Bachelor of Science in Biomedical Engineering ***2016-2017***

Suggested Plan of Study – Freshman Admission

Course	CR	Course	Comments/alternate course
Term 1		*Fall*	
BME1008	1	Introduction to Biomedical Engineering	
CHM2045	3	General Chemistry	*/CHM2095
CHM2045L	1	General Chemistry Laboratory	CHM2095L/CHM2054L/X-Lab 1
IUF1000	3	What is the Good Life	
ENC1101	3	Expository and Argumentative Writing	
MAC2311	4	Analytical Geometry and Calculus 1	*
Term Credit	15		
Term 2		*Spring*	
BSC2010	3	Integrated Principles of Biology 1	*
BSC2010L	1	Biology 1 Lab	BSC2044L/X-Lab 1
CHM2046	3	General Chemistry and Quantitative analysis	*/CHM2096
CHM2046L	1	General Chemistry and Quant Anal Lab	CHM2096L/CHM2054L/X-Lab 2
MAC2312	4	Analytical Geometry and Calculus 2	*/MAC2512+MAC2311AP
GenEd_S	3	State Core (Social and Behavioral Science)	
Term Credits	15		
Term 3		*Fall*	
CHM3217	4	Organic Chemistry 1	CHM2210+CHM2211
COP2271	2	Comp Prog for Engineers (C++ or Matlab)	Other substitutions possible
COP2271L	1	Lab for COP2271 (same language)	
MAC2313	4	Analytic Geometry and Calculus 3	*
PHY2048	3	Physics with Calculus 1	*
PHY2048L	1	Laboratory for PHY2048	PHY2064L/X-Lab 1
Term Credits	15		
Term 4		*Spring*	
BME3060	3	BME Fundamentals	*
PHY2049	3	Physics with Calculus 2	*
PHY2049L	1	Laboratory for PHY2049	
MAP2302	3	Elementary Differential Equations	*
PCB3713C	4	Cell and Systems Physiology	*
EGM2511 or EMA3010	3	Engineering Mechanics – Statics Materials	Biomechanics track prereq Biomaterials track prereq
Term Credits	17		
Lower Div	**62**		
Term 5		*Summer*	
EEL3111C	4	Circuits 1	
ENC3246	3	Professional Writing for Engineers	
EGM2511 or EMA3010	3	Engineering Mechanics – Statics Materials	Biomechanics track prereq Biomaterials track prereq
Term Credits	10		

* Preprofessional Critical Tracking Courses, minimum GPA 3.0, grade C or better, no more than 2 attempts

NOTE: BME is a limited access program. Admission into the upper division is required to take BME courses.

Course	CR	Course	Comments/alternate course
Term 6		*Fall*	
BME3053C	2	Computer Applications for BME	
BME4409	3	Quantitative Physiology	
BME4503	3	Biomedical Instrumentation	
BME4503L	1	Biomedical Instrumentation Lab	
BME4311	3	Molecular Biomedical Engineering	
STA3032	3	Engineering Statistics	
Term Credits	15		
Term 7		*Spring*	
BME 3323L	3	Cellular Engineering Lab	
BME4621	3	Biomedical Thermodynamics and Kinetics	
BME4632	3	Biotransport	
BME Track	3		
BME Track	3		
Term Credits	15		
Term 8		*Fall*	
BME4531	3	Biomedical Imaging	
BME4882	3	Senior Design, Professionalism and Ethics 1	
GedEd_H	3	State Core (Humanities)	
BME Track	3		
BME Track	3		
Term Credits	15		
Term 9		*Spring*	
BME4883	3	Senior Design, Professionalism and Ethics 2	
BME Elective	3		
BME Elective	3		
BME Track	3		
GenEd_S	3	State Core (Social and Behavioral Science)	
Term Credits	15		
Upper Div	**70**		
BSBME	**132**		

GenEd: Students are expected to complete the general education international (GE-N) and diversity (GE-D) requirements. This is often done concurrently with another general education requirement (typically, GE-C, H or S).

Gordon Rule: Students must meet University math and writing requirements.

BME Track: 15 credits of 3000/4000-level courses selected from approved lists (see advisor).