

BIOMEDICAL ENGINEERING: BIOMECHANICS & BIOMATERIALS

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	All	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
				1*	Status: First Year
Total				18	
Fall	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
	All	ENGR:2120	Engineering Fundamentals II – Electrical Circuits	3	C: MATH:2560
	All	ENGR:2130	Engineering Fundamentals III – Thermodynamics	3	P: CHEM:1110, PHYS:1611; C: MATH:1560
	F/S	BME:2010	BME Professional Seminar	1*	Status: Second Year
Total				16	
Spring	All	HHP:3500	Human Physiology	3	P: BIOL:1411, CHEM:1110
	F/S	BME:2500	Biomaterials & Biomechanics / Lab	4	P: ENGR:2110; C: HHP:3500, BIOS:4120 (STAT:3510)
	All	ENGR:2710	TR#1: Dynamics	3	P: MATH:1550, ENGR:2110
	F/S	PHYS:1612	Introductory Physics II with lab	4	P: PHYS:1611; C: MATH:1560
	All	BIOS:4120	Intro to Biostatistics (or STAT:3510 Biostatistics)	3	
	F/S	BME:2010	BME Professional Seminar	1*	Status: Second Year
Total				18	
Fall	F/S	BME:2400	Cell Biology for Engineers / Lab	3	P: BIOL:1411; C: BIOS:4120 (STAT:3510)
	All	ENGR:2720	TR#2: Materials Science	3	P: CHEM:1100; C: MATH:1550
	All	ENGR:2750	TR#3: Mechanics of Deformable Bodies	3	P: ENGR:2110; C: MATH:2560
	F/S	ENGR:2510	TR#4: Fluid Mechanics	3	P: MATH:2560, ENGR:2710; C: ENGR:2130
	All		General Education Component Elective #1	3	
	F	BME:3010	Leadership and Resourcefulness	1*	Status: Third Year
Total				16	
Spring	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)
			TE#1: Track Elective #1	3	
			TE#2: Track Elective #2	3	
	All		General Education Component Elective #2	3	
	S	BME:4010	BME Design Seminar	1*	Status: Third Year
Total				18	
Fall	F	BME:4910	BME Design I	4	P: Senior Status, BIOS:4120 (STAT:3510), BME:4010
			TE#3: Track Elective #3	3	
			TE#4: Track Elective #4	3	
	All		General Education Component Elective #3	3	
	All		General Education Component Elective #4	3	
Total				16	
Spring	S	BME:4920	BME Design II	4	P: BME:4910
			TE#5: Track Elective #5	3	
			TE#6: Track Elective #6	3	
			TE#7: Track Elective #7	3	
	All		General Education Component Elective #5	3	
Total				16	

* 1sh; does not count toward 128 sh total required for graduation

Note: Two Track Electives must be Engineering topics courses

Please check MyUI for the most up to date course offerings and pre/corequisites