

BME UNDERGRADUATE CURRICULUM**PRE-MEDICAL****202 units**

FRESHMAN		units		units		units
Fall			Winter		Spring	
MAT 21A Calculus	4		MAT 21B Calculus	4	MAT 21C Calculus	4
CHE 2A General Chemistry	5		CHE 2B General Chemistry	5	CHE 2C General Chemistry	5
BIM 1 Intro to BME	2		ENG 6 Eng. Problem Solving	4	PHY 9A Classical Physics	5
Lower Division Composition	4		GE elective		GE elective	
SOPHOMORE						
Fall			Winter		Spring	
MAT 21D Vector Analysis	4		MAT 22A or 27A Linear Algebra	3/4	MAT 22B or 27B Differential Equations	3/4
CHE 118A Organic Chemistry	4		CHE 118B Organic Chemistry	4	CHE 118C Organic Chemistry	4
PHY 9B Classical Physics	5		PHY 9C Classical Physics	5	BIM 20 Fundamentals of Bioengineering	4
BIS 2A Life on Earth	5		SE: BIS 2B Ecology & Evolution	5	BIM 20L Graphics Design for BME	2
JUNIOR						
Fall			Winter		Spring	
BIM 105 Probability & Data Science for BME	4		BIM 106 Biotransport Phenomena	4	BIM 108 Biomedical Signals & Control	4
NPB 101 Physiology	5		BIM 107 Mfg Processes for BME	2	BIM 109 Biomaterials	4
ENG 17/17V Circuits I	4		BIS 102 Structure & Function of Biomolecules	3	ENG 105 Thermodynamics	4
SE: BIS 2C Biodiversity & Tree of Life	5		ENG 100 Electronic Circuits & Systems	3	BIS 103 Bioenergetics & Metabolism	3
			Upper Division Composition Course=4 units, Exam=0 units		GE elective	
SENIOR						
Fall			Winter		Spring	
BIM 110A BME Senior Design	3		BIM 110B BME Senior Design	3	BIM 110C BME Senior Design	3
BIM 111 Biomedical Instrumentation Lab	6		EE: BIM 144 Principles of Biophotonics	4	ENG 190 Professional Responsibilities of Engineers	3
EE: BIM 174 Microcontroller Applications Lab	2		EE: BIM 172 Intro to Neuroengineering Lab	2	EE: BIM 163 Bioelectricity, Biomechanics & Signaling Systems	4
EE: BIM 171 Clinical App for Biomedical Device Design	4		GE elective		EE: BIM 142 Principles & Practices of Biomedical Imaging	4
GE elective			GE elective		GE elective	

Engineering electives listed are merely recommendations. You may choose your own electives.

Requirements for medical schools vary. Look at individual websites, and visit Health Professions Advising at hpa.ucdavis.edu. Might want to take STA 100 as BIM 105 is more focused on Probability.

Non-Science courses – 1 year English (ENL, UWP), PSC 1; SOC 3

Use Summer Sessions to lighten this course load.