

Biomedical Engineering

Total Credit Hours = 126

Semester 1	Cr.	Semester 2	Cr.
CHM 2045 General Chemistry I	3	CHM 2046 General Chemistry II	3
CHM 2045L General Chemistry I Laboratory	1	CHM 2046L General Chemistry II Laboratory	1
EGN 3000 Foundations of Engineering	0	ENC 1102 Composition II	3
EGN 3000L Foundations of Engineering Lab	3	MAC 2282 Engineering Calculus II	4
ENC 1101 Composition I	3	PHY 2048 General Physics I - Calculus Based	3
MAC 2281 Engineering Calculus I	4	PHY 2048L General Physics I Laboratory	1
Semester Hours:	14	Semester Hours:	15

Semester 3	Cr.	Semester 4	Cr.
EGN 3443 Probability & Statistics for Engineers	3	BME 3053 Computer Programming for Biomedical Engineers	3
MAC 2283 Calculus III	4	EGN 3343 Thermodynamics I	3
PHY 2049 General Physics II	3	EGN 3433 Modeling and Analysis of Engineering Systems or MAP 2302 Differential Equations	3
PHY 2049L Physics II Laboratory	1	BSC 2010 Cellular Processes	3
BME 4100 Biomedical Engineering	3	BSC 2010L Cellular Processes Laboratory	1
EGN 3311 Statics	3	General Education Core Social Sciences	3
Semester Hours:	17	Semester Hours:	16

Summer	Cr.
CHM 2210 Organic Chemistry I	3
CHM 2210L Organic Chemistry Laboratory I	2
ENC 3246 Communication for Engineers	3
Professional Elective	1
Semester Hours:	9

Semester 5	Cr.	Semester 6	Cr.
BME 4409 Engineering Physiology	3	EGN 3321 Dynamics	3
BME 4508 Biomedical Signals and Systems Analysis	3	BME 4056C Biomedical Engineering Lab I	2
EGN 3373 Introduction to Electrical Systems I	3	BME 3032 Biomedical Transport Processes	3
BME 4503 Biomedical Instrumentation	3	General Education Humanities and Cultural Diversity	3
General Education Core Humanities	3	EGN 3365 Materials Engineering I or EMA 4003 Introduction to Materials Science	3
Semester Hours:	15	Semester Hours:	14

Semester 7	Cr.	Semester 8	Cr.
BME 3312 Molecular and Cellular Engineering	3	BME 4883 Biomedical Engineering Design II	3
BME 4057C Biomedical Engineering Lab II	2	BME Upper-Level Elective	3
BME 4882 Biomedical Engineering Design I	3	STEM Upper-Level Elective	3
BME Upper-Level Elective	3	General Education Ethical Reasoning & Civil Engagement	3
STEM Upper-Level Elective	3	Apply for Graduation	
Semester Hours:	14	Semester Hours:	12