

BME UNDERGRADUATE COURSES

Course Offerings 2019-20

Required				
BIM 1	2	Introduction to Biomedical Engineering	Choi	Fall
BIM 20 (89C/20L)	4(2)	Fundamentals of Bioengineering (CAD)	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	Choi	F/W/S
BIM 111	6	Biomedical Instrumentation Laboratory	Carney	Fall
BIM 116 or NPB 101	5	Physiology for Biomedical Engineers	Lewis	Fall
Science Electives				
BIM 102	4	Cellular Dynamics	Yamada	Fall
BIM 161A	4	Biomolecular Engineering	Tan	Fall (odd)
Engineering Electives				
<i>BIM 189C</i>	<i>4</i>	<i>Computational tools in Bioengineering & Biomedicine</i>	<i>Saiz</i>	<i>Sabbatical</i>
BIM 89C	1	Clinical Needs Finding	Choi	Spring
BIM 120	4	Introduction to Materials Science for BME	Joshi	Winter
BIM 140	4	Protein Engineering	Duan	Spring
BIM 141	4	Cell and Tissue Mechanics	Sivasankar	Winter
BIM 142	4	Principles and Practices of Biomedical Imaging	Phipps	Spring
BIM 143	4	Biomolecular Systems Engineering: Synthetic Biology	Facciotti	Spring
BIM 143L	2	Synthetic Biology Lab	Facciotti	Spring
BIM 144	4	Fundamentals of Biophotonics and Bioimaging	Phipps	Winter
BIM 145	4	Immuno-engineering	Lewis	Winter
BIM 152	4	Molecular Control of Biosystems	Saiz	Winter
BIM 189C/154	4	Computational Genomics	Aviran	Spring
BIM 162	4	Introduction to the Biophysics of Molecules and Cells	Heinrich	Fall
BIM 163	4	Bioelectricity, Biomechanics, and Signaling Systems	Chen-Izu	Spring
BIM 167	4	Biomedical Fluid Mechanics	Tan	Spring
BIM 170	2	Aspects of Medical Device Design and Manufacturing	Chigazola	Winter
BIM 171	4	Clinical Applications for Biomedical Device Design	Tran	Fall
BIM 173	4	Cell and Tissue Engineering	Leach	Fall
Engineering Electives - Skills Modules				
BIM 174	2	Microcontroller Applications Lab	Choi	Fall
BIM 189C/175	1	Advanced Manufacturing: Welding & Metalworking	Choi	Winter
BIM 176	2	Microfluidic Lab	Pan	Winter
BIM 189C	2	Introduction to Neuroengineering	Moxon	Winter
BIM 189C	2	Introduction to Rapid Prototyping for BME	Passerini	Winter

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