BME UNDERGRADUATE CURRICULUM **Medical Devices**

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 020L Graphics for BME	**2**
ENG 6 MATLAB	**4**	GE elective		ENG 17 Circuits I	**4**
JUNIOR					
Fall		**Winter**		**Spring**	
BIM 105 Probability for BME	**4**	BIM 106 Biotransport	**4**	BIM 108 Biomedical Signals and Control	**4**
BIM 116/NPB 101 Physiology	**5**	BIM 107 Mfg for BME	**2**	BIM 109 Biomaterials	**4**
SE: ECS 32A	**4**	ENG 100 Circuits	**3**	EE: ENG 35 Statics	**4**
Upper Division Composition Course=4 units, Exam=0 units	**4/0**	SE: ECS 32B	**4**	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: ENG 102 Dynamics	**4**	EE: ENG 104 Mechanics of Materials	**4**
EE: BIM 171 Clinical Applications for Biomedical Device Design	**4**	EE: BIM 177 Intro to Rapid Prototyping	**2**	ENG 105 Thermodynamics	**4**
BIM 174 Microcontrollers or BIM 170 Aspects of Medical Device Design & Mfg	**2**	GE elective		ENG 190 Professional Responsibility Engineers	**3**
		GE elective		GE elective	

Other courses: ENG 102 Dynamics
EE - BIM Skills Modules – 172 Neuroengineering, 174 Microcontrollers,
BIM 177 Rapid Prototyping, BIM 189C Cell Culture Techniques

July 2023