

BME UNDERGRADUATE COURSES

Course Offerings 2018-19

Required					
BIM 1	2	Introduction to Biomedical Engineering	Choi	Fall	
BIM 20	4	Fundamentals of Bioengineering	Joshi	Spring	
BIM 105	4	Probability and Statistics for Biomedical Engineers	Rocke	Fall	
BIM 106	4	Biotransport Phenomena	George	Winter	
BIM 108	4	Biomedical Signals and Control	Qi	Spring	
BIM 109	4	Biomaterials	Panitch	Spring	
BIM 110 LAB	8	BME Senior Design Experience	Passerini/Choi	F/W/S	
BIM 111	6	Biomedical Instrumentation Laboratory	Pan	Fall	
BIM 116 or NPB 101	5	Physiology for Biomedical Engineers	Lewis	Fall	
Science Electives					
BIM 102	4	Cellular Dynamics	Yamada	Fall	B,C
<i>BIM 161A</i>	<i>4</i>	<i>Biomolecular Engineering</i>	<i>Tan</i>	<i>Fall (odd)</i>	<i>C,S</i>
Engineering Electives					
<i>BIM 144</i>	<i>4</i>	<i>Fundamentals of Biophotonics and Bioimaging</i>	<i>Srinivasan</i>	<i>W19</i>	<i>I</i>
<i>BIM 163</i>	<i>4</i>	<i>Bioelectricity, Biomechanics, and Signaling Systems</i>	<i>Chen-Izu</i>	<i>Sabbatical</i>	<i>B, C</i>
<i>BIM 189C/154</i>	<i>4</i>	<i>Computational Genomics</i>	<i>Aviran</i>	<i>W20</i>	<i>S</i>
BIM 120	4	Introduction to Materials Science for BME	Silva	Winter	B,C,MD
BIM 141	4	Cell and Tissue Mechanics	Sivasankar/Simon	Winter	B,C
BIM 142	4	Principles and Practices of Biomedical Imaging	Cherry	Spring	I
BIM 143	4	Biomolecular Systems Engineering: Synthetic Biology	Facciotti	Spring (odd)	S
BIM 143L	2	Synthetic Biology Lab	Facciotti	Spring (odd)	S
BIM 145	4	Immuno-engineering	Lewis	Winter	C
BIM 152	4	Molecular Control of Biosystems	Saiz	Fall	S
BIM 162	4	Introduction to the Biophysics of Molecules and Cells	Heinrich	Fall	B,C
BIM 167	4	Biomedical Fluid Mechanics	Tan	Spring	B,C,MD
BIM 170	2	Aspects of Medical Device Design and Manufacturing	Chigazola	Winter	MD
BIM 171	4	Clinical Applications for Biomedical Device Design	Tran	Fall	MD
BIM 173	4	Cell and Tissue Engineering	Leach	Fall	C
BIM 174	2	Microcontroller Applications Lab	Choi	Fall	B,C,I,MD
BIM 189C/175	1	Advanced Manufacturing: Welding & Metalworking	Choi	Winter	B, MD
BIM 176	2	Microfluidic Lab	Pan	Winter	C,MD
BIM 189C	4	Computational tools in Bioengineering & Biomedicine	Saiz	Winter	S
BIM 189C	2	Neuroengineering Lab	Moxon	Spring	C,S
BIM 89C	1	Clinical Needs Finding	Choi	Spring	MD

Specializations: B-Biomechanics, C-Cellular & Tissue, I-Imaging, MD-Medical Devices, S-Systems & Synthetic Biology

Professional Development Courses (Non-Degree)					
BIM 88V	2	Introduction to Research	Louie	Winter	
BIM 89C	1	BME Professional Development	Choi	Winter	