

BME UNDERGRADUATE CURRICULUM

Biomechanics

164 units + GE 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	BIS 2A Intro to Biology	5	PHY 9A Classical Physics	5	
Lower Division Composition	4	GE elective		GE elective		
SOPHOMORE						
Fall			Winter		Spring	
MAT 21D Vector Analysis	4	MAT 22A Linear Algebra	3	MAT 22B Differential Equations	3	
CHE 8A Organic Chemistry	2	CHE 8B Organic Chemistry	4	BIM 20 Fundamentals of Bioengineering	4	
PHY 9B Classical Physics	5	PHY 9C Classical Physics	5	ENG 17 Circuits I	4	
ENG 6 MATLAB	4	ENG 35 Statics	4	GE elective		
JUNIOR						
Fall			Winter		Spring	
BIM 105 Probability and Stats for BME	4	BIM 106 Biotransport	4	BIM 108 Biomedical Signals and Control	4	
NPB 101 Physiology	5	ENG 100 Circuits II	3	BIM 109 Biomaterials	4	
EE: ENG 45 Properties of Materials	4	EE: BIM 126 Tissue Mechanics	3	EE: BIM 167 Biomedical Fluid Mechanics	4	
Upper Division Composition Course=4 units, Exam=0 units	4/0	GE elective		SE: EXB 103 Analysis and Control of Human Movement	4	
SENIOR						
Fall			Winter		Spring	
BIM 110L BME Senior Design Lab (or W)	2	BIM 110A BME Senior Design	3	BIM 110B BME Senior Design	3	
BIM 111 Biomedical Instrumentation Lab (or W)	6	ENG 105 Thermodynamics	4	ENG 190 Professional Responsibility Engineers	3	
EE: ENG 102 Dynamics or BIM 189C Design of Experiments	4	EE: ENG 104 Mechanics of Materials	4	EE: BIM 163 Bioelectricity, Biomechanics and Signaling Systems	4	
SE: EXB 115 Biomechanical Bases of Movement	3	GE elective		EE: EBS 128 Biomechanics/Ergonomics	4	
GE elective		GE elective				

For cellular-tissue Biomechanics, use BIM 102/161A as Science electives and BIM 141/162 (not BIM 126/EBS 128) as Engineering electives.

Additional courses: CHA 101 and 101L Human Gross Anatomy

Use Summer Sessions to lighten this course load.

September 2014