MINOR IN ELECTRICAL ENGINEERING

The purpose of the Minor in Electrical Engineering is to give students in other fields of study a good basic background in electrical engineering. The 16-unit core provides an introduction to four basic areas of modern electrical engineering – basic electrical circuit theory, electronics, linear signals and systems, and digital logic and computer architecture. Elective courses provide opportunities for additional breadth or depth in a particular area. Students interested in the electrical engineering minor must meet with the program coordinator and complete the Electrical Engineering Minor Program Approval Form. Revision of the form requires the approval of the program coordinator.

All coursework used to satisfy the requirements of the minor must be completed with a minimum grade point average of 2.0.

Electrical Engineering Minor — 22 units
Prerequisite Requirements (23 units)
The minor is intended for students who have satisfied the following prerequisite requirements:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 226</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 227</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 228</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 245</td>
<td>Elementary Differential Equations and Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 220 &amp; PHYS 222</td>
<td>General Physics with Calculus I and General Physics with Calculus I Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 230 &amp; PHYS 232</td>
<td>General Physics with Calculus II and General Physics with Calculus II Laboratory</td>
<td>4</td>
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</tbody>
</table>

The minor may be satisfied by a minimum of 22 units (not including prerequisite units) distributed as follows:

Core Requirements (16 units)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 205</td>
<td>Electric Circuits</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 206</td>
<td>Circuits and Instrumentation Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 305</td>
<td>Linear Systems Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 315</td>
<td>Systems Analysis Lab</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 353</td>
<td>Microelectronics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 301</td>
<td>Microelectronics Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 356</td>
<td>Digital Design</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 357</td>
<td>Digital Design Laboratory</td>
<td>1</td>
</tr>
</tbody>
</table>

Electives (6 units)
Approved upper division electrical engineering courses. No upper division course from the major can be double-counted toward meeting the elective requirements of the minor or second major. There must be prior approval from the program head.

To earn the Minor in Electrical Engineering, a student must complete at least 12 of the required 22 core and elective units at SF State. Each of