

BME (Traditional) Approved Technical Electives

Number	Cr	Title	Prerequisites	Online	Fall	Spring	Summer
BME 3940	1-3	Engineering Internship	Junior status, Department permission	As arranged			
BME 4450	3	Tissue Engineering & Regenerative Medicine	(ANT 2120 or ANT 3120), BME 4440			X	
BME 4460	3	Nanomedicine Fundamentals	(ANT 2120 or ANT 3120), BME 4440			X	
BME 4710	3	Optical Imaging	PHY 2410		X		
BME 4720	3	Biomedical Optics	(ANT 2120 or ANT 3120), PHY 2410			X	
BME 4730	3	Neurophonics & Optical Brain Mapping	PHY 2410			X	
BME 4850	3	Six Sigma for Engineers	ISE 2211	X	X		
BME 4940	1-3	Engineering Internship	Senior status, Department permission	As arranged			
BME 4950	1-5	Undergraduate Research in BME II	Department Permission	As arranged			
BME 4960	1-4	Departmental Honors Research in BME	Research Proposal, Department Permission	As arranged			
BME 4980	1-5	Undergraduate Special Topics in BME II	Varies with topic	As scheduled			
BME 4990	1-5	Undergraduate Independent Study in BME	Department permission	As arranged			
EE 4190	4	Reinforcement Learning & Neural Networks in Intelligent Control (available odd years)	MTH 2350		X		
ISE 4150	3	Advanced Probability & Statistics for Engineers	ISE 2211	X	X		
ISE 4300	3	Fundamentals of Human Factors Engineering	ISE 2211, PSY 1010	X	X		
ISE 4310	3	Ergonomics	ISE 2211	X	X		
ISE 4320	3	Human-System Interaction & Design Thinking Principles	ISE 2211, ISE 4300	X		X	
ISE 4400	3	Engineering Economy	EGR 1010 or MTH 2300	X	X		
ISE 4830	3	Engineering Project Management and Applications	ISE 2211 or STT 3600				X
ME 4120	3	Finite Element Analysis	MTH 2350, ME 3120		X		
ME 3870	3	Machining	(ME 2210 and ME 2700) or BME 3212		X		

This list is not all inclusive. Other courses will be considered for technical elective credit via departmental petition.