

BIOMEDICAL ENGINEERING - MINOR

Program Requirements

Code	Title	Semester Credit Hours
BMEN 253	Discovering Biomedical Engineering Design Thinking ¹	1
VIBS 243	Introductory Mammalian Histology ¹	2
Select two of the following: ¹		6
BMEN 311	Imaging Living Systems	
BMEN 321 & BMEN 320	Circuits, Signals and Systems and Signals, Power, Acquisition, Transforms and Knowledge (SPARK) Laboratory	
BMEN 341	Biotransport	
BMEN 343 & BMEN 342	Biomedical Engineering Materials and Biomaterials Characterization and Testing Laboratory	
BMEN 344 & BMEN 341	Biological Interactions and Testing and Biological Interactions and Testing Laboratory	
BMEN 361 & BMEN 360	Biomedical Engineering Mechanics and Biomechanics Laboratory	
Select two of the following: ¹		6
BMEN 401	Principles and Analysis of Biological Control Systems	
BMEN 420	Medical Imaging	
BMEN 422	Bioelectromagnetism	
BMEN 425	Biophotonics	
BMEN 427	Magnetic Resonance Engineering	
BMEN 428/ CSCE 461	Embedded Systems for Medical Applications	
BMEN 431	Biomolecular Engineering	
BMEN 432	Molecular and Cellular Biomechanics	
BMEN 457	Orthopedic Biomechanics	
BMEN 458	Motion Biomechanics	
BMEN 461	Cardiac Mechanics	
BMEN 463	Soft Tissue Mechanics and Finite Element Methods	
BMEN 464	Cancer Bioengineering	
BMEN 466	Clinical Engineering for Cardiac Rhythm Management and Ablation	
BMEN 471	Numerical Methods in Biomedical Engineering	
BMEN 472	Computational Fluid Dynamics in Biomedical Engineering	
BMEN 480	Biomedical Engineering of Tissues	
BMEN 482	Polymeric Biomaterials	
BMEN 483	Polymeric Biomaterial Synthesis	

BMEN 486 Biomedical Nanotechnology

BMEN 487 Drug Delivery

¹ Must make a grade of C or better.

Students must be admitted to a degree sequence in the College of Engineering or Biological and Agricultural Engineering. Students may use up to 6 hours from their home department to satisfy minor requirements upon approval from the BMEN Advising Office. All substitutions must be approved by the BMEN Advising Office and director.