

Biomedical Engineering

Biomedical Engineering							
UI Course #	University of Iowa Course Title	SH		DMACC Course #	DMACC Course Title	SH	
Semester 1							
Fall	MATH:1550	Engineering Math I – Single Variable Calculus	4	BOTH	MAT 211	Calculus I	5
					MAT 217	Calculus II	5
	ENGR:1100	Introduction to Engineering Problem Solving	3		EGR 166	Engineering Graphics/Conceptual Design	4
	CHEM:1110	Principles of Chemistry I & Lab	4		CHM 165	General/Inorganic Chemistry I	4
	RHET:1030	Rhetoric (Writing Component 1, Writing Component 2, and a single Speech Component all required)	4	CHOOSE 1	ENG 105	Composition I	3
					ENG 106	Composition II	3
					ENG 108	Composition II: Technical Writing	3
ENGR:1000	Engr Success for First-Year Students	1*			No equivalent course offered		
	Total	16					
Semester 2							
Spring	MATH:1560	Engineering Math II – Multivariable Calculus	4		MAT 219**	Calculus III	4
	MATH:2550	Engineering Math III – Matrix Algebra	2		MAT 148	Linear Algebra w/ Applications	4
	ENGR:1300	Introduction to Engineering Computing	3	CHOOSE 1	CIS 161	C++	3
					CIS 169	C#	3
					CIS 171	Java	3
				OR BOTH	CIS 125	Intro to Programming Logic	3
	EGR 155	Engineering C/C++	2				
	PHYS:1611	Introductory Physics I with Lab	4		PHY 213	Classical Physics I	6
CHEM:1120	Principles of Chemistry II & Lab	4		CHM 175	General/Inorganic Chemistry II	4	
BME:1010	BME Forum	1*			No equivalent course offered		
	Total	18					
Semester 3							
Fall	MATH:2560	Engineering Math IV – Differential Equations	3		MAT 227	Differential Equations with Laplace	4
	BIOL:1411	Foundations of Biology	4	BOTH	BIO 112	General Biology I	4
					BIO 113	General Biology II	4
	ENGR:2110	Engineering Fundamentals I – Statics	2		EGR 180	Statics	3
	ENGR:2120	Engineering Fundamentals II – Electrical Circuits	3			No equivalent course offered	
	ENGR:2130	Engineering Fundamentals III – Thermodynamics	3			No equivalent course offered	
	BME:2010	BME Professional Seminar	1*			No equivalent course offered	
	Total	16					
Semester 4							
Spring	HHP:3500	Human Physiology	3	BOTH	BIO 168	Anatomy & Physiology I	4
					BIO 173	Anatomy & Physiology II	4
				OR	BIO 734	Health Science Physiology	3
	BME:2200	Systems, Instrumentation, & Data Acquisition/Lab	4			No equivalent course offered	
	BME:2210	Bioimaging & Bioinformatics/Lab	4			No equivalent course offered	
	BME:2500	Bio- Materials & Mechanics / Lab	4			No equivalent course offered	
	BIOS:4120	Intro to Biostatistics (STAT:3510 Biostatistics)	3			No equivalent course offered	
BME:2010	BME Professional Seminar	1*			No equivalent course offered		
	Total	19					

Semester 5						
Fall	BME:2110	Cell Biology for Engineers / Lab	3		No equivalent course offered	
		Track Requisite #1	3		No equivalent course offered	
	PHYS:1612	Introductory to Physics II with Lab	4		PHY 223	Classical Physics II 6
		GEC Elective #1	3			
		GEC Elective #2	3			
	BME:3010	Leadership and Resourcefulness	1*		No equivalent course offered	
		Total	17			
Semester 6						
		Track Requisite #2	3		No equivalent course offered	
		Track Elective #1	3			
		Track Elective #2	3			
		GEC Elective #3	3			
		GEC Elective #4	3			
	BME:4010	BME Design Seminar	1*		No equivalent course offered	
		Total	16			
Semester 7						
Fall	BME:4910	BME Design I	4		No equivalent course offered	
		Track Elective #3	3			
		Track Elective #4	3			
		Track Requisite #3	3		No equivalent course offered	
		Track Requisite #4	3		No equivalent course offered	
		Total	16			
Semester 8						
Spring	BME:4920	BME Design II	4		No equivalent course offered	
		Track Elective #5	3			
		Track Elective #6	3			
		Track Elective #7	3			
		GEC Elective #5	3			
		Total	16			

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

updated May 2018

Note: Two Track Electives must be Engineering courses

**Students must have completed Calculus I, II, and III to receive credit for Engineering Math II