<table>
<thead>
<tr>
<th>Course(s)</th>
<th>Suggested Year</th>
<th>Done</th>
<th>Need</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prerequisite Courses</strong></td>
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<tr>
<td>* MATH 121 Calculus I</td>
<td>FR</td>
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<tr>
<td>* MATH 122 Calculus II</td>
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<tr>
<td><strong>Basic Math &amp; Science Courses (5.5 units)</strong></td>
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<tr>
<td>PHYS 190 Physics &amp; Engineering Colloquium</td>
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<tr>
<td>PHYS 201 Newtonian Mechanics</td>
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<tr>
<td>PHYS 202 Electricity and Magnetism</td>
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<tr>
<td>PHYS 203 Atomic, Molecular, &amp; Optical Physics</td>
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<tr>
<td>PHYS 270 Math Methods for Physics</td>
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<tr>
<td>CPSC 120 Programming</td>
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<tr>
<td><strong>Engineering Topics (8.5 units)</strong></td>
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<tr>
<td>ENGS 191 Engineering Foundations</td>
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<td>ENGS 192 Engineering Analysis</td>
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<tr>
<td>ENGS 200 Engineering Design Exploration (0.5 unit)</td>
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<tr>
<td>ENGS 301 Statics &amp; Material Testing</td>
<td>SO/JR/SR</td>
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<tr>
<td>ENGS 302 Electronics &amp; Robotics Principles</td>
<td>SO/JR/SR</td>
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<td>ENGS 303 Heat &amp; Mass Transfer</td>
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<td>ENGS 304 Fluid Mechanics</td>
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<td>ENGS 490 Design Capstone I</td>
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<tr>
<td>ENGS 491 Design Capstone II</td>
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<tr>
<td><strong>Focusing Area (2 units from same area)</strong></td>
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<tr>
<td>Materials Focus</td>
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<tr>
<td>Materials Focus PHYS 250 Introduction to Nanomaterials</td>
<td>SO/JR/SR</td>
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<td>Robotics Focus</td>
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<tr>
<td>Robotics Focus CPSC 250 Data Structures (CPSC 170 is prereq)</td>
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<tr>
<td>Mechanics Focus</td>
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<tr>
<td>Mechanics Focus PHYS 299/499 Special Topics (with approval)</td>
<td>JR/SR</td>
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* Note that MATH 121 and MATH 122 are prerequisites for PHYS 201 and PHYS 202 but do not count as part of the engineering science major itself.

Note that this check sheet is intended as a guide; the Academic Catalog contains more details and nuances, and students are encouraged to check that book along with the academic advisors as needed.