

Biomedical Engineering Concentration

Year	Fall Semester			Hrs.	Spring Semester			Hrs.	
Freshman	RWS	1301	Rhetoric and Composition I ⁺¹	3	RWS	1302	Rhetoric and Composition II ⁺¹	3	
	CS	1320	Comp Programming for Sci/Engr. ⁺ (MATH 1508 ⁺)	3	PHYS	2420	Introductory Mechanics ⁺ (MATH 1411 ⁺)	4	
	EL	1405	Fundamentals of Engineering Leadership and Graphics ⁺ (Co-req MATH 1508 ⁺)	4	CHEM	1305	General Chemistry ⁺ (MATH 1411 ⁺)	3	
	MATH	1411 ⁺	Calculus I ⁺ (MATH 1508 ⁺)	4	MATH	1312	Calculus II ⁺ (MATH1411 ⁺)	3	
	UNIV	1301	Foundations of Engineering ⁺¹	3	EL	1302	Intro to Engineering Design & Leadership ⁺ (MATH 1411 ⁺)	3	
Total Semester Hours				17	Total Semester Hours				16
Sophomore	HIST	1301	History of the US to 1865 ⁺¹	3	CE	2326	Economics for Engineers & Scientists ⁺¹	3	
	PHYS	2421	Introductory Electromagnetism ⁺ (PHYS 2420 ⁺)	4	EL	3373	Eng. Probability & Statistics Models ⁺² (MATH 2321 ⁺ OR 2326 ⁺)	3	
	MME	2303	Intro to Materials Sci & Engineering (CHEM 1305 ⁺)	3	MME	2434	Mechanics of Materials (MATH 1411 ⁺)	4	
	MATH	2313	Calculus III ⁺ (MATH 1312 ⁺)	3	MATH	2326	Differential Equations ⁺ (MATH 1312 ⁺)	3	
	EL	2301	Modeling & Simulation ⁺ (EL 1302 ⁺ , MATH 1312 ⁺)	3	EL	3302	Engineering Measurements ⁺ (EL 2301 ⁺ , MATH 1312 ⁺)	3	
Total Semester Hours				16	Total Semester Hours				16
Junior	HIST	1302	History of the US since 1865 ⁺¹	3			Visual & Performing Arts Elective ⁺	3	
	CE	2338	Dynamics ^{1,3}	3	MECH	2311	Intro to Thermal Fluid Science ^{1,4}	3	
	CE	2377	Electro-Mechanical Systems ^{1,4}	3	BME MME	3303 4171	Fundamentals of BME I ^{1,6} Fund. BME I LAB ^{1,6}	4	
	BIOL	1305 1107	General Biology & Topics in the Study of Life ^{1,6} (MATH 1508 ⁺)	4	BIOL	2311 2111	Human Anat/Physiology I and Human Anat/Physio Lab I ^{1, 5, 6} (BIOL 1305 ⁺)	4	
	EL	3331	Engineering Design: People to Products ⁺	3	EL	3332	Engineering Entrepreneurship: Products to People ⁺ (EL 3331 ⁺)	3	
Total Semester Hours				16	Total Semester Hours				17
Senior	POLS	2310	Introduction to Politics ⁺¹	3	POLS	2311	American Government & Politics ⁺	3	
	PHIL	2306	Ethics ⁺¹	3					
	BME	3305	Fundamentals of BME II ^{1,6} (BME 3303 ⁺)	3			Eng. Technical Elective from approved list for BME Minor ^{1,6}	3	
			Concentration elective as approved by department	3			Upper level BIOL, CHEM, or CBCH course from approved list for BME Minor ^{1,6}	3	
	EL	4395	Capstone Design I: Definition & Exploration ⁺ (MATH 2326 ⁺ , EL 3332 ⁺ , PHYS 2421, CE 2326 ⁺)	3	EL	4396	Capstone Design II: Development & Evaluation ⁺ (EL 4395 ⁺)	3	
Total Semester Hours				15	Total Semester Hours				12
	Summer 1				Summer 2				
	EL	3003	Professional Practice 1	0	EL	3005	Professional Practice 2	0	
Total 125 Credit Hrs.									

