INSTRUCTIONS
1. Select desired courses. Selected courses will turn green, prerequisites will turn orange and corequisites will turn blue.
2. Select courses you have satisfied. Selected prerequisites and corequisites will turn gray.
3. Observe remaining red and blue courses. These will need to be satisfied prior to enrolling in your desired course selections.
4. Note: use the "CLEAR" buttons in the KEY to remove color highlights and start over.

KEY
- Selected course
- Prerequisite
- Corequisite
- Elective
- Satisfied course
- Course requiring a grade of "C" or better
- Information (mouse over)

INTERACTIVE COURSE MAP: You May Customize Your Path On This Map And Print Your Customization.
### Bachelor of Science in Biomedical Engineering

**Static Course Map:** You may print and use for reference.

#### Course Map Overview
- **Total Credits for Major:** 128
- **Other Requirements:** statically determined

#### Course Requirements
- **Common Pre-requisites:**
  - MAC 2281/2311
  - MAC 2282/2312
  - MAC 2283/2313
  - PHY 2048
  - PHY 2049
  - CHM 1045
  - CHM 1045L
  - BME 1008C
  - BSC 2010
  - BSC 2010L
  - SLS 1501
  - ENC 1101

- **Course Map:**

<table>
<thead>
<tr>
<th>Semester I / Fall</th>
<th>Semester II / Spring</th>
<th>Semester III / Fall</th>
<th>Semester IV / Spring</th>
<th>Semester V / Fall</th>
<th>Semester VI / Spring</th>
<th>Semester VII / Fall</th>
<th>Semester VIII / Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Credits: 18</td>
<td>Total Credits: 17</td>
<td>Total Credits: 17</td>
<td>Total Credits: 15</td>
<td>Total Credits: 17</td>
<td>Total Credits: 17</td>
<td>Total Credits: 14</td>
<td>Total Credits: 13</td>
</tr>
</tbody>
</table>

1. Minimum "C" or better in all Common Pre-requisites
2. A combined GPA of 2.5 in all Common Pre-requisites is required for graduation

**For Reference Only**
- Check Catalog for complete details
- Total Credits for Major: 128
- Please see the other page for co-reqs & pre-reqs for each course

---

**Other Requirements (Must be completed for graduation):**

<table>
<thead>
<tr>
<th>FLENT/FLEX</th>
<th>9 Summer Credit Hours</th>
<th>UCC</th>
<th>2.5 Prequisite GPA</th>
<th>Total Credits</th>
<th>J 128</th>
</tr>
</thead>
</table>

GL1: ______ | GL2: ______ | GRW1: ______ | GRW2: ______ | Civic Literacy: ______ |

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**For Reference Only**
- Check Catalog for complete details
- Total Credits for Major: 128
- Please see the other page for co-reqs & pre-reqs for each course

---

**Science and Engineering Elective:**

- MAC 2281/2311
- MAC 2282/2312
- MAC 2283/2313
- PHY 2048
- PHY 2049
- CHM 1045
- CHM 1045L
- BME 1008C
- BSC 2010
- BSC 2010L
- SLS 1501
- ENC 1101

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**Humanities**

- Group One (3)
- Group Two (3)

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**Social Science**

- Group One (3)
- Group Two (3)

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**Engineering or Science Elective**

- Engineering or Science Elective (3)
- Engineering or Science Elective (3)
- Engineering or Science Elective (3)
- Engineering or Science Elective (3)
- Engineering or Science Elective (3)
- Engineering or Science Elective (3)
- Engineering or Science Elective (3)
- Engineering or Science Elective (3)

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**Exams**

- MAC 2281/2311
- MAC 2282/2312
- MAC 2283/2313
- PHY 2048
- PHY 2049
- CHM 1045
- CHM 1045L
- BME 1008C
- BSC 2010
- BSC 2010L
- SLS 1501
- ENC 1101

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**ENG 3235**

- Eval of Engg Data (3)
- or
- STA 3033 (3)

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**EGM 3503**

- Applied Mechanics (4)
- or
- EGN 3311 (3) & 3321 (3)

---

**EEL 3110**

- Circuits Analysis (3)
- or
- EEN 3311 (3)

---

**EEL 3110L**

- Circuits Analysis Lab (1)

---

**BME 2740**

- BME Mod. & Sim. (3)

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**BME 3403**


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**BME 3721**

- BME Data Eval. Prin. (3)

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**BME 4503C**

- Med. Inst. Design (4)

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**BME 4011**

- Clinical Rotation (1)

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**BME 4050L**

- BME Lab I (1)

---

**BME 4051L**

- BME Lab II (1)

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**BME 4908**

- Sr. Des. Project (3)

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**BME 4930**

- Undergrad Sem. (0)

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**BME 4930**

- Undergrad Sem. (0)

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**BME 4930**

- Undergrad Sem. (0)

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**BME 4930**

- Undergrad Sem. (0)

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**BME 4930**

- Undergrad Sem. (0)

---

**BME 4930**

- Undergrad Sem. (0)

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**BME 4930**

- Undergrad Sem. (0)
BACHELOR OF SCIENCE IN BIOMEDICAL ENGINEERING

PREREQUISITES/COREQUISITES

COURSES MUST BE COMPLETED WITH COMBINED GPA OF A 2.5 ONLY “C” OR BETTER WILL BE ACCEPTED FOR THESE COURSES

MAC 2311 Calculus I (4)  
Prereqs: MAC 1147 OR MAC 1140 & MAC 1114
MAC 2312 Calculus II (4)  
Prereq: MAC 2311
MAC 2313 Multivariable Calculus (4)  
Prereq: MAC 2312
MAP 2302 Differential Equations (3)  
Prereq: MAC 2312
BSC 2010 General Biology (3)  
BSC 2010L General Biology (1)  
PHY 2048 Physics with Calculus I (4)  
PHY 2048L Physics with Calculus I Lab (1)  
Coreq: PHY 2048
PHY 2049 Physics with Calculus II (4)  
PHY 2049L Physics with Calculus II Lab (1)  
Coreq: PHY 2049
CHM 1045 General Chemistry I (3)  
CHM 1045L General Chemistry I Lab (1)  
Coreq: CHM 1045
CHM 1046 General Chemistry II (3)  
CHM 1046L General Chemistry II Lab (1)  
Coreq: CHM 1046
CHM 2210 Organic Chemistry I (4)  
CHM 2210L Organic Chemistry I Lab (1)  
Coreq: CHM 2210

GRADE OF “D” OR BETTER WILL BE ACCEPTED FOR BELOW COURSES

BME 1054L BME Computing (1)  
Prereqs: PHY 2049 & BME 3403
BME 3403 Biomedical Systems and Devices (3)  
Prereqs: BSC 2010 & BME 1054L  
Coreq: MAP 2302 & BME 1008C
BME 3404 Engineering Analysis of Bio Sys II (3)  
Prereq: BME 3403

Engineeering Electives

BME 4501 Biomedical Optics (3)  
Prereqs: PHY 2049 & BME 2740
BME 4531 Medical Imaging (3)  
Prereqs: PHY 2049 & BME 2740
BME 4423 Biophysics of Neural Comp. (3)  
Prereqs: EEL 3110 & EEL 3110B
EEL 3135 Signals & Systems (3)  
Varies by Dept. *Must email advisor to be enrolled
EEE 4510 Intro to Digital Syst. (3)  
Varies by Dept.
EEE 3657 Control Systems I (3)  
Varies by Dept.
BME 4211 Orthopedic Biomech. (3)  
Prereq: BME 4100
BME 4260 Eng. Hemodynamics (3)  
Prereq: BME 3632 & BME 3404
EGN 3365 Materials in Eng. (3)  
Varies by Dept.
Prereqs: CHM 2010, MAC 2311 & PHY 2048
EGM 3311 Analysis of Eng. Sys. (3)  
Varies by Dept. *Must email advisor to be enrolled
EML 4804 Intro to Mechatronics (3)  
Varies by Dept.
BME 4311 Molecular Engineering (3)  
Prereq: BME 3403
BME 4332 Cell and Tissue Eng. (3)  
Varies by Dept.
Prereqs: MAC 2313, BME 3632 & BME 4100
BME 4230 Biomech of Cardiac Syst (3)  
Prereqs: BME 3632, BME 3404, BME 4100

SCIENCE ELECTIVES (ALLOWED 3 MAX)

CHM 2111 Organic Chemistry I (3)  
Prereqs: BME 2740, CHM 2411L
CHM 2112 Organic Chemistry II (3)  
Prereqs: BME 2740, CHM 2411L
CHM 3120 Analytic Chemistry (3)  
Prereqs: CHM 3120, MAC 2311 & PHY 2048
BCH 3033 General Biochemistry (3)  
Prereqs: CHM 2211 & BSC 2010
CHM 4304 Biological Chemistry I (3)  
Prereqs: CHM 2211 & CHM 2211L
CHM 4307 Biological Chem. II (3)  
Prereqs: CHM 2211
PCB 3003 Genetics (3)  
Prereqs: BSC 2010
PCB 4003 Cell Biology (3)  
Prereq: PCB 3003 & CHM 1046
PCB 4233 Immunology (3)  
Prereqs: PCB 3063
MCB 3020 General Microbiology (3)  
Prereqs: PCB 3063
ZOO 3753 Histology (3)  
Varies by Dept.
Prereqs: BSC 2010, CHM 2210 & CHM 2211

ENGINEERING ELECTIVES

BME 4501 Biomedical Optics (3)  
Prereqs: PHY 2049 & BME 3403
BME 4531 Medical Imaging (3)  
Prereqs: PHY 2049 & BME 2740
BME 4423 Biophysics of Neural Comp. (3)  
Prereqs: EEL 3110 & EEL 3110B
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Varies by Dept. *Must email advisor to be enrolled
EEE 4510 Intro to Digital Syst. (3)  
Varies by Dept.
EEE 3657 Control Systems I (3)  
Varies by Dept.
BME 4211 Orthopedic Biomech. (3)  
Prereq: BME 4100
BME 4260 Eng. Hemodynamics (3)  
Prereq: BME 3632 & BME 3404
EGN 3365 Materials in Eng. (3)  
Varies by Dept.
Prereqs: CHM 2010, MAC 2311 & PHY 2048
EGM 3311 Analysis of Eng. Sys. (3)  
Varies by Dept. *Must email advisor to be enrolled
EML 4804 Intro to Mechatronics (3)  
Varies by Dept.
BME 4311 Molecular Engineering (3)  
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Varies by Dept.
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Prereqs: BME 2740, CHM 2411L
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Prereqs: CHM 3120, MAC 2311 & PHY 2048
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Prereqs: CHM 2211 & BSC 2010
CHM 4304 Biological Chemistry I (3)  
Prereqs: CHM 2211 & CHM 2211L
CHM 4307 Biological Chem. II (3)  
Prereqs: CHM 2211
PCB 3003 Genetics (3)  
Prereqs: BSC 2010
PCB 4003 Cell Biology (3)  
Prereq: PCB 3003 & CHM 1046
PCB 4233 Immunology (3)  
Prereqs: PCB 3063
MCB 3020 General Microbiology (3)  
Prereqs: PCB 3063
ZOO 3753 Histology (3)  
Varies by Dept.
Prereqs: BSC 2010, CHM 2210 & CHM 2211