strong>MATH 141 (4)</strong></td>
<td><strong>MATH 141 (4)</strong></td>
</tr>
<tr>
<td></td>
<td>General Physics I</td>
<td><strong>PHYS 141 (4) [MATH 119]</strong></td>
<td><strong>PHYS 141 (4) [MATH 119]</strong></td>
</tr>
<tr>
<td></td>
<td>Oral Communication</td>
<td></td>
<td><strong>COMS 101/102 (4)</strong></td>
</tr>
<tr>
<td></td>
<td>Expository Writing</td>
<td></td>
<td><strong>ENGL 123/124 (4)</strong> [A2]</td>
</tr>
<tr>
<td></td>
<td><strong>GE (4)</strong></td>
<td></td>
<td><strong>GE (4)</strong></td>
</tr>
<tr>
<td></td>
<td><strong>COMS 126, 145, ENGL 145, 147, ES 145, PHIL 126, or WOQS 145 (4)</strong></td>
<td></td>
<td><strong>GE (4)</strong></td>
</tr>
</tbody>
</table>

**Notes:**
- **MOST GENERAL EDUCATION COURSES CAN BE TAKEN IN ANY ORDER AS LONG AS PREREQUISITES ARE MET**
  - Refer to current catalog for prerequisites.
  - **One course from each of the following GE areas must be completed:** A1, A2, A3, C1, C2, Lower-Division C Elective, Upper-Division C, D1, Area D Elective, Lower-Division E, & F. Upper-Division C should be taken only after Junior standing is reached (90 units). Refer to online catalog for GE course selection, United States Cultural Pluralism (USCP) and Graduation Writing Requirement (GWR). USCP requirement can be satisfied by some (but not all) courses within GE categories: C1, Upper-Division C, D1, D2, Upper-Division D, or E. Refer to online catalog for course selection and guidelines for technical electives.
  - **Graduation Writing Requirement (GWR)**: Students can attempt to fulfill the requirement after 90 earned units; students should complete the requirement before senior year.
  - **(Students can attempt to fulfill the requirement after 90 earned units; students should complete the requirement before senior year.)**

**Technical Electives:**
- 24 units Technical Electives. See catalog for course options and additional guidelines.

**Total:** 190-192