Biomedical Engineering – Program Map

Semester 1

Chem I / Lab CHEM:1110	Engr Math I MATH:1550	Intro Engr Prob Solving ENGR:1100	Rhetoric RHET:1030	Engr Success First Year ENGR:1000

Semester 2

Chem II / Lab CHEM:1120	Engr Math II MATH:1560	Engr Math III MATH:2550	Physics I / Lab PHYS:1611	Intro Engr Computing ENGR:1300	BME Forum BME:1010

Semester 3

Foundations of Biology / Lab BIOL:1411	Engr Math IV MATH:2560	Statics ENGR:2110	Elec Circuits ENGR:2120	Thermo ENGR:2130 or *Intro AI & Mach Learning ENGR:3110*	BME Prof Seminar BME:2010

Semester 4

Human Physiology HHP:3500 or BME:2260 Quantitative Physiology	Biostatistics BIOS:4120 or STAT:3510	BME Core #1 (BME:2200, 2210, 2400, or 2500)	BME Core #2 (BME:2200, 2210, 2400, or 2500)	Required Course: Focus Area #1

Semester 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, and Society

Semester 6

Focus Area Elective #1	Focus Area Elective #2	Required Course: Focus Area #4	Approved GEC course	Be Creative

Semester 7

BME Senior Design I BME:4910	Focus Area Elective #3	Focus Area Elective #4	Focus Area Elective #5	Approved GEC course

Semester 8

BME Senior Design II BME:4920	Physics II / Lab PHYS:1612	Focus Area Elective #6	Focus Area Elective #7	Approved GEC course

Legend:
- Math & Science Courses
- Required Engineering Courses
- Focus Area Required Courses
- General Education Courses
- Engineering Core Courses
- Biomedical Core Courses
- Focus Area Elective Courses
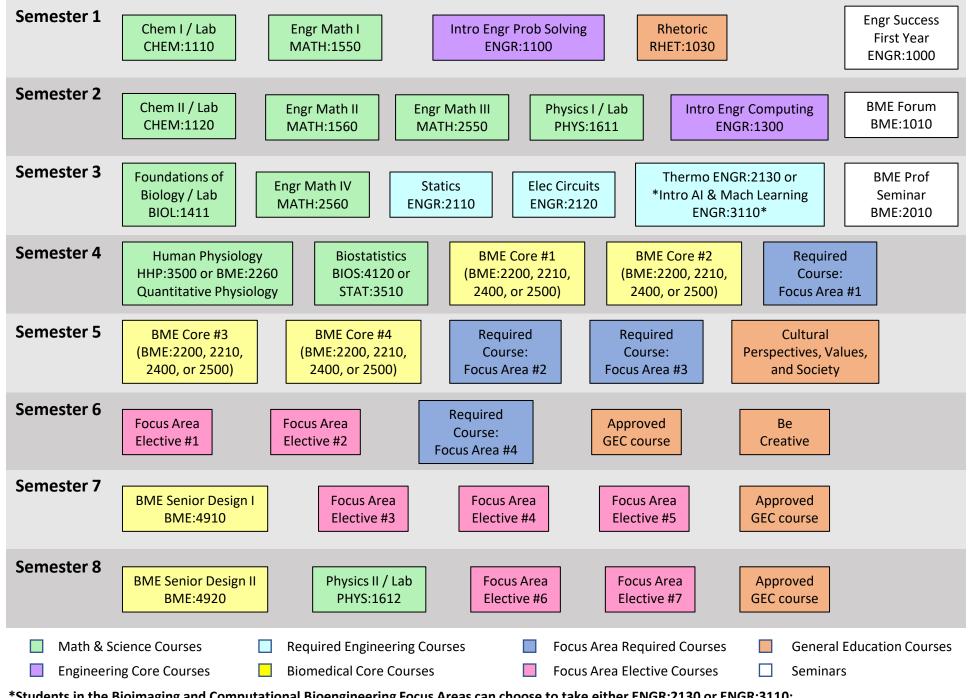- Seminars

*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.

Last updated 10/11/24