**Suggested Four Year Curriculum Plan for BS in BMEN**

The four year curriculum for a BS degree in Biomedical Engineering is given in the table below with core BMEN courses (pink), elective courses (purple), basic science courses (yellow), and general education courses (green) indicated by color.

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BMEN 101 1</td>
<td>BMEN 211C 3</td>
</tr>
<tr>
<td></td>
<td>Biomedical Engr Seminar</td>
<td>Modeling and Simulation of Biomedical Systems</td>
</tr>
<tr>
<td></td>
<td>BIOL 101C/L 4</td>
<td>BIOL 102C/L 4</td>
</tr>
<tr>
<td></td>
<td>Biological Principles I</td>
<td>Biological Principles II</td>
</tr>
<tr>
<td></td>
<td>CHEM 111C/L 4</td>
<td>CHEM 112C/L 4</td>
</tr>
<tr>
<td></td>
<td>General Chemistry</td>
<td>General Chemistry</td>
</tr>
<tr>
<td></td>
<td>MATH 141C 4</td>
<td>MATH 142C 4</td>
</tr>
<tr>
<td></td>
<td>Calculus I</td>
<td>Calculus II</td>
</tr>
<tr>
<td></td>
<td>ENGL 101C 3</td>
<td>ENGL 102 3</td>
</tr>
<tr>
<td></td>
<td>Composition</td>
<td>Composition and Literature</td>
</tr>
<tr>
<td></td>
<td>Total 16</td>
<td>Total 18</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BMEN 202 1</td>
<td>BMEN 260 3</td>
</tr>
<tr>
<td></td>
<td>Biomedical Engr Seminar</td>
<td>Biomechanics</td>
</tr>
<tr>
<td></td>
<td>MATH 241C 3</td>
<td>MATH 290 3</td>
</tr>
<tr>
<td></td>
<td>Vector Calculus</td>
<td>Thermodynamics of Biomolecular Systems</td>
</tr>
<tr>
<td></td>
<td>PHYS 211C/L 4</td>
<td>MATH 242C 3</td>
</tr>
<tr>
<td></td>
<td>Essential of Physics I</td>
<td>Elementary Differential Equations</td>
</tr>
<tr>
<td></td>
<td>CHEM 333 3</td>
<td>PHYS 212/L 4</td>
</tr>
<tr>
<td></td>
<td>Organic Chemistry I</td>
<td>Essential of Physics II</td>
</tr>
<tr>
<td></td>
<td>CHEM 331L 1</td>
<td>STAT 509 3</td>
</tr>
<tr>
<td></td>
<td>Organic Chemistry I Lab</td>
<td>Statistics for Engineers</td>
</tr>
<tr>
<td></td>
<td>BIOL 302C/L 4</td>
<td>Cell &amp; Molecular Biology</td>
</tr>
<tr>
<td></td>
<td>Total 16</td>
<td>Total 16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BMEN 271 3</td>
<td>BMEN 303 1</td>
</tr>
<tr>
<td></td>
<td>Biomaterials</td>
<td>Biomedical Engr Seminar</td>
</tr>
<tr>
<td></td>
<td>BMEN 321 3</td>
<td>BMEN 345 4</td>
</tr>
<tr>
<td></td>
<td>Biomedical Circuits and Systems</td>
<td>Anatomy and Physiology for Biomedical Engineers</td>
</tr>
<tr>
<td></td>
<td>BMEN 391 3</td>
<td>BMEN 361 4</td>
</tr>
<tr>
<td></td>
<td>Kinetics in Biomolecular Systems</td>
<td>Biomedical Measurement and Instrumentation</td>
</tr>
<tr>
<td></td>
<td>ECHE 320 or EMCH 360 3</td>
<td>Transport in Biological Systems</td>
</tr>
<tr>
<td></td>
<td>Fluid Mechanics</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Aesthetic/Interpretive Understanding Elective</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social Sciences Elective</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total 18</td>
<td>Total 15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 4</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BMEN 427 3</td>
<td>BMEN 428 3</td>
</tr>
<tr>
<td></td>
<td>Biomedical Engineering Design</td>
<td>Biomedical Engineering Design</td>
</tr>
<tr>
<td></td>
<td>Biomedical Engr Elective</td>
<td>Biomedical Engr Elective</td>
</tr>
<tr>
<td></td>
<td>Engineering Elective</td>
<td>Engineering Elective</td>
</tr>
<tr>
<td></td>
<td>Technical Elective</td>
<td>Technical elective</td>
</tr>
<tr>
<td></td>
<td>Technical Lab Elective</td>
<td>Ethics Elective</td>
</tr>
<tr>
<td></td>
<td>Historical Thinking Elective</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total 16</td>
<td>Total 15</td>
</tr>
</tbody>
</table>

- Core Biomedical Engineering or other engineering courses
- Biomedical Engineering, Engineering, and Technical Electives
- Basic science courses
- General education courses

*Required for application to upper division*