## Track Requisites

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Type</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>BME:5210</td>
<td>Medical Imaging Physics</td>
<td>F</td>
<td>P: BME:2200, BME:2210</td>
</tr>
<tr>
<td>ENGR:2730</td>
<td>Computers in Engineering</td>
<td>All</td>
<td>P: ENGR:1300</td>
</tr>
<tr>
<td>ECE:3330</td>
<td>Intro to Software Design</td>
<td>F</td>
<td>P: ENGR:2730</td>
</tr>
<tr>
<td>BME:5220</td>
<td>Digital Image Processing</td>
<td>F</td>
<td>P: BME:2200</td>
</tr>
</tbody>
</table>

## Track Electives

### Engineering Topics

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Type</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>BME:5200</td>
<td>Biomedical Signal Processing</td>
<td>F</td>
<td>P: BME:2200, or equivalent</td>
</tr>
<tr>
<td>BME:5251</td>
<td>Advanced Biosystems</td>
<td>Sp</td>
<td>P: BME:2200</td>
</tr>
<tr>
<td>ECE:5450</td>
<td>Pattern Recognition</td>
<td>Every other F</td>
<td>P: ECE:2400</td>
</tr>
</tbody>
</table>

### Other Suggestions

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Type</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH:3800</td>
<td>Numerical Analysis</td>
<td>F/Sp</td>
<td></td>
</tr>
<tr>
<td>CS:6421</td>
<td>Knowledge Discovery</td>
<td>F/Sp</td>
<td></td>
</tr>
<tr>
<td>ECE:5460</td>
<td>Digital Signal Processing</td>
<td>F</td>
<td>P: BME:2200</td>
</tr>
<tr>
<td>CS:2210</td>
<td>Discrete Structures</td>
<td>All</td>
<td>P: CS:1210, or equivalent (i.e., ENGR:1300)</td>
</tr>
<tr>
<td>CS:2230</td>
<td>Data Structures</td>
<td>All</td>
<td>P: ENGR:2730; C: CS:2210</td>
</tr>
</tbody>
</table>

### Pre-Medicine

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Type</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL:1412</td>
<td>Diversity of Form &amp; Function</td>
<td>All</td>
<td>P: BIOL:1411, CHEM:1110</td>
</tr>
<tr>
<td>CHEM:2210</td>
<td>Organic Chemistry I</td>
<td>All</td>
<td>P: CHEM:1120</td>
</tr>
<tr>
<td>CHEM:2220</td>
<td>Organic Chemistry II</td>
<td>All</td>
<td>P: CHEM:2210</td>
</tr>
<tr>
<td>CHEM:2410</td>
<td>Organic Chemistry Lab</td>
<td>All</td>
<td>P: CHEM:1110, CHEM:1120, CHEM:2210</td>
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<tr>
<td>BIOC:3110</td>
<td>Biochemistry</td>
<td>S</td>
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</tr>
<tr>
<td>BIOL:2512</td>
<td>Fundamental Genetics</td>
<td>All</td>
<td>P: BIOL:1402, CHEM:1120; C: CHEM:2210</td>
</tr>
</tbody>
</table>

**Note:** At least two electives must be from the list of Engineering Topics
# Biomedical Engineering – Program Map: Bioimaging Track

<table>
<thead>
<tr>
<th>Semester 1</th>
<th>Semester 2</th>
<th>Semester 3</th>
<th>Semester 4</th>
<th>Semester 5</th>
<th>Semester 6</th>
<th>Semester 7</th>
<th>Semester 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Track Elective #1</td>
<td>Track Elective #2</td>
<td>Physics II / Lab PHYS:1612</td>
<td>GEC Elective #2</td>
<td>GEC Elective #3</td>
<td>BME Design Seminar BME:4010</td>
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</tr>
<tr>
<td>BME Design I BME:4910</td>
<td>Digital Image Processing BME:5220</td>
<td>Track Elective #3</td>
<td>Track Elective #4</td>
<td>GEC Elective #4</td>
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</tr>
<tr>
<td>BME Design II BME:4920</td>
<td>Track Elective #5</td>
<td>Track Elective #6</td>
<td>Track Elective #7</td>
<td>GEC Elective #5</td>
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</tbody>
</table>

- **Math & Science Courses**
- **Biomedical Core Courses**
- **Engineering Core Courses**
- **Track Requisite Courses**
- **Track Elective Courses**
- **Seminar**
- **General Education Courses**