

BIOMEDICAL ENGINEERING: BIOIMAGING

1 st Year	Session	Course	Course Title	SH	P: Prerequisite; C: Corequisite	
Fall	F/S	MATH:1550	Engineering Math I – Single Variable Calculus	4	ALEKS Score of 75 or higher OR MPT 3 Score of 9 or higher	
	F	ENGR:1100	Introduction to Engineering Problem Solving	3		
	All	CHEM:1110	Principles of Chemistry I & Lab	4		
	All	RHET:1030	Rhetoric	4		
	F	ENGR:1000	Engr Success for First-Year Students	1*	Status: First Year	
Total				16		
Spring	F/S	MATH:1560	Engineering Math II – Multivariable Calculus	4	P: MATH:1550	
	All	MATH:2550	Engineering Math III – Matrix Algebra	2	P: MATH:1550	
	F/S	ENGR:1300	Introduction to Engineering Computing	3	C: MATH:1550	
	All	PHYS:1611	Introductory Physics I with Lab	4	C: MATH:1550	
	All	CHEM:1120	Principles of Chemistry II & Lab	4	P: CHEM:1110	
	S	BME:1010	BME Forum	1*	Status: First Year	
Total				18		
2 nd Year	All	MATH:2560	Engineering Math IV – Differential Equations	3	P: MATH:1560, MATH:2550	
	All	BIOL:1411	Foundations of Biology	4	P: CHEM:1110	
	All	ENGR:2110	Engineering Fundamentals I – Statics	2	P: MATH:1550; C: MATH:1560, PHYS:1611	
	Fall	All	ENGR:2120	Engineering Fundamentals II – Electrical Circuits	3	C: MATH:2560
		All	ENGR:2130 OR	Engineering Fundamentals III – Thermodynamics OR	3	P: CHEM:1110, PHYS:1611; C: MATH:1560 OR
	S	ENGR:2995	Intro to AI and Machine Learning	3	P: ENGR:1400; C: MATH:2550	
	F/S	BME:2010	BME Professional Seminar	1*	Status: Second Year	
	Total				16	
Spring	All	HHP:3500	Human Physiology	3	P: BIOL:1411	
	F/S	BME:2200	Systems, Instrumentation, & Data Acquisition / Lab	4	P: ENGR:2120; C: HHP:3500, BIOS:4120 (STAT:3510)	
	F/S	BME:2210	Bioimaging & Bioinformatics / Lab	4	P: ENGR:1300, BIOL:1411; C: BIOS:4120 (STAT:3510)	
	F/S	ENGR:2730	R#1: Computers in Engineering	3	P: ENGR:1300	
	All	BIOS:4120	Intro to Biostatistics (or STAT:3510 Biostatistics)	3		
	F/S	BME:2010	BME Professional Seminar	1*	Status: Second Year	
Total				18		
3 rd Year	F/S	BME:2400	Cell Biology for Engineers / Lab	3	P: BIOL:1411; C: BIOS:4120 (STAT:3510)	
	F/S	BME:2500	Biomaterials & Biomechanics / Lab	4	P: ENGR:2110; C: HHP:3500, BIOS:4120 (STAT:3510)	
	Fall	F	BME:5210	R#2: Medical Imaging Physics	3	P: BME:2200, BME:2210
		F/S	ECE:3330	R#3: Intro to Software Design	3	P: ENGR:2730
	All		General Education Component Elective #1	3		
	F	BME:3010	Leadership and Resourcefulness	1*	Status: Third Year	
Total				17		
Spring			E#1: Focus Area Elective #1	3		
			E#2: Focus Area Elective #2	3		
	F/S	PHYS:1612	Introductory Physics II with lab	4	P: PHYS:1611; C: MATH:1560	
	All		General Education Component Elective #2	3		
	All		General Education Component Elective #3	3		
S	BME:4010	BME Design Seminar	1*	Status: Third Year		
Total				17		
4 th Year	F	BME:4910	BME Senior Design I	4	P: Senior Status, BIOS:4120 (STAT:3510), BME:4010	
	Fall	F	ECE:5480	R#4: Digital Image Processing	3	P: BME:2200 or ECE:2400
				E#3: Focus Area Elective #3	3	
				E#4: Focus Area Elective #4	3	
	All		General Education Component Elective #4	3		
Total				16		
Spring	S	BME:4920	BME Senior Design II	4	P: BME:4910	
			E#5: Focus Area Elective #5	3		
			E#6: Focus Area Elective #6	3		
			E#7: Focus Area Elective #7	3		
	All		General Education Component Elective #5	3		
Total				16		

* 1sh; does not count toward 128 sh total required for graduation
Please check MyUI for the most up to date course offerings and pre-/corequisites

Note: Two Track Electives must be Engineering topics courses