

SJSU B.S. BIOMEDICAL ENGINEERING

5-YEAR STUDY PLAN - Fall 2022

FALL				SPRING			
Year	Course Number	Course Title	Units	Year	Course Number	Course Title	Units
Year I	Math 30/30X*	Calculus I	3		Math 31/31X*	Calculus II	4
	Comm 20	Oral Communication	3		Chem 1A	General Chemistry	5
	Engl 1A	Composition I	3		Engl 1B	Composition II	3
	Engr 10	Intro to Engr	3				
	<i>* MATH 30X requires enrollment in MATH 30W.</i>				<i>* MATH 31X requires enrollment in MATH 31W.</i>		
	Total		12		Total		12
Year II	Chem 1B	General Chemistry	5		Math 33A/33LA	Ordinary Diff Eqs for SCI and ENGR	3
	Math 32/32X*	Calculus III	3		Biol 30	Principles of Biology I	4
	BME 25	Intro to BME Design	2		Phys 50	General Physics (Mechanics)	4
	Register to take WST				AAS/AFAM/CCS 25**	The Changing Majority	3
	<i>* MATH 32X requires enrollment in MATH 32W.</i>				<i>**Satisfies Area F: Ethnic Studies.</i>		
	Total		10		Total		14
Year III	BME 115 †				Foundations of BME		4
	BME 177 †				Physiology for Engineers		3
	AMS 1A	American Studies	6		AMS 1B	American Studies	6
	BME 135	Biomedical Engineering Design Methods	2		BME 65	Biomedical Applications of Statics	3
					BME 133	Programming Applications in BME	1
				Year III Total			25
Year IV	BME 130 †				Numerical Methods in BME		3
	BME 147 †				Quantitative & Statistical Methods for BME		3
	BME 68	Biomed Applications of Ceramics/Metals	3		BME 116	Biosensors and Bioinstrumentation	3
	Chem 8	Organic Chemistry	3		BME 174	Biomedical Regulatory Requirements	3
	Phys 51	Electricity/Magnetism	4		Engr 100W	Engineering Reports	3
					Chem 9	Organic Chemistry	1
				Year IV Total			26
Year V	BME 117 †				Biotransport Phenomena		3
	BME 165 †				Applied Engineering Biomechanics		3
	BME 168 †				Medical/Biological Polymers		3
	BME 198A	Senior Project I	2		BME 198B	Senior Project II	2
	Engr 195A	Global/Social Issues	1		Engr 195B	Global/Social Issues	1
		One course from Major Electives ‡	3		BME 178	Biomedical Product Realization	3
						One course from Major Electives ‡	3
	<i>† These BME courses can be taken either semester.</i>				<i>‡ A list of preapproved elective tracks is available on the BME department website.</i>		
				Year V Total			24

All classes must be completed with a grade of C- or better

TOTAL NUMBER OF UNITS 123

A. Bellofiore – October 7, 2022