

USF Biomedical Engineering (BME) 131 hours

The schedule that follows indicates the required courses for this degree program and the recommended sequence of registration for full time engineering students. Students who adhere to the recommended sequence of courses, and complete each course with the required grade, will be fully prepared for each subsequent semester. Registration assistance will be provided by academic advisors in the College of Engineering.

Fall Semester - Year 1		Spring Semester - Year 1	
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	R	ENC 1102 Composition II	3
EGN 3000L Foundations of Engineering	1	MAC 2282 Engineering Calculus II	4
ENC 1101 Composition I	3	PHY 2048 General Physics I	3
MAC 2281 Engineering Calculus I	4	PHY 2048L General Physics I Laboratory	1
FKL/ Humanities Elective	3		
	Total 15		Total 15
Fall Semester - Year 2		Spring Semester - Year 2	
EGN 3443 Engineering Statistics I	3	BME 3053 Computer Programming for BME	3
MAC 2283 Engineering Calculus III	4	EGN 3343 Thermodynamics I	3
PHY 2049 General Physics II	3	EGN 3433 Mod Analysis for Engineering	3
PHY 2049L General Physics II Laboratory	1	BSC 2010 Bio I - Cellular Processes	3
BME 4100 Introduction to Biomedical Engineering	3	BSC 2010L Bio I - Cellular Processes lab	1
EGN 3311 Statics	3	FKL/Social & Behavioral Elective	3
	Total 17		Total 16
Summer Term - Year 2			
CHM 2210 Organic Chemistry I	3		
CHM 2210L Organic Chemistry Laboratory I	2		
ENC 3246 Communications for Engineers	3		
	Total 8		
Fall Semester - Year 3		Spring Semester - Year 3	
BSC 2011 Bio II - Biological Diversity	3	STEM Upper-Level Elective	6
BSC 2011L Bio II - Biological Diversity Lab	1	BME 4409 Engineering Physiology	3
BME 4508 Biomedical Signal Systems Analysis	3	BME 4056C Biomedical Engineering Lab I	2
EGN 3373 Intro to Electrical Systems I	3	BME 3032 Biomedical Transport Processes	3
BME 4503 Biomedical Instrumentation	3	St. Gen Ed: Social & Behavioral Elective	3
FKL/Fine Arts Elective	3		
	Total 16		Total 16
Fall Semester - Year 4		Spring Semester - Year 4	
BME 3312 Molecular & Cellular Eng.	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	Capstone Design	3
BME Upper level Elective	3	FKL Human Cultural Diversity & Global Elective	3
St. Gen Ed: Humanities Elective	3		
	Total 14		Total 12

- Minimum grade for math and science courses is a C, prerequisite major courses is a C-
- Upper Elective classes have to be 3000 level or above and approved by the advisor.
- STEM Elective: Engineering students must complete at least 5 credits outside of COE that are 3000 level or above and approved by the advisor.
- STEM Elective: Pre-Med students must use this to take CHM 2211 Organic Chemistry II.