Biomedical Engineering – Program Map

Semester	Course 1	Course 2	Course 3	Course 4	Course 5	Seminar
1	Principles Chem I / Lab **CHEM:1110** *(Math & Science)*	Engr Calculus I **MATH:1550** *(Math & Science)*	Intro Engineering Problem Solving **ENGR:1100** *(Engineering Core)*	Rhetoric **RHET:1030** *(Gen Ed)*	—	
2	Principles Chem II / Lab **CHEM:1120** *(Math & Science)*	Engr Calculus II **MATH:1560** *(Math & Science)*	Engr Matrix Algebra **MATH:2550** *(Math & Science)*	Physics I / Lab **PHYS:1611** *(Math & Science)*	Intro Engr Computing **ENGR:1300** *(Engineering Core)*	BME Forum **BME:1010**
3	Foundations of Biology / Lab **BIOL:1411** *(Math & Science)*	Engr Diff Equations **MATH:2560** *(Math & Science)*	Statics **ENGR:2110** *(Required Engineering)*	Electrical Circuits **ENGR:2120** *(Required Engineering)*	*Thermo **ENGR:2130** or Intro AI & Machine Learning **ENGR:3110** *(Required Engineering)*	BME Prof Seminar **BME:2010**
4	Fund Human Physiology **HHP:2400** or **BME:3260** Quantitative Physiology *(Math & Science)*	Biostatistics **BIOS:4120** or **STAT:3510** *(Math & Science)*	BME Core #1 (**BME:2200, 2210, 2400, or 2500**)	BME Core #2 (**BME:2200, 2210, 2400, or 2500**)	Required Course: Focus Area #1	
5	BME Core #3 (**BME:2200, 2210, 2400, or 2500**)	BME Core #4 (**BME:2200, 2210, 2400, or 2500**)	Required Course: Focus Area #2	Required Course: Focus Area #3	Cultural Perspectives, Values, & Society *(Gen Ed)*	
6	Focus Area Elective #1	Focus Area Elective #2	Required Course: Focus Area #4	Approved Gen Ed course	Be Creative *(Gen Ed)*	
7	BME Senior Design I **BME:4910** *(BME Core)*	Focus Area Elective #3	Focus Area Elective #4	Focus Area Elective #5	Approved Gen Ed course	
8	BME Senior Design II **BME:4920** *(BME Core)*	Physics II / Lab **PHYS:1612** *(Math & Science)*	Focus Area Elective #6	Focus Area Elective #7	Approved Gen Ed course	

*Students in the Bioimaging and Computational Bioengineering Focus Areas can choose to take either ENGR:2130 or ENGR:3110; students in the Biomechanics & Biomaterials and Cellular Engineering Focus areas are required to take ENGR:2130.

At least two Focus Area Electives must be from the list of Engineering Topics.