### Freshman Year - Fall Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Course Name</th>
<th>Hrs</th>
<th>Prerequisites</th>
<th>Corequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM</td>
<td>General Chemistry I</td>
<td>3</td>
<td>min Math ACT 23 (SAT 590) or ≥ B in MATH 125</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>or above</td>
<td>CHEM 115</td>
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<tr>
<td>CHEM</td>
<td>General Chemistry Laboratory I</td>
<td>1</td>
<td></td>
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<tr>
<td>CSCI</td>
<td>Computer Science I</td>
<td>3</td>
<td>min Math ACT 22 or MATH 121 (or above)</td>
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</tr>
<tr>
<td>EL E</td>
<td>Introduction to Electrical Engineering</td>
<td>1</td>
<td></td>
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</tr>
<tr>
<td>ENGL</td>
<td>English Composition I</td>
<td>3</td>
<td></td>
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<tr>
<td>MATH</td>
<td>Unified Calculus &amp; Analytic Geometry I</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S-H-F</td>
<td>Soc. Sci.-Hum.-Fine Arts elective</td>
<td>3</td>
<td>(course specific)</td>
<td>(course specific)</td>
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</tbody>
</table>

**Semester Total 17**

### Freshman Year - Spring Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Course Name</th>
<th>Hrs</th>
<th>Prerequisites</th>
<th>Corequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCI</td>
<td>Computer Science II</td>
<td>3</td>
<td>CSCI 111 (with min grade C)</td>
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<tr>
<td>LIBA</td>
<td>First Year Seminar</td>
<td>3</td>
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<tr>
<td>MATH</td>
<td>Unified Calculus &amp; Analytic Geometry II</td>
<td>3</td>
<td>MATH 261 (with min grade C)</td>
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<tr>
<td>PHYS</td>
<td>Physics for Science and Engineering I</td>
<td>3</td>
<td></td>
<td>MATH 262 and PHYS 221</td>
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<tr>
<td>PHYS</td>
<td>Laboratory Physics for Science and Engineering I</td>
<td>1</td>
<td></td>
<td>PHYS 211</td>
</tr>
<tr>
<td>S-H-F</td>
<td>Soc. Sci.-Hum.-Fine Arts elective</td>
<td>3</td>
<td>(course specific)</td>
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</table>

**Semester Total 16**
## Sophomore Year - Fall Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Course Name</th>
<th>Hrs</th>
<th>Prerequisites</th>
<th>Corequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCI</td>
<td>211  Computer Science III</td>
<td>3</td>
<td>CSCI 112 (with min grade C)</td>
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<tr>
<td>EL E</td>
<td>335  Principles of Digital Systems</td>
<td>3</td>
<td>CSCI 111 or CSCI 251</td>
<td>EL E 336</td>
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<tr>
<td></td>
<td>336  Digital Systems Laboratory I</td>
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<td>EL E 335</td>
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<tr>
<td>MATH</td>
<td>263  Unified Calculus &amp; Analytic Geometry III</td>
<td>3</td>
<td>MATH 262 (with min grade C)</td>
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<tr>
<td>PHYS</td>
<td>212  Physics for Science and Engineering II</td>
<td>3</td>
<td>PHYS 211</td>
<td>MATH 262 and PHYS 222</td>
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<td></td>
<td>222  Laboratory Physics for Science and Engineering II</td>
<td>1</td>
<td>PHYS 221</td>
<td>PHYS 212</td>
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<tr>
<td>S-H-F</td>
<td>xxx  Soc. Sci.-Hum.-Fine Arts elective</td>
<td>3</td>
<td>(course specific)</td>
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**Semester Total** 17

## Sophomore Year - Spring Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Course Name</th>
<th>Hrs</th>
<th>Prerequisites</th>
<th>Corequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCI</td>
<td>223  Computer Organization and Assembly Language</td>
<td>3</td>
<td>CSCI 112 (with min grade C)</td>
<td></td>
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<tr>
<td>ECON</td>
<td>310  Engineering Economy</td>
<td>3</td>
<td></td>
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</tr>
<tr>
<td>ENGR</td>
<td>360  Electric Circuit Theory</td>
<td>4</td>
<td>PHYS 212</td>
<td>MATH 353</td>
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<tr>
<td>MATH</td>
<td>264  Unified Calculus &amp; Analytic Geometry IV</td>
<td>3</td>
<td>MATH 263 (with min grade C)</td>
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<tr>
<td>MATH</td>
<td>353  Elementary Differential Equations</td>
<td>3</td>
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<td>MATH 264</td>
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</table>

**Semester Total** 16
## Bachelor of Science in Electrical Engineering with emphasis in Computer Engineering

**Effective Date:** Fall 2007

### Junior Year - Fall Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Course Name</th>
<th>Hrs</th>
<th>Prerequisites</th>
<th>Corequisites</th>
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</thead>
<tbody>
<tr>
<td>EL E 331</td>
<td>Linear Systems</td>
<td>3</td>
<td>ENGR 360</td>
<td></td>
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<tr>
<td>EL E 351</td>
<td>Models and Circuits I</td>
<td>3</td>
<td>ENGR 360</td>
<td></td>
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<tr>
<td>EL E 385</td>
<td>Advanced Digital Systems</td>
<td>3</td>
<td>EL E 335 and EL E 336</td>
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<tr>
<td>ENGR 361</td>
<td>Electric Circuit Laboratory</td>
<td>1</td>
<td>ENGR 360</td>
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<tr>
<td>ENGR 410</td>
<td>Engineering Analysis II</td>
<td>4</td>
<td>MATH 264 and MATH 353</td>
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<tr>
<td>MATH 301</td>
<td>Discrete Mathematics</td>
<td>3</td>
<td>MATH 261 (with min grade C)</td>
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</table>

**Semester Total** 17

### Junior Year - Spring Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Course Name</th>
<th>Hrs</th>
<th>Prerequisites</th>
<th>Corequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCI 361</td>
<td>Introduction to Computer Networks</td>
<td>3</td>
<td>CSCI 223 or EL E 335 or TC 201</td>
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<tr>
<td>EL E 341</td>
<td>Theory of Fields</td>
<td>3</td>
<td>MATH 264</td>
<td>ENGR 410</td>
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<tr>
<td>EL E 352</td>
<td>Models and Circuits II</td>
<td>3</td>
<td>EL E 351</td>
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<tr>
<td>EL E 353</td>
<td>Electronics Laboratory</td>
<td>1</td>
<td>ENGR 361</td>
<td>EL E 352</td>
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<tr>
<td>EL E 367</td>
<td>Computer-Aided Design in Electrical Engineering</td>
<td>2</td>
<td>EL E 351</td>
<td>ENGR 361</td>
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<td>EL E 386</td>
<td>Advanced Digital Systems Laboratory</td>
<td>1</td>
<td>EL E 385</td>
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<tr>
<td>EL E 391</td>
<td>Random Signals</td>
<td>3</td>
<td>EL E 331</td>
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</table>

**Semester Total** 16
Bachelor of Science in Electrical Engineering with emphasis in Computer Engineering  
Effective Date:  Fall 2007

### Senior Year - Fall Semester

<table>
<thead>
<tr>
<th>Course</th>
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<th>Hrs</th>
<th>Prerequisites</th>
<th>Corequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCI 423</td>
<td>Introduction to Operating Systems</td>
<td>3</td>
<td>CSCI 211 (with min grade C)</td>
<td>CSCI 223 (with min grade C)</td>
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<tr>
<td>EL E 431</td>
<td>Theory of Control Systems</td>
<td>3</td>
<td>EL E 331</td>
<td></td>
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<tr>
<td>EL E 461</td>
<td>Senior Design in Electrical Engineering I</td>
<td>1</td>
<td>EL E 353</td>
<td>EL E 461</td>
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<tr>
<td>EL E 485</td>
<td>Microprocessor Systems Engineering</td>
<td>2</td>
<td>EL E 352</td>
<td>EL E 486</td>
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<tr>
<td>EL E 486</td>
<td>Microprocessor Systems Engineering Laboratory</td>
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<td>EL E 485</td>
</tr>
<tr>
<td>EL E 533</td>
<td>Electronic Properties of Materials</td>
<td>3</td>
<td></td>
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</tr>
<tr>
<td>S-H-F xxx</td>
<td>Soc. Sci.-Hum.-Fine Arts elective</td>
<td>3</td>
<td>(course specific)</td>
<td>(course specific)</td>
</tr>
</tbody>
</table>

**Semester Total** 16

### Senior Year - Spring Semester

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<th>Prerequisites</th>
<th>Corequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>EL E 462</td>
<td>Senior Design in Electrical Engineering II</td>
<td>2</td>
<td>EL E 461</td>
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<tr>
<td>ENGR 309</td>
<td>Statics</td>
<td>3</td>
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<td>MATH 263 and PHYS 211</td>
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<tr>
<td>ENGR 321</td>
<td>Thermodynamics</td>
<td>3</td>
<td>CHEM 105</td>
<td>and MATH 262 and PHYS 211</td>
</tr>
<tr>
<td>S-H-F xxx</td>
<td>Soc. Sci.-Hum.-Fine Arts elective</td>
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<td>(course specific)</td>
<td>(course specific)</td>
</tr>
<tr>
<td>Tech-E xxx</td>
<td>Technical elective 2hr</td>
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<td>(course specific)</td>
<td>(course specific)</td>
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</table>

**Semester Total** 13

* ENGR 330 can be used as a substitute course, ONLY if EL E 331 is not being taught