

Biomedical Engineering Sample Schedule

| | Credit Hours | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|--------------|-----------|-----------|-----------|-----------|-----------|-----------|--------------|--------------|
| Subjects Required by all Programs (55 hours) | | | | | | | | | |
| Mathematics 115, 116, 215, 216 | 16 | 4 | 4 | 4 | 4 | - | - | - | - |
| Engineering 100, Introduction to Engineering | 4 | 4 | - | - | - | - | - | - | - |
| Engineering 101, Introduction to Computers | 4 | - | 4 | - | - | - | - | - | - |
| Chemistry 125/126 and 130 or Chemistry 210 and 211 ¹ | 5 | 5 | - | - | - | - | - | - | - |
| Physics 140 with Lab 141; Physics 240 with Lab 241 ² | 10 | - | 5 | 5 | - | - | - | - | - |
| Intellectual Breadth | 16 | 4 | - | - | 4 | 4 | 4 | - | - |
| Life and Materials Science and Engineering (8 hours) | | | | | | | | | |
| Biology 172 or 174, Introduction to Biology ³ | 4 | - | 4 | - | - | - | - | - | - |
| MATSCIE 250, Principles of Engineering Materials | 4 | - | - | - | - | 4 | - | - | - |
| Required Program Subjects (35 hours) | | | | | | | | | |
| BIOMEDE 211, Circuits & Systems for Biomedical Engineers | 4 | - | - | - | 4 | - | - | - | - |
| BIOMEDE 221, Biophysical Chemistry & Thermodynamics | 4 | - | - | 4 | - | - | - | - | - |
| BIOMEDE 231, Introduction to Biomechanics | 4 | - | - | - | 4 | - | - | - | - |
| BIOMEDE 241, Statistics, Computation, and Data Analysis | 4 | - | - | 4 | - | - | - | - | - |
| BIOMEDE 350, Introduction to Biomedical Design | 4 | - | - | - | - | 4 | - | - | - |
| BIOMEDE 418, Quantitative Cell Biology | 3 | - | - | - | - | 3 | - | - | - |
| BIOMEDE 419, Quantitative Physiology | 4 | - | - | - | - | - | - | 4 | - |
| BIOMEDE 450, Biomedical Design or | 4 | - | - | - | - | - | - | - | 4 |
| BIOMEDE 451, Biomedical Design, | 3 | - | - | - | - | - | - | 3 | - |
| Part I and BIOMEDE 452, Biomedical Design, Part II | 3 | - | - | - | - | - | - | - | 3 |
| BIOMEDE 458, Biomedical Instrumentation & Design | 4 | - | - | - | - | - | 4 | - | - |
| Depth Requirements⁴ (21 hours) | | | | | | | | | |
| Engineering Expertise | 12 | - | - | - | - | - | - | 8 | 4 |
| Advanced Science, Technology, Engineering or Math | 6 | - | - | - | - | - | 3 | - | 3 |
| Experiential Elective | 3 | - | - | - | - | - | 3 | - | - |
| General Electives (9 hours) | 9 | - | - | - | - | - | 3 | 3 | 3 |
| Total | 128 | 17 | 17 | 17 | 16 | 15 | 17 | 15-18 | 13-14 |

Candidates for the Bachelor of Science in Engineering in Biomedical Engineering - B.S.E. in Biomed E. - must complete the program listed above. This sample schedule is an example of one leading to graduation in eight terms.

Notes:

¹-If you have a satisfactory score or grade in Chemistry AP, A-Level, IB Exams or transfer credit from another institution for Chemistry 130/125/126 you will have met the Chemistry Core Requirement for the College of Engineering.

²-If you have a satisfactory score or grade in Physics AP, A-Level, IB Exams or transfer credit from another institution for Physics 140/141 and 240/241 you will have met the Physics Core Requirement for the College of Engineering.

³- If you have a satisfactory score or grade in Biology AP, A-Level, IB Exams or transfer credit from another institution for Biology 172/174 you will have met the Biology Requirement for BME.

⁴-Depth requirements: A list of depth requirements and optional tracks is available on the department website and in 1111 Gerstacker.