## Electrical Engineering Sample Curriculum

<table>
<thead>
<tr>
<th>Units</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Year</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities or social science elective</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>General Physics I or Physics I (Physics 117A or Physics 197)</td>
<td>4</td>
<td>—</td>
</tr>
<tr>
<td>Computer Science I, II (CSE 131, 132)</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Calculus II, III (Math 132, 233)</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Freshman Elective (ESE 101, ESE 103, or ESE 141)</td>
<td>1</td>
<td>—</td>
</tr>
<tr>
<td>Introduction to Digital Logic and Computer Design (ESE 260)</td>
<td>—</td>
<td>3</td>
</tr>
<tr>
<td>General Physics II or Physics II (Physics 118A or Physics 198)</td>
<td>—</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>14</td>
<td>16</td>
</tr>
<tr>
<td><strong>Second Year</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Differential Equations (Math 217)</td>
<td>3</td>
<td>—</td>
</tr>
<tr>
<td>Introduction to Electrical and Electronic Circuits (ESE 230)</td>
<td>4</td>
<td>—</td>
</tr>
<tr>
<td>Humanities or social science elective</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>General Chemistry I (Chem 111A)</td>
<td>3</td>
<td>—</td>
</tr>
<tr>
<td>General Chemistry Laboratory I (Chem 151)</td>
<td>2</td>
<td>—</td>
</tr>
<tr>
<td>Introduction to Electronic Circuits (ESE 232)</td>
<td>—</td>
<td>3</td>
</tr>
<tr>
<td>Signals and Systems (ESE 351)</td>
<td>—</td>
<td>3</td>
</tr>
<tr>
<td>Engineering Mathematics A (ESE 318)</td>
<td>—</td>
<td>3</td>
</tr>
<tr>
<td>Engineering Mathematics B (ESE 319)</td>
<td>—</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td><strong>Third Year</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Probability and Statistics for Engineering (ESE 326)</td>
<td>3</td>
<td>—</td>
</tr>
<tr>
<td>Humanities or social sciences elective</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Engineering and science breadth elective</td>
<td>3</td>
<td>—</td>
</tr>
<tr>
<td>Engineering Electromagnetics Principles (ESE 330)</td>
<td>3</td>
<td>—</td>
</tr>
<tr>
<td>Electrical Engineering electives with engineering topics units</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Electrical Engineering laboratory</td>
<td>—</td>
<td>3</td>
</tr>
<tr>
<td>Technical Writing (Engr 310)</td>
<td>—</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td><strong>Fourth Year</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Free electives</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Engineering course with engineering topics units</td>
<td>3</td>
<td>—</td>
</tr>
</tbody>
</table>