# M.S. in Biomedical Engineering

The M.S. program will include:

- 24 credit hours of core biomedical engineering courses
- 3 credit hours of technical electives
- 3 credit hours of seminars
- 6 thesis credit hours

Applicants from countries where English is not the first language are required to demonstrate English proficiency. Please consult the graduate school website for required scores.

## Degree Plan

Required Credits: 36

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MS in Biomedical Engineering (All courses require a grade of C or better)</strong></td>
<td></td>
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</tr>
<tr>
<td><strong>Required Courses:</strong></td>
<td></td>
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</tr>
<tr>
<td>BME 5101 &amp; BME 5102</td>
<td>Research Seminar I and Research Seminar II</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 6304</td>
<td>Physiological Regulatory Mech</td>
<td>3</td>
</tr>
<tr>
<td>BME 5192</td>
<td>Clinical Rotations for Eng</td>
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<tr>
<td>BME 5196</td>
<td>Medical Device Practicum</td>
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<tr>
<td>BME 5301</td>
<td>BME for Global Health</td>
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<tr>
<td>BME 5302</td>
<td>Telemedicine &amp; Imaging Info.</td>
<td>3</td>
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<tr>
<td>BME 5303</td>
<td>Research &amp; Lab Methods</td>
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<tr>
<td>BME 5304</td>
<td>BME Device Design &amp; Regulation</td>
<td>3</td>
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<tr>
<td>DRSC 5495</td>
<td>Anatomy for Health Sciences</td>
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<td>MGMT 5314</td>
<td>Corporate Entrepreneurship</td>
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<tr>
<td>BME 5193</td>
<td>Graduate Clinical Research</td>
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<tr>
<td><strong>Thesis/Non-Thesis Option:</strong></td>
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<tr>
<td>Select one sequence below:</td>
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<tr>
<td><strong>Thesis Option:</strong></td>
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<tr>
<td>BME 5398 &amp; BME 5399</td>
<td>Thesis and Thesis</td>
<td>9</td>
</tr>
<tr>
<td><strong>Non-Thesis Option:</strong></td>
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<td><strong>Total Hours</strong></td>
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An exit examination is required for the non-thesis option; thesis defense is required for the thesis option.

Select six additional hours from one of the following tracks

## Tracks

### Biomedical Devices Track

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>BME 5350</td>
<td>Bioelectromagnetism Fundmtls</td>
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<tr>
<td>BME 5351</td>
<td>Physiological Measurements</td>
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</tr>
<tr>
<td>BME 5353</td>
<td>Biomedical Signal &amp; Image Proc</td>
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<td><strong>Total Hours</strong></td>
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### Regenerative Medicine Track

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<th>Hours</th>
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<tr>
<td>BME 5310</td>
<td>Biomaterials</td>
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<tr>
<td>BME 5312</td>
<td>Tissue Biomechanics</td>
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</tr>
<tr>
<td>BME 5313</td>
<td>Tissue Engineering</td>
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**Total Hours** 9

### Rehabilitation Track

<table>
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<th>Title</th>
<th>Hours</th>
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<tr>
<td>BME 5320</td>
<td>Musculoskeletal Biomechanics</td>
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<tr>
<td>BME 5321</td>
<td>Biomechatronics</td>
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</tr>
<tr>
<td>BME 5323</td>
<td>Human Machine Interf Des &amp; Prc</td>
<td>3</td>
</tr>
</tbody>
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**Total Hours** 9