

Biomedical Engineering – Example Program Map

Bioimaging (Medical Physics)

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	Thermodynamics ENGR:2130	BME Prof Seminar BME:2010
Semester 4	Human Physiology HHP:3500 or Quantitative Physiology BME:2260	Biostatistics BIOS:4120 or STAT:3510	Systems, Instrum, & Data Acquisition / Lab BME:2200	Bioimaging & Bioinformatics / Lab BME:2210	Comp in Engr ENGR:2730	
Semester 5	Cell Biology for Engr / Lab BME:2400	Biomaterials & Biomechanics / Lab BME:2500	Medical Imaging Physics BME:5210	Physics II / Lab PHYS:1612	Cultural Perspectives, Values, and Society	
Semester 6	Intro to Software Design ECE:3330	Physics IV PHYS:2704	Biomed Signal Processing BME:5200	Approved GEC course	Be Creative	
Semester 7	BME Senior Design I BME:4910	Electricity & Magnetism I PHYS:3811	Intro to Quantum Mechanics I PHYS:3741	Digital Image Processing ECE:5480	Approved GEC course	
Semester 8	BME Senior Design II BME:4920	Multidim Image Analysis Tools & Tech ECE:5490	Intermed Lab PHYS:3756	Electricity & Magnetism II PHYS:3812	Approved GEC course	

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| Math & Science Courses | Required Engineering Courses | Focus Area Required Courses | General Education Courses |
| Engineering Core Courses | Biomedical Core Courses | Focus Area Elective Courses | Seminars |

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

Last updated 10/11/24