



Engineering for Professionals - Applied Biomedical Engineering Course Planning Schedule

Course Number	Course Title	Fall	Spring	Summer
585.601	Physiology for Applied Biomedical Engineering I	Online	Online	
585.602	Physiology for Applied Biomedical Engineering II		Online	
585.607	Molecular Biology		Online	Online
585.615	Mathematical Methods	Online	Online	
585.616	Principles of Medical Instrumentation and Devices	Online		
585.617	Rehabilitation Engineering	Online		
585.619	Regulation of Medical Devices		Online	
585.621	Advances in Pulmonary Therapeutics		Online	
585.631	Introduction to Biomechanics		Online	
585.635	Ethics in Biomedical Engineering Research and Management	Online	Optional	
585.685	Methods in Neurobiology	Online	Optional	
585.702	Medical Device Innovation and Design		Online	
585.704	Principles of Medical Imaging		Online	
585.708	Biomaterials			Online
585.709	Biomechanics of Cells and Stem Cells	Online		
585.710	Biochemical Sensors		Online	
585.717	Rehabilitation Engineering II		Online	
585.718	Biological Solid & Fluid Mechanics			Online
585.719	Sparse Representations in Computer Vision and Machine Learning	Online		
585.720	Orthopedic Biomechanics	Online	Optional	
585.724	Neural Prosthetics: Science, Technology	Online		
585.725	Biomedical Engineering Practice and Innovation (highly recommended)			Online
585.726	Biomimetics in Biomedical Engineering			Online
585.729	Cell and Tissue Engineering	Online		
585.732	Advanced Signal Processing for Biomedical Engineers		Online	
585.734	Biophotonics	Online		
585.735	Applied Bioelectrical Engineering		Virtual Live	
585.741	MR Imaging in Medicine		Online	

Core courses		Focus Areas - Core courses are highlighted				
Core (2x Bio, 1x Math)		Biomechanics	Imaging	Medical Devices	Neuro-engineering	Translational Tissue Engineering
Bio (take 2)	Math (take 1)	Core + 1 elective	Core + 1 elective	Core + 1 elective	Core + 1 elective	Core + 1 elective
Fall & Spring						
Spring						
Spring & Summer						
	Fall & Spring					
			Fall	Fall		
				Fall		Fall
				Spring		Spring
		Spring		Spring		Spring
		Spring				Spring
Fall & Spring (Opt)					Fall & Spr (Opt)	
	Spring		Spring	Spring		
						Summer
	Fall	Fall				Fall
Fall		Fall	Fall	Fall	Fall	Fall
				Spring		Spring
	Spring	Spring				Spring
			Fall	Fall		
		Fall & Spr (Opt)		Fall		Fall
				Fall	Fall	Fall
		Summer	Summer	Summer	Summer	Summer
		Summer				Summer
						Fall
	Spring		Spring	Spring	Spring	
				Fall	Fall	
	Spring		Spring	Spring - Virt Live	Spring - Virt Live	

585.744	Biomedical Applications of Glycoengineering		Virtual Live	
585.747	Advances in Cardiovascular Medicine	Online		
585.751	Immunoengineering		Online	
585.761	Bioentrepreneurship	Online		
585.762	Computational Methods in Biomedical Engineering		Online	
585.770	Global Health Engineering		Online	
585.771	Biomedical Data Science		Online	
585.781	Frontiers in Neuroengineering		Online	
585.783	Introduction to Brain-Computer Interfaces			Online
585.785	Computational Medicine: Cardiology		Online	
585.788	Foundations of Computational Biology and Bioinformatics		Virtual Live	
585.800	Independent Study I	Online	Online	Online
585.801	Independent Study II	Online	Online	Online

						Spring - Virt Live
		Fall	Fall	Fall		Fall
		Spring				Spring
		Fall	Fall	Fall	Fall	Fall
		Spring	Spring	Spring	Spring	Spring
		Spring		Spring	Spring	
		Spring	Spring	Spring	Spring	Spring
Spring				Spring	Spring	
				Summer	Summer	
		Spring				
						Spring - Virt Live
		Every term	Every term	Every term	Every term	Every term
		Every term	Every term	Every term	Every term	Every term