

# Bioengineering Monroe Premed Flowchart

1ST YEAR		2ND YEAR				3RD YEAR		4TH YEAR		5TH YEAR		
Fall	Spring	Fall	Spring	Summer	Fall	Spring	Summer	Fall	Spring	Summer	Fall	Spring
General Chemistry I CHM 151 4 hrs	General Chemistry II CHM 152 4 hrs	Organic Chemistry I CHM 251 3 hrs	Organic Chemistry II CHM 252 3 hrs	Cell Biology BIOL 3030 3 hrs	Orientation & Intro to BIOE BIOE 1000 3 hrs	Co-op Experience BIOE 3940 1 hr	Coursework for deficiencies, medical school requirements, business minor or additional co-op experience.	Co-op Experience BIOE 3940 1 hr	Intro to Biomechanics BIOE 3110 3 hrs	Co-op Experience BIOE 3940 1 hr	Biosignal Processing BIOE 4120 3 hrs	
General Chem Lab I CHM 151 1 hr	General Chem Lab II CHM 152 1 hr	Organic Chem Lab I CHM 251 1 hr	Organic Chem Lab II CHM 252 1 hr	Cell Biology Laboratory BIOL 3040 2 hrs	BIOE Thermo- dynamics BIOE 2100 3 hrs				Biomedical Electronics BIOE 3300 3 hrs		Senior Design Project I BIOE 4410 3 hrs	Senior Design Project II BIOE 4420 3 hrs
Calculus I MATH 171 4 hrs	Calculus II MATH 172 4 hrs	Multivariate Calculus MATH 271 4 hrs	Differential Equations MATH 273 3 hrs	Statics CIVE 1150 3 hrs	Bioprocessing Laboratory BIOE 3500 3 hrs				Biotransport Phenomena BIOE 3400 3 hrs		BIOE Technical Elective 3 hrs	BIOE Technical Elective 3 hrs
English Composition ENGL 151 3 hrs	Physics I PHY 251 5 hrs	Physics II PHY 252 5 hrs	Professional Development BIOE 1010 1 hr	HUM/SS/MC Elective 3 hrs	Physiology for Bioengineers BIOE 4100 3 hrs				Bioelectronics Laboratory BIOE 4140 2 hrs		Technical Elective 3 hrs	HUM/SS/MC Elective 3 hrs
PSYC 151 Elective 3 hrs	Technical Writing ENGL 155 3 hrs	Fund. of Life Science II BIOL 151 4 hrs	Computer Applications BIOE 1200 3 hrs	HUM/SS/MC Elective 3 hrs	Electrical Circuits EECS 2300 4 hrs				Analysis of BIOE Systems BIOE 4300 3 hrs			HUM/SS/MC Elective 3 hrs
		Fund. of Life Science Lab II BIOL 151 1 hr	Biomaterials BIOE 2200 3 hrs									
15 hours	17 hours	18 hours	14 hours	14 hours	16 hours	1 hour	Optional	1 hour	14 hours	1 hour	12 hours	12 hours