# e+ Electrical Emphasis Checklist

The e+ degree requirements include completion of 128 semester hours of required and elective courses with a minimum grade point average of 2.25. The minimum passing grade for prerequisite and corequisite courses for the e+ Electrical Emphasis curriculum is a C, including courses completed outside the department (APPM, PHYS, etc.).

The e+ Electrical Emphasis curriculum consists of 53 engineering credit hours, including a two-semester capstone design experience. All students must take the Fundamentals of Engineering (FE) exam prior to graduation.

<table>
<thead>
<tr>
<th>Course Title/Subject</th>
<th>Course Number</th>
<th>Grade</th>
<th>Term</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Engineering Core</strong></td>
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<tr>
<td>Introduction to Engineering Computing</td>
<td>ECEN 1310†</td>
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<tr>
<td>Engineering Projects or Intro to Digital and Analog Electronics</td>
<td>GEEN 1400† or ECEN 1400*</td>
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<tr>
<td>Statics for Engineers</td>
<td>GEEN 2851</td>
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<tr>
<td>Materials Science for Engineers</td>
<td>GEEN 3024</td>
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<tr>
<td>Introduction to Circuits and Electronics</td>
<td>ECEN 2250</td>
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<tr>
<td>Electronics Design Lab</td>
<td>ECEN 2270</td>
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<tr>
<td>Engineering for the Community</td>
<td>GEEN 2400</td>
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<td>Data Analysis for Engineers</td>
<td>GEEN 3853</td>
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<tr>
<td>Invention and Innovation</td>
<td>GEEN 3400</td>
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<tr>
<td>Thermodynamics for Engineers</td>
<td>GEEN 3852</td>
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<tr>
<td><strong>Electrical Emphasis</strong></td>
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<tr>
<td>Circuits as Systems</td>
<td>ECEN 2260</td>
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<tr>
<td>Digital Logic</td>
<td>ECEN 2350</td>
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<td>Select three of the following five:</td>
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<tr>
<td>Microelectronics</td>
<td>ECEN 3250</td>
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<tr>
<td>Linear Systems</td>
<td>ECEN 3300</td>
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<tr>
<td>Programming of Digital Systems</td>
<td>ECEN 3350</td>
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<tr>
<td>Digital Design Laboratory</td>
<td>ECEN 3360</td>
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<tr>
<td>Electromagnetic Fields and Waves</td>
<td>ECEN 3400</td>
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<tr>
<td>Capstone Laboratory, Part 1</td>
<td>ECEN 4610</td>
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<tr>
<td>Capstone Laboratory, Part 2</td>
<td>ECEN 4620</td>
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<td>Fundamentals of Engineering Exam Required</td>
<td>FE Exam</td>
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</table>

* ECEN 1400 is the preferred choice of EE department, but not required specifically for e+ majors.  
† Standard course substitutions:  
ECEN 1310: CSCI 1300 (4), or CSCI 1320 (4)  
GEEN 1400: ASEN 1400 (3), COEN 1400 (3), COEN 1410 (3), or ECEN 1400 (3)  

Last updated 21 November 2019