

Biomedical Engineering

The minimum number of credit hours for the Bachelor of Science in Biomedical Engineering is 131

Freshman (First Year)

First Semester			Second Semester		
AIU 100	The AIU Experience (EX)	1	AIU 111/112	Wellness (WL)	1
BIO 101	Basic Life Mechanisms	3	CHM 110	General Chemistry I	3
BIO 102	Basic Life Mechanisms Laboratory	1	CHM 111	General Chemistry I Laboratory	1
ENG 101	College Writing (EC)	3	CSC 101	Computer Essentials (CS)	3
MAT 121	Calculus I	4	MAT 122	Calculus II	4
PHY 120	Physics I (NS)	3	PHY 122	Physics II (NS)	3
PHY 121	Physics I Laboratory (NS)	1	PHY 123	Physics II Laboratory (NS)	1
Total Credit Hours		16	Total Credit Hours		16

Sophomore (Second Year)

First Semester			Second Semester		
BME 240	Anatomy for Engineers	2	BME 241	Physiology for Engineers	2
CSC 102	Intro to Programming	3	BME 341	Engineering Physiology Laboratory	1
ECE 200	Electrical Circuits I	3	ECE 260	Digital Logic Design	3
ECE 201	Electrical Circuits I Laboratory	1	ECE 261	Digital Logic Design Laboratory	1
EGR 100	Design in Engineering	3	ECE 320	Electronics I	3
MAT 221	Calculus III	4	EGR 200	Statics	3
Total Credit Hours		16	MAT 230	Differential Equations and Matrix Algebra	4
			Total Credit Hours		17

Junior (Third Year)

First Semester			Second Semester		
BME 310	Biomedical Signals & Systems	3	AIU 300	Internship & Career Preparation (EX)	1
BME 311	Biomedical Signals & Systems Laboratory	1	BME 300	Medical Imaging I	3
BME 330	Biomaterials and Biocompatibility	3	BME 315	Biomedical Instrumentation I	3
ECE 350	Electronics II	3	BME 320	Biomechanics I	3
ECE 351	Electronics II Laboratory	1	BME 395	Biomedical Engineering Seminar	1
EGR 205	Elementary Mechanics of Materials	3	EGR 150	Probability & Statistics in Engineering (MA)	3
ENG 301	Technical Writing (EC)	3	ENG 302	Technical Presentations (OC)	3
Total Credit Hours		17	Total Credit Hours		17
			Summer Semester - EGR 490 Internship		1

Senior (Fourth Year)

First Semester			Second Semester		
BME 495	Senior Project I	1	BME 496	Senior Project II	3
BME elective		3	BME elective		3
PHL 112	Professional Ethics (AH)	3	BME elective		3
GenEd AH course		3	ECO 201	Principles of Microeconomics	3
GenEd SS course		3	Engineering Technical Elective		3
Engineering Technical Elective		3	Total Credit Hours		15
Total Credit Hours		16			

This is a recommended plan of study for the Bachelor of Science in Biomedical Engineering.
Please see Undergraduate Catalog for a complete explanation of degree requirements.

