The overall objective of the Master of Medical Device and Biomaterials is to provide education and training relevant to the design and development of medical devices. Special emphasis is placed on principles of engineering design methodology, computational and modeling aspects of medical devices, and design and use of biomaterials in medical devices. Students will be encouraged to apply for internship and co-op opportunities. The student must have a minimum 3.0/4.0 GPA in an engineering or science bachelor's program to be admitted. Candidates should have prior coursework that demonstrates proficiency in math.

The admission requirements for the degree include a relevant undergraduate degree with the following minimum requirements: an earned GPA of 3.0, GRE composite score of 300 and quantitative score of 80%, 2 semesters of Calculus and 1 semester of Differential Equations.

**Curriculum**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>Minimum Credits Required</td>
<td>32</td>
</tr>
<tr>
<td>Maximum 400-Level Credit</td>
<td>12</td>
</tr>
<tr>
<td>Maximum 500-Level Credit</td>
<td>32</td>
</tr>
<tr>
<td>Maximum Transfer Credit</td>
<td>9</td>
</tr>
<tr>
<td>Maximum 700-Level Credit</td>
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</table>

### Required Courses (17 credits)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BME 500</td>
<td>Introduction to Biomedical Engineering</td>
<td>2</td>
</tr>
<tr>
<td>BME 525</td>
<td>Introduction to Medical Devices, BioMEMS and Microfluidics</td>
<td>3</td>
</tr>
<tr>
<td>or BME 425</td>
<td>Introduction to Medical Devices, BioMEMS and Microfluidics</td>
<td>3</td>
</tr>
<tr>
<td>BME 526</td>
<td>Advanced Biomedical Engineering Design</td>
<td>3</td>
</tr>
<tr>
<td>BME 533</td>
<td>Biostatistics</td>
<td>3</td>
</tr>
<tr>
<td>or BME 433</td>
<td>Biomedical Engineering Applications of Statistics</td>
<td>3</td>
</tr>
<tr>
<td>or MATH 425</td>
<td>Statistical Methods</td>
<td>3</td>
</tr>
<tr>
<td>or MATH 476</td>
<td>Statistics</td>
<td>3</td>
</tr>
<tr>
<td>or CHE 426</td>
<td>Statistical Tools for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>BME 553</td>
<td>Advanced Quantitative Physiology</td>
<td>3</td>
</tr>
<tr>
<td>or BME 453</td>
<td>Quantitative Physiology</td>
<td>3</td>
</tr>
<tr>
<td>CHE 580</td>
<td>Biomaterials</td>
<td>3</td>
</tr>
</tbody>
</table>

### Elective Courses (15 credits)

Select 2 courses from the following list (6 credits).  
Select additional 9 credits of Math/Life Science/Eng (Recommended to take from the Select 2 list).

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>BME 502</td>
<td>Introduction to Regulatory Science for Engineers</td>
<td>3</td>
</tr>
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</table>