

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 4703	3	Medical Imaging	(ANT 2120 or ANT 3120), 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			
CS 3840	3	Applied Machine Learning	CS 1160 and ISE 2211			X	
EE 4190	4	Reinforcement Learning & Neural Networks in Intelligent Control (available odd years)	MTH 2350		X		
ISE 3540	3	Introduction to Machine Learning in Engineering Applications	CS 1160 and ISE 2211	X		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 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.

*BME 4950, BME 4960, or BME 4990 may be used to fulfill one technical elective requirement. Students may not use more than one of these courses to fulfill multiple technical elective requirements.