

NAME:

BIOMEDICAL ENGINEERING (PREMED) 135 credits

FRESHMAN YEAR				SECOND SEMESTER			
Course	Cr.	Registered	Grade	Course	Cr.	Registered	Grade
MATH 121 Calculus I	4			MATH 122 Calculus II	4		
ENGR 102 Intro Engr. Design & Prof.	3			PHYS 215 University Physics I	4		
CHEM 103/113 General Chem I/Lab	5			CHEM 104 General Chemistry II	3		
<i>PHIL 201 Classical Mind</i>	3			CHEM 114 General Chemistry Lab	2		
<i>ENG 101 Rhetoric & Composition</i>	3			TRS 201 Faith Seeking Understanding	3		
	0			CSC 113 Computer Programming	3		
				BE 491 Seminar Biomedical Engineering	0		
Total Credits 18				Total Credits 19			
SOPHOMORE YEAR				SECOND SEMESTER			
CHEM 203/213 Organic Chem I/Lab	5			CHEM 204/214 Organic Chem II/Lab	5		
PHYS 216 University Physics II	4			ENGR 212 Electrical Networks	3		
ENGR 201 Engineering Mechanics I	3			ENGR 222 Engineering Math I	4		
BIOL 105 Mechanisms of Life I	3			BE 202 Biomechanics	3		
BIOL 115 Mechanisms of Life I - Lab	2			<i>ENGR 106 Computer Aided Engineer Tools</i>	3		
				BE 491 Seminar Biomedical Engineering	0		
Total Credits 17				Total Credits 18			
JUNIOR YEAR				SECOND SEMESTER			
MATH 309 Probability & Statistics for Engr	3			BE 315 Intro to Biomedical Systems Analysis	3		
ENGR 321 Electronic Circuits I	3			BIOL 418 Physiology	4		
ENGR 355 Electronics Lab	1			BE 413 Bioinstrumentation	3		
ENGR 331 Fluid Mechanics	3			PHIL 362 Professional Ethics in Engineering	3		
BE 398 Biomechanical Design	3			<i>PHIL 202 Modern Mind</i>	3		
<i>Liberal Studies</i>	3			BE 491 Seminar Biomedical Engineering	0		
Total Credits 16				Total Credits 16			
SENIOR YEAR				SECOND SEMESTER			
ENGR 441 Senior Design	3			ENGR 442 Senior Project Lab	3		
BE 401 Biomaterials	3			BE <i>Program Elective</i>	3		
ENGR 403 Control Systems	3			BE <i>Program Elective</i>	3		
BE <i>Program Elective</i>	3			<i>Liberal Studies</i>	3		
<i>Liberal Studies</i>	3			<i>Liberal Studies</i>	3		
ENGR 401 Senior Seminar I	1						
Total Credits 16				Total Credits 15			

Liberal studies requirement: 1) students entering Fall 2018 or later: TRS 202A/B and one class from the approved list of Fine Arts, Literature, or Social Science. 2) students entering prior to Fall 2018: 3 TRS

Students are recommended to take Biology 454 (Biochemistry), a Psychology, and a Sociology course.