

Biomedical Engineering

	UI Course #	University of Iowa Course Title	SH		IHCC Course #	Indian Hills Course Title	SH
Semester 1							
Fall	MATH:1550	Engineering Math I – Single Variable Calculus	4	BOTH	MAT 210	Calculus I	4
					MAT 216	Calculus II	4
	ENGR:1100	Engineering Problem Solving I	3		EGR 160	Engineering I	
	CHEM:1110	Principles of Chemistry I & Lab	4	BOTH	CHM 157	Principles of Chemistry	3
					CHM 158	Principles of Chemistry II	3
					OR	CHM 166	General Chemistry I
	RHET:1030	Rhetoric (Writing Component 1, Writing Component 2, and a single Speech Component all required)	4		ENG 105	Composition I (Writing Component I)	3
					ENG 106	Composition II (Writing Component II)	3
				CHOOSE 1	SPC 101	SPC 101: Fundamentals of Oral Communication (Speech Component)	3
	SPC 112	SPC 112: Public Speaking (Speech Component)	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		EGR 162	Engineering Math - Matrix Algebra	2
	ENGR:1300	Engineering Problem Solving II	3	CHOOSE 1	EGR 165	Engineering II	3
					CIS 171	Java	3
					CIS 169	C#	3
	PHYS:1611	Introductory Physics I with Lab	4	BOTH	PHY 200	Classical Physics I	3
					PHY 201	Classical Physics II	3
	CHEM:1120	Principles of Chemistry II & Lab	4	BOTH	CHM 158	Principles of Chemistry II	3
					CHM 159	Principles of Chemistry III	4
					OR	CHM 176	General Chemistry II
BME:1010	BME Forum	1*		No equivalent course offered			
	Total		18				
Semester 3							
Fall	MATH:2560	Engineering Math IV – Differential Equations	3		MAT 226	Differential Equations with Laplace	3
	BIOL:1411	Foundations of Biology	4	BOTH	BIO 120	General Biology ID	4
					BIO 121	General Biology IID	3
	ENGR:2110	Engineering Fundamentals I – Statics	2		EGR 180	Statics	3
	ENGR:2120	Engineering Fundamentals II – Electrical Circuits	3		EGR 284	Intro to Electrical Circuits	3
	ENGR:2130	Engineering Fundamentals III – Thermodynamics	3		EGR 290	Thermodynamics	3
	BME:2010	BME Professional Seminar	1*		No equivalent course offered		
	Total		16				
Semester 4							
Spring	HHP:3500	Human Physiology	3		BIO 178	Human Physiology	3
	BME:2500	Bio- Materials & Mechanics / Lab	4		No equivalent course offered		
	BME:2200	Systems, Instrumentation, & Data Acquisition/Lab	4		No equivalent course offered		
	BME:2210	Bioimaging & Bioinformatics/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		18			

Biomedical Engineering

UI Course #		University of Iowa Course Title		SH	IHCC Course #		Indian Hills Course Title		SH
Semester 5									
Fall	BME:2110	Cell Biology for Engineers / Lab		3		No equivalent course offered			
		Track Requisite #1		3					
	PHYS:1612	Introductory Physics II w/lab		4	BOTH	PHY 201	Classical Physics II		3
						PHY 202	Classical Physics III		3
		GEC Elective #1		3					
		GEC Elective #2		3					
	BME:3010	Leadership and Resourcefulness		1*		No equivalent course offered			
	Total		17						
Semester 6									
Spring		Track Requisite #2		3					
		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					
		Track Requisite #4		3					
		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					

2017-18 Curriculum

updated June 2018

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

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

***Students must complete BIO 120, BIO 121, & BIO 122 in order to receive credit for BIOL:1411 & BIOL 1412 (BIOL:1412 is an approved Track Elective)