# Master of Engineering, Plan C, Biomedical Engineering Specialization

The Master of Engineering, Plan C, Biomedical Engineering Specialization focuses on enhancing the expertise of working engineering professionals. Engineers and scientists who want to further their careers with engineering related firms and governmental agencies should consider this degree. Students have flexibility to develop a plan of study in their area of interest. Students interested in graduate work should refer to CSU's Graduate and Professional Bulletin (http://catalog.colostate.edu/general-catalog/graduate-bulletin/) and the School of Biomedical Engineering (http://www.engr.colostate.edu/sbme/) website.

## Requirements

**Effective Fall 2021**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Core Course Requirements</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOM 570/MECH 570</td>
<td>Bioengineering</td>
<td>3</td>
</tr>
<tr>
<td>BIOM 576/MECH 576</td>
<td>Quantitative Systems Physiology</td>
<td>4</td>
</tr>
<tr>
<td><strong>Foundation Courses</strong></td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>BIOM 517/MECH 517</td>
<td>Advanced Optical Imaging</td>
<td></td>
</tr>
<tr>
<td>BIOM 525/MECH 525</td>
<td>Cell and Tissue Engineering</td>
<td></td>
</tr>
<tr>
<td>BIOM 526/ECE 526</td>
<td>Biological Physics</td>
<td></td>
</tr>
<tr>
<td>BIOM 531/MECH 531</td>
<td>Materials Engineering</td>
<td></td>
</tr>
<tr>
<td>BIOM 533/CIVE 533 or CIVE 534</td>
<td>Biomolecular Tools for Engineers</td>
<td></td>
</tr>
<tr>
<td>BIOM 537/ECE 537</td>
<td>Biomedical Signal Processing</td>
<td></td>
</tr>
<tr>
<td>BIOM 573/MECH 573</td>
<td>Structure and Function of Biomaterials</td>
<td></td>
</tr>
<tr>
<td>BIOM 574/MECH 574</td>
<td>Bio-Inspired Surfaces</td>
<td></td>
</tr>
<tr>
<td><strong>Depth Courses</strong></td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>ANEQ 565</td>
<td>Interpreting Animal Science Research</td>
<td></td>
</tr>
<tr>
<td>BC 565</td>
<td>Molecular Regulation of Cell Function</td>
<td></td>
</tr>
<tr>
<td>BIOM 504/CBE 504</td>
<td>Fundamentals of Biochemical Engineering</td>
<td></td>
</tr>
<tr>
<td>BIOM 518/ECE 518</td>
<td>Biophotonics</td>
<td></td>
</tr>
<tr>
<td>BIOM 527A/ECE 527A</td>
<td>Biosensing: Cells as Circuits</td>
<td></td>
</tr>
</tbody>
</table>

**Program Total Credits:** 30

A minimum of 30 credits are required to complete this program.

1. Students with a strong background in Cellular and Molecular Biology may substitute CM 502 for BIOM 533 or CIVE 534.
2. Students must take a minimum of 15 credits of biomedical engineering (BIOM) courses.