FRESHMAN 1
- CAS MA 123 Calculus I (4)
- ENG EK 100 Freshman Seminar (0)
- CAS CH 101 General Chemistry I (4)
- ENG EK 127 or ENG EK 129 Engineering Computation (4)
- Either Semester

FRESHMAN 2
- CAS MA 124 Calculus II (4)
- CAS PY 211 Physics I (4)
- CAS CH 102 General Chemistry II (4)
- Either Semester

SOPHOMORE 1
- CAS MA 225 Multivariate Calculus (4)
- CAS PY 212 Physics II (4)
- ENG EK 307 ** Electric Circuits (4)
- Either Semester

SOPHOMORE 2
- CAS MA 226 Differential Equations (4)
- CAS BI 315 Systems Physiology (4)
- ENG EK 200 Principles of Molecular Cell Biology & Biotechnology (4) [Fall or Spring]
- Either Semester

JUNIOR 1
- ENG EK 424 Thermodynamics & Statistical Mechanics (4) [Fall or Spring]
- CAS BI 315 Systems Physiology (4)
- ENG BE 200 introduction to Probability (4)
- Either Semester

JUNIOR 2
- Biomedical Elective (4)
- Fields Elective ENG - BE 419, BE 420, BE 435, or BE 436 (4)
- ENG BE 491 Biomed. Measurements I (2) [Fall only]
- ENG BE 401 Signals & Systems in Biomedical Engineering (4) [Fall only]

SENIOR 1
- Engineering Elective (4)
- Professional Elective (4)
- ENG BE 467 Product Design/Innovation (2) [Fall only]
- ENG BE 465 Senior Project (2)

SENIOR 2
- Biomedical Elective (4)
- Biomedical Elective (4)
- Professional Elective (4)
- ENG BE 466 Senior Project (2)

Extra Courses
- ( )
- ( )
- ( )
- ( )
- ( )
- ( )

** STUDY ABROAD: Students who plan to study abroad in Sophomore 2 should take EK 301 in Sophomore 1

General Education Requirements Checklist
1. CAS WR 100
2. CAS WR 150
3. 1 course in Social Science
4. 1 course in SS or HUM
5. 1 course General Education Elective
6. Total of at least 24 credits

Key:
- Math
- Natural Science
- Engineering Common
- General Education
- Biomedical Required
- Electives

Prereq. = Coreq. =
REQUIREMENTS

Students majoring in Biomedical Engineering are required to complete a minimum of 136 credits as detailed on the Program Planning Sheet on the other side of this form.

General Education courses: For a list of specific courses that satisfy the Social Science, Humanities, and the General Education Elective, please go to the College of Engineering Undergraduate Requirements website at: http://www.bu.edu/eng/current-students/ugrad/requirements/.

CONTINUAE AND FIELDS IN BIOMEDICAL SYSTEMS ELECTIVE (4 credits required)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG BE 419</td>
<td>Principles of Continuum Mechanics and Transport</td>
</tr>
<tr>
<td>ENG BE 420</td>
<td>Introduction to Solid Biomechanics</td>
</tr>
<tr>
<td>ENG BE 435</td>
<td>Transport Phenomena in Living Systems</td>
</tr>
<tr>
<td>ENG BE 436</td>
<td>Fundamentals of Fluid Mechanics</td>
</tr>
</tbody>
</table>

PROFESSIONAL ELECTIVES (8 credits required)

For the following 9 sets of courses, only 1 course can be taken for credit in each set due to the overlap of material:

1. ENG BF 527 Applications in Bioinformatics
2. ENG EC 412 Analog Electronics
3. ENG ME 407** Computer-Aided Design & Manufacture

Additionally, any Biomedical Elective (below) that has not been used to satisfy the BME Elective requirement (except BF 527) may be used as an Engineering Elective.

BIOMEDICAL ENGINEERING ELECTIVES (12 credits required)

All ENG BE 400 and 500 level courses (except BE 500); BE 700 level courses may be petitioned.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG EC 410</td>
<td>Introduction to Electronics</td>
</tr>
<tr>
<td>ENG BF 527</td>
<td>Application in Bioinformatics</td>
</tr>
</tbody>
</table>

DESIGN ELECTIVES (4 credits required) One of the elective choices above (Prof, ENG or BME) must include one 4-credit or two 2-credit courses from the design electives list.

<table>
<thead>
<tr>
<th>Fulfills Professional Elective:</th>
<th>Fulfills Engineering Elective:</th>
<th>Fulfills Biomedical Elective:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG EK 156, Design and Manufacture (2 cr)</td>
<td>ENG EC 311, Analog Electronics</td>
<td>ENG ME 428, Device Diagnostics &amp; Design</td>
</tr>
<tr>
<td>ENG ME 359, CAD/ Machine Components (2 cr)</td>
<td>ENG ME 407**, Computer-Aided Design &amp; Manufacture</td>
<td>ENG ME 501, Intro Biomechanical Design</td>
</tr>
<tr>
<td>ENG ME 360, Product Design</td>
<td>ENG ME 419, Heat Transfer</td>
<td>ENG ME 511, Intro Biomedical Instrumentation</td>
</tr>
<tr>
<td>ENG BE 435, Transport Phenomena</td>
<td>ENG ME 421, Advanced Circuit Design</td>
<td>ENG EC 410, Introduction to Electronics</td>
</tr>
</tbody>
</table>

DEGREE ENHANCEMENTS

CONCENTRATIONS: Students may choose to add a Concentration in Energy Technologies, Nanotechnology or Technology Innovation. Students completing a Minor in Mechanical Engineering may choose to add a concentration in Aerospace Engineering. A concentration requires 4 courses which satisfy courses within the major. Hence, a concentration can usually be completed without additional coursework. More information on concentrations and the specific requirements for each can be found at http://www.bu.edu/eng/academics/programs/concentrations/. Students may also pursue minors in other Colleges at Boston University. For more information, please contact the College of the minor.

MINORS: Students may choose to add a minor in any one of the other degree programs or divisions (Materials Science & Engineering or Systems Engineering), within the College of Engineering. A minor consists of 5 courses, 2 of which may also be used to satisfy requirements for the major. Completing a Minor will add a minimum of 12 credits to the total credits for the degree. More information on minors and the specific requirements for each can be found at http://www.bu.edu/eng/academics/programs/minors/.

DOUBLE MAJORS: Students may earn two engineering BS degrees. Double majors require a minimum of 168 credits and students must fulfill the requirements for each of the degree programs. See http://www.bu.edu/eng/academics/special-programs/ for more details.

OTHER WAYS TO ENHANCE YOUR DEGREE

Students have several additional options available to them including study abroad, research, and co-op/ internship opportunities. For more information on these programs, please visit the College of Engineering Undergraduate website: http://www.bu.edu/eng/academics/.

Notes: For the following 9 sets of courses, only 1 course can be taken for credit in each set due to the overlap of material:

1. ENG ME 305, ENG BE 420
2. ENG ME 404, ENG BE 402, ENG EC 402
3. ENG ME 303, ENG BE 436
4. ENG ME 441, ENG ME 515
5. ENG ME 501, ENG EC 501
6. ENG EE 102, CAS MA 142, CAS MA 242
7. ENG BE 401, ENG EC 401
8. ENG ME 366, ENG EC 381, ENG BE 200, ENG EK 500
9. ENG ME 359, ENG ME 407**

** Summer only

5/21/15