Biomedical Engineering BBE Four-Year Plan

FALL	SPRING
First Year	
MATH 241 - Analytic Geometry and Calculus A	MATH 242 - Analytic Geometry and Calculus B
BISC 207 - Introductory Biology I and BISC 217 – Introductory Biology Lab	CISC 106 - General Computer Science for Engineers
CHEM 103 - General Chemistry and CHEM 133 - General Chemistry Laboratory	CHEM 104 - General Chemistry and CHEM 134 - General Chemistry Laboratory
EGGG 101 - Introduction to Engineering	ENGL 110 - First-Year Writing
Breadth Requirement (1/5)	BMEG 100 - Fundamentals of Biomedical Engineering
	BMEG 111 - Cell and Tissue Engineering Lab
Credits: 17	Credits: 16
Second Year	
MATH 243 - Analytic Geometry and Calculus C	MATH 305 - Applied Mathematics for Biomed, Chem and Biomol Engg
BMEG 341 - Biomedical Experiment Design & Analysis	BMEG 230 - Circuits, Signals, and Systems for Biomedical Applications
CHEM 321 - Organic Chemistry I & CHEM 325 - Organic Chemistry Laboratory I	BMEG 260 - Introduction to Medical Device Design
PHYS 203 - Fundamentals of Physics with Biomedical Applications I or PHYS 207 - Fundamentals of Physics I and PHYS 227 - Fundamentals of Physics Laboratory I	PHYS 204 - Fundamentals of Physics with Biomedical Applications II or PHYS 208 - Fundamentals of Physics II and PHYS 228 - Fundamentals of Physics Laboratory II
	BMEG 301 - Quantitative Cellular Physiology
Credits: 15	Credits: 16

FALL	SPRING
Third Year	
BMEG 302 - Quantitative Systems Physiology	BMEG 311 – Bioengineering Mechanics II
BMEG 310 – Bioengineering Mechanics	BMEG 340 – Biomedical and Pharmaceutical Modeling
BMEG 309 – Bioengineering Mechanics Lab	BMEG 360 – Biomedical Engineering Junior Design
BMEG 330 – Biomedical Instrumentation	BMEG 420 – Biological Transport Phenomena
MSEG 201 – Introduction to Materials Science	Technical Elective (2/5)*
Technical Elective (1/5)*	
Credits: 17	Credits: 15
Fourth Year	
BMEG 460 – EG Senior Design(DLE and Capstone)	PHIL 444 – Medical Ethics
Technical Elective (3/5)*	Technical Elective (4/5)*
Breadth Requirement (2/5)	Technical Elective (5/5)*
Breadth Requirement (3/5)	Breadth Requirement (4/5)
	Breadth Requirement (5/5)
Credits: 15	Credits: 15
Total Credits: 126	

*See program page for approved courses.

Disclaimer: Four-Year Plans are a Departmental suggestion of how a student could complete this degree in four years (eight semesters). Students may opt to take courses in the summer or winter sessions. These plans do not take into account additional requirements brought on by minors or other majors. A Four-Year Plan is subject to change from year-to-year given the resources and focuses of the Department. It is the student's responsibility to meet with his or her assigned advisor at least once a semester to monitor progress and ensure that he or she is on track to graduate on time. This document is intended as a supplemental advisement tool to be used in conjunction with in-person advisement and the Degree Audit. Students should direct any questions or concerns regarding degree progress to their advisor or Academic Assistant Dean.