### BIOMEDICAL ENGINEERING - Computation (129 Hours)

Effective Fall 2018 (revised 9/18/2023) (engg.us/bme)

**NOTE:** PREREQUISITES ARE SHOWN IN THE COURSE BLOCK.

a. Technical electives must be selected to complete one of the areas of emphasis. Technical electives must come from the approved BME Technical Electives List.
b. Humanities and Social Science (H&SS) electives must be selected from the list of courses approved by the College of Engineering. Students should select these courses as needed to complete the requirements for the K-State 8 Gen Ed Pgm.
c. Students must follow the department C Prerequisite Course Policy.

<table>
<thead>
<tr>
<th>Advisor:</th>
<th>Printed:</th>
<th>DOE:</th>
<th>Class:</th>
<th>Flowchart:</th>
<th>Hours:</th>
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<tr>
<th><strong>FRESHMAN</strong></th>
<th><strong>SOPHOMORE</strong></th>
<th><strong>JUNIOR</strong></th>
<th><strong>SENIOR</strong></th>
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<tbody>
<tr>
<td>ENGL 100 (3)</td>
<td>ECON 110 (3)</td>
<td>ENGL 415 (3)</td>
<td>BME 591 (3)</td>
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<td>Expo Writ I</td>
<td>Microeconomics</td>
<td>Writ Comm</td>
<td>Senior Design Exp 2</td>
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<td>PR: ENGL 100</td>
<td>PR: BME 490</td>
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<td>(grade of A or B)</td>
<td>PR: ENGL 415</td>
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| ECON 110 (3)  | COMM 105 (2)  | TECH ELEC (1) | BME 400 (1) |
| Microeconomics| Public Speaking|               | BME Design Exp 1 |
|               |               |               | PR: PHYS 214 |

| MATH 220 (4)  | MATH 221 (4)  | MATH 222 (4)  | MATH 500 (3) |
| Anal Geo & Calc 1 | Anal Geo & Calc 2 | Anal Geo & Calc 3 | Microcontrollers |
| PRE: MATH 220 | PRE: MATH 221 | PRE: MATH 221 | PR: PHYS 214 |

| BME 001 (0)   | PHYS 213 (5)  | PHYS 214 (5)  | ECE 433 (3) |
| New Student Assem | Engg Physics 1 | Engg Physics 2 | Microcontrollers |
| PRE: Conc: MATH 221 | PRE: PHYS 213 | PRE: PHYS 221 | PR: ECE 421 |

| ECE 241 (3)  | CIS 200 (4)  | CIS 300 (3)  | ECE 540 (3) |
| Intro to BME | Intro to Comp Engg | Data/Prog Structures | Appl Sci Comp |
| PRE: ECE 241 | PRE: ECE 241 | PRE: CIS 200 | PR: STAT 530 |

| CHM 210 (4)  | CHM 230 (4)  | BIOL 198 (4)  | BIOL 441 (4) |
| Chem 1       | Chem 2       | Prin of Biology | Human Body 1 |
| PRE: CHM 210 | PRE: CHM 230 | PRE: CHM 210 | PRE: BIOL 198 |

| BIOL 442 (4)  | Tech Elec (1) |
| Human Body 2  | a |
| PRE: BIOL 441 | |

| BIOL 772/773 (3) | BME 674 (3) |
| Biosth Thy & Lab | Medical Img |
| PRE: ECE 540 | PRE: ECE 512 |

| ECE 772/773 (3) | MATH 222 (4)  | ECE 512 (3)  | BIOL 210 (4) |
| Biosth Thy & Lab | Anal Geo & Calc 3 | Linear Sys | Prin of Biology |
| PRE: ECE 540 | PRE: MATH 222 | PRE: ECE 512 | PRE: CHM 210 |

| BME 430 (3)  | BME 451 (3)  | BME 590 (3)  | BME 591 (3) |
| Biomat | Biomechanics | Senior Design Exp 1 | Senior Design Exp 2 |
| PRE: BME 490 | PRE: BME 490 | PR: ENGL 415 | PR: BME 490 |

| BME 500 (3)  | BME 501 (3)  | BME 550 (3)  | BME 575 (3) |
| TECH ELEC | Senior Design Exp 1 | Clinical Sys Engg | |
| PR: BME 490 | PR: BME 490 | PRE: BME 490 | PRE: BME 490 |

| TECH ELEC | TECH ELEC | TECH ELEC | TECH ELEC |
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**Currently Enrolled**: [ ]
**Passed**: [ ]
**Retaken**: [ ]
**Failed**: [ ]
**Warning**: [ ]