Saint Louis University
Electrical Engineering Flowchart
(BIOELECTRONICS CONCENTRATION-Pre-Med Emphasis)

**Total Hours: 127**

**MUST BE AT SENIOR STANDING (pass all junior level ECE and CSCI requirements)**

1. Students needing prerequisite work in writing skills as determined by ACT or SAT scores will be required to take ENGL 1500: The Process of Composition (3) and perhaps ENGL- 1040: Accelerated Reading
2. Requires a proficiency exam.
3. Must not be used to satisfy another core requirement.
4. Must be taken from an approved list of ECE or BME elective courses.

<table>
<thead>
<tr>
<th>Name</th>
<th>Student #</th>
<th>Entered EE</th>
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<tbody>
<tr>
<td>Freshman</td>
<td></td>
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</tr>
<tr>
<td>€ BIOL 1040 Biology I</td>
<td>4</td>
<td>€ BIOL 1060 Biology II</td>
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<tr>
<td>€ CHEM 1110 Intro to Chemistry I</td>
<td>3</td>
<td>€ CHEM 1120 Intro to Chemistry II</td>
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<tr>
<td>€ CHEM 1115 Chemistry I Lab c(CHEM 1110)</td>
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<td>€ CHEM 1125 Chemistry II Lab c(CHEM 1120)</td>
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<tr>
<td>€ ECE 1001 Introduction to ECE</td>
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<td>€ ECE 1002 Introduction to ECE II</td>
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<tr>
<td>€ ENGL 1920 Adv Writing for Professionals ¹</td>
<td>3</td>
<td>€ MATH 1520 Calculus II (MATH 1510)</td>
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<tr>
<td>€ MATH 1510 Calculus I ²</td>
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<td>€ PHYS 1610 Eng Physics I (MATH 1510)</td>
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<td>16</td>
<td>€ PHYS 1620 Eng Physics Lab c(PHYS 1610)</td>
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<tr>
<td>Sophomore Year</td>
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<tr>
<td>€ BME 2000 BME Computing</td>
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<td>€ ECE 2102 Electrical Circuits II</td>
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<td>€ ECE 2101 Electrical Circuits I</td>
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<td>€ ECE 2103 Electrical Circuits Lab</td>
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<td>(ECE 1001, MATH 1520, PHYS 1610)</td>
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<td>€ MATH 1660 Discrete Math</td>
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<tr>
<td>€ ECE 2205 Digital Design</td>
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<td>€ MATH 3550 Differential Equations (MATH 2530)</td>
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<td>€ MATH 4880 Probability &amp; Statistics(MATH 2530)</td>
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<td>€ MATH 2530 Calculus III (MATH 1520)</td>
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<td>€ PHYS 1630 Eng Physics II (PHYS 1610)</td>
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<tr>
<td>€ CHEM 2410 Organic Chemistry</td>
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<td>€ CHEM 2420 Organic Chemistry II</td>
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<td>€ CHEM 2425 Organic Chemistry II Lab</td>
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<td>€ ECE 3130 Semiconductor Devices</td>
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<td>€ ECE 3131 Electronic Ckts (ECE 3130)</td>
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<td>€ ECE 3150/BME3100 Linear Systems</td>
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<td>€ ECE 3132 Electronic Ckts Lab c(ECE 3131)</td>
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<td>(ECE 2102, MATH 3550)</td>
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<td>€ ECE 3140 EM Fields</td>
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<tr>
<td>€ CHEM 3600 General Biochemistry</td>
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<td>€ PSY-1010 Intro to Psychology</td>
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<td>Senior Year</td>
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<tr>
<td>€ ECE 4800 Senior Design I**</td>
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<td>€ BME 4050 Biomedical Instrumentation</td>
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<td>€ ECE/BME Elective ⁴</td>
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<td>€ ECE 4810 Senior Design II (ECE 4800)</td>
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<td>€ MATH 3110 Linear Algebra</td>
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<td>€ ECE 4120 Auto Control Systems</td>
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<td>€ PHIL 3400 Ethics &amp; Engineering</td>
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<td>€ Core: Cultural Diversity ³</td>
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<td>€ ECE 3225 Microprocessors</td>
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<td>€ THEO 1000 Theological Foundations</td>
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