SCHOOL OF ENGINEERING AND COMPUTING

Biomedical Engineering

The minimum number of credit hours for the Bachelor of Science in Biomedical Engineering is 132

Freshman (First Year)

First Semester

AIU 100	The AIU Experience (EX)	1
BIO 101	Basic Life Mechanisms	3
BIO 102	Basic Life Mechanisms Laboratory	1
ENG 101	College Writing (EC)	3
BME 101	Introduction to Biomedical Engineering	1
MAT 121	Calculus I	4
PHY 120	Physics I (NS)	3
PHY 121	Physics I Laboratory (NS)	1
Total Credit Hours		17

Second Semester

AIU 111/112	Wellness (WL)	1
CHM 110	General Chemistry I	3
CHM 111	General Chemistry I Laboratory	1
CSC 101	Computer Essentials (CS)	3
MAT 122	Calculus II	4
PHY 122	Physics II (NS)	3
PHY 123	Physics II Laboratory (NS)	1
Total Credit Hours		**16**

Sophomore (Second Year)

First Semester

BME 240	Anatomy for Engineers	2
CSC 102	Intro to Programming	3
ECE 200	Electrical Circuits I	3
ECE 201	Electrical Circuits I Laboratory	1
EGR 100	Design in Engineering	3
MAT 221	Calculus III	4
Total Credit Hours		**16**

Second Semester

BME 241	Physiology for Engineers	2
BME 371	Biomechanics Lab	1
BME 310	Biomedical Signals & Systems	3
BME 311	Biomedical Signals & Systems Laboratory	1
ECE 320	Electronics I	3
BME 320	Biomechanics I	3
MAT 230	Differential Equations and Matrix Algebra	4
Total Credit Hours		**17**

Junior (Third Year)

First Semester

EGR 150	Probability & Statistics in Engineering (MA)	3
BME 395	Biomedical Engineering Seminar	1
BME 330	Biomaterials and Biocompatibility	3
ECE 350	Electronics II	3
ECE 351	Electronics II Laboratory	1
BME 300	Medical Imaging I	3
ENG 301	Technical Writing (EC)	3
Total Credit Hours		**17**

Summer Semester - Internship

EGR 490		**1**

Second Semester

AIU 300	Internship & Career Preparation (EX)	1
BME 325	Image Processing	3
BME 345	Biomedical Sensors	3
BME 315	Biomedical Instrumentation I	3
BME 341	Engineering Physiology Laboratory	1
BME elective		3
ENG 302	Technical Presentations (OC)	3
Total Credit Hours		**17**

Senior (Fourth Year)

First Semester

BME 495	Senior Project I	1
BME elective		3
PHL 112	Professional Ethics (AH)	3
GenEd AH course		3
GenEd SS course		3
BME 415	Biomedical Instrumentation II	3
Total Credit Hours		**16**

Second Semester

BME 496	Senior Project II	3
BME 470	Upper and Lower Limbs Prosthesis	3
BME elective		3
ECO 201	Principles of Microeconomics	3
Engineering Technical Elective		3
Total Credit Hours		**15**

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.

