

BME UNDERGRADUATE CURRICULUM

Imaging

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	BIM 089C/20L* CAD for BME	
ENG 6 MATLAB	4	GE elective		ENG 17 Circuits I	4
JUNIOR					
Fall		Winter		Spring	
BIM 105 Probability and Stats for BME	4	BIM 106 Biotransport	4	BIM 108 Biomedical Signals and Control	4
BIM 116/NPB 101 Physiology	5	ENG 100/EEC 100 (+2 EE) Circuits II	3	BIM 109 Biomaterials	4
SE: PHY 9D Modern Physics	4	EE: BIM 144 Fundamentals of Biophotonics/Bioimaging	4	EE: BIM 142 Biomedical Imaging	4
GE elective GE elective		Upper Division Composition Course = 4 units, Exam = 0 units	4/0	ENG 190 Professional Responsibility Engineers	3
SENIOR					
Fall		Winter		Spring	
BIM 110L BME Senior Design Lab	2	BIM 110A BME Senior Design	3	BIM 110B BME Senior Design	3
BIM 111 Biomedical Instrumentation Lab	6	ENG 105 Thermodynamics	4	SE – Imaging Elective**	
EE: BIM 242 Intro to Biomedical Imaging	4	EE: Imaging Elective**	4	EE: BIM 287 Molecular Imaging	4
EE: Imaging Elective**	4	GE elective		GE elective	

***BIM 089C/BIM 20L must be taken concurrently with BIM 20**

****See advisor for additional Science and Engineering Imaging electives. Only academically strong students may petition to take graduate Imaging courses.**

Other courses: EE - BIM Skills Modules – 174 Microcontrollers, 189C/175 Metalworking, 176 Microfluidics, 189C Neuroengineering, 189C Rapid Prototyping

September 2019