

General BME

First Year				
Fall				
Course			Variance/Elective/Substitution	Semester Completed
CHEM 1601/1601L	General Chemistry (Lecture, Lab, Recitation)	4		
MATH 1300	Accelerated Single-Variable Calculus I + Recitation	4		
LAC	LAC Elective	3 LAC		
ES 1401/2/3	Introduction to Engineering Modules	3		
Total Hours for Fall		14		

Spring				
Course				
Course			Variance/Elective/Substitution	Semester Completed
CHEM 1602/1602L	General Chemistry (Lecture, Lab, Recitation)	4		
MATH 1301	Accelerated Single-Variable Calculus II + Recitation	4		
CS 1103/1101/1104	Introductory Programming	3		
PHYS 1601/1601L	General Physics I and Lab	4		
BME 1015	Innovations and Careers in BME	1 OPEN		
Total Hours for Spring		16		

Second year				
Fall				
Course			Variance/Elective/Substitution	Semester Completed
BME 2301	Systems Physiology I	3		
MATH 2300	Multivariable Calculus	3		
BSCI 1510/1510L	Introduction to Biological Sciences and Lab	4		
PHYS 1602/1602L	General Physics II and Lab	4		
LAC	LAC Elective	3 LAC		
Total Hours for Fall		17		

Spring				
Course				
Course			Variance/Elective/Substitution	Semester Completed
BME 2302	Systems Physiology II	3		
BME 2100	Introductory Biomechanics	3		
BME 2400	Quantitative Methods I	3		
BME 2900W	Biomedical Engineering Lab I	1		
MATH 2400	Differential Equations with Linear Algebra + Recitation	4		
ECE 2112	Circuits I	3		
Total Hours for Spring		17		

Third Year				
Fall				
Course			Variance/Elective/Substitution	Semester Completed
BME 3000	Physiological Transport Phenomena	3		
BME 3301	Biomedical Instrumentation I	4		
BME 3400	Quantitative Methods II	3		
BME 3900W	Biomedical Engineering Lab II	1		
LAC	LAC Elective	3 LAC		
TECH	Technical Elective	3 TECH		
Total Hours for Fall		17		

Spring				
Course				
Course			Variance/Elective/Substitution	Semester Completed
BME 3302	Biomedical Instrumentation II	4		
BME 3500	Biomaterials	3		
BME	BME Elective	3 BME		
BME	BME Elective	3 BME		
LAC	LAC Elective	3 LAC		
Total Hours for Spring		16		

Fourth Year				
Fall				
Course			Variance/Elective/Substitution	Semester Completed
BME 4901W	Biomedical Engineering Lab III	1		
BME 4950	BME Design	2		
BME 4959	Design Seminar	1		
LAC	LAC Elective	3 LAC		
BME	BME Elective	3 BME		
TECH	Technical Elective	3 TECH		
Open	Open Elective	2 OPEN		
Total Hours for Fall		15		

Spring				
Course				
Course			Variance/Elective/Substitution	Semester Completed
BME 4951	BME Design	3		
BME	BME Elective	3 BME		
TECH	Tech Elective	3 TECH		
LAC	LAC Elective	3 LAC		
Open	Open Elective	3 OPEN		
Total Hours for Spring		15		

BME PreMed

First Year				
Fall				
Course			Variance/Elective/Substitution	Semester Completed
CHEM 1601/1601L	General Chemistry (Lecture, Lab, Recitation)	4		
MATH 1300	Accelerated Single-Variable Calculus I + Recitation	4		
LAC	English W Course	3 LAC		
ES 1401/2/3	Introduction to Engineering Modules	3		
PSY 1200	General Psychology	3 LAC		
Total Hours for Fall		17		

Spring				
Course				
Course			Variance/Elective/Substitution	Semester Completed
CHEM 1602/1602L	General Chemistry (Lecture, Lab, Recitation)	4		
MATH 1301	Accelerated Single-Variable Calculus II + Recitation	4		
CS 1103/1101/1104	Introductory Programming	3		
PHYS 1601/1601L	General Physics I and Lab	4		
BME 1015	Innovations and Careers in BME	1 OPEN		
Total Hours for Spring		16		

Second year				
Fall				
Course			Variance/Elective/Substitution	Semester Completed
BME 2301	Systems Physiology I	3		
MATH 2300	Multivariable Calculus	3		
BSCI 1510/1510L	Introduction to Biological Sciences and Lab	4		
PHYS 1602/1602L	General Physics II and Lab	4		
CHEM 2221/2221L	Organic Chemistry	4 TECH		
Total Hours for Fall		18		

Spring				
Course				
Course			Variance/Elective/Substitution	Semester Completed
BME 2302	Systems Physiology II	3		
BME 2900W	Biomedical Engineering Lab I	1		
MATH 2400	Differential Equations with Linear Algebra + Recitation	4		
BSCI 1511/1511L	Introduction to Biological Sciences	4 OPEN		
CHEM 2222/2222L	Organic Chemistry	4 TECH		
Total Hours for Spring		16		

Third Year				
Fall				
Course			Variance/Elective/Substitution	Semester Completed
BME 2100	Introductory Biomechanics	3		
BME 2400	Quantitative Methods I	3		
ECE 2112	Circuits I	3		
BME 3900W	Biomedical Engineering Lab II	1		
LAC	Sociology	3 LAC		
BME	BME Elective	3 BME		
Total Hours for Fall		16		

Spring				
Course				
Course			Variance/Elective/Substitution	Semester Completed
BME 3301	Biomedical Instrumentation I	4		
BME 3400	Quantitative Methods II	3		
BME 3500	Biomaterials	3		
BME	BME Elective	3 BME		
BSCI 2520	Biochemistry	3 TECH		
Total Hours for Spring		16		

Fourth Year				
Fall				
Course			Variance/Elective/Substitution	Semester Completed
BME 3000	Physiological Transport Phenomena	3		
BME 4901W	Biomedical Engineering Lab III	1		
BME 4950	BME Design	2		
BME 4959	Design Seminar	1		
BME	BME Elective	3 BME		
BME 3302	Biomedical Instrumentation II	4		
LAC	LAC Elective	3 LAC		
Total Hours for Fall		17		

Spring				
Course				
Course			Variance/Elective/Substitution	Semester Completed
BME 4951	BME Design	3		
LAC	LAC Elective	3 LAC		
LAC	LAC Elective	3 LAC		
BME	BME Elective	3 BME		
Total Hours for Spring		12		

BME/ECE Double Major

First Year													
Fall					Spring								
Course			Variance/Elective/Substitution		Semester Completed		Course			Variance/Elective/Substitution		Semester Completed	
CHEM 1601/1601L	General Chemistry (Lecture, Lab, Recitation)	4					CHEM 1602/1602L	General Chemistry (Lecture, Lab, Recitation)	4				
MATH 1300	Accelerated Single-Variable Calculus I + Recitation	4					MATH 1301	Accelerated Single-Variable Calculus II + Recitation	4				
LAC	LAC Elective	3	LAC				CS 1101	Introductory Programming	3				
ES 1401/2/3	Introduction to Engineering Modules	3					PHYS 1601/1601L	General Physics I and Lab	4				
Total Hours for Fall			14				Total Hours for Spring			16			

Second year													
Fall					Spring								
Course			Variance/Elective/Substitution		Semester Completed		Course			Variance/Elective/Substitution		Semester Completed	
BME 2301	Systems Physiology I	3					BME 2302	Systems Physiology II	3				
MATH 2300	Multivariable Calculus	3					BME 2100	Introductory Biomechanics	3				
BSCI 1510/1510L	Introduction to Biological Sciences and Lab	4					MATH 2400	Differential Equations with Linear Algebra + Recitation	4				
PHYS 1602/1602L	General Physics II and Lab	4					ECE 2123/2123L	Digital Systems and Lab	4				
ECE 2112/2112L	Circuits I + Lab	4					ECE 2214	Analog Circuits and Systems	3				
Total Hours for Fall			18				Total Hours for Spring			17			

Third Year													
Fall					Spring								
Course			Variance/Elective/Substitution		Semester Completed		Course			Variance/Elective/Substitution		Semester Completed	
BME 2400	Quantitative Methods I	3					BME 3302	Biomedical Instrumentation II	4				
BME 2900W	Biomedical Engineering Lab I	1					BME 3500	Biomaterials	3				
CS 2201/2203	Program Design and Data Structures	3					BME 3900W	Biomedical Engineering Lab II	1				
ECE 3235/3235L	Electronics I	4					ECE elective	ECE Elective	3				
LAC	LAC Elective	3	LAC				ECE	ECE Elective	3	EECE			
LAC	LAC Elective	3	LAC				LAC	LAC Elective	3	LAC			
Total Hours for Fall			17				Total Hours for Spring			17			

Fourth Year													
Fall					Spring								
Course			Variance/Elective/Substitution		Semester Completed		Course			Variance/Elective/Substitution		Semester Completed	
BME 3000	Physiological Transport Phenomena	3					BME 4951	BME Design	3				
BME 4901W	Biomedical Engineering Lab III	1					BME	BME Elective	3	BME			
BME 4950	BME Design	2					ECE	ECE Elective	3	EECE			
BME 4959	Design Seminar	1					ECE	ECE Elective	3	EECE			
EECE	ECE Elective	3	EECE				LAC	LAC Elective	3	LAC			
EECE	ECE Elective	3	EECE										
LAC	LAC Elective	3	LAC										
Total Hours for Fall			16				Total Hours for Spring			15			

BME/ChBE Double Major

First Year				
Fall				
Course		Variance/Elective/Substitution	Semester Completed	
CHEM 1601/1601L	General Chemistry (Lecture, Lab, Recitation)	4		
MATH 1300	Accelerated Single-Variable Calculus I + Recitation	4		
LAC	LAC Elective	3 LAC		
ES 1401/2/3	Introduction to Engineering Modules	3		
Total Hours for Fall		14		

Spring				
Course		Variance/Elective/Substitution	Semester Completed	
CHEM 1602/1602L	General Chemistry (Lecture, Lab, Recitation)	4		
MATH 1301	Accelerated Single-Variable Calculus II + Recitation	4		
CS 1103/1101/1104	Introductory Programming	3		
PHYS 1601/1601L	General Physics I and Lab	4		
Total Hours for Spring		15		

Second year				
Fall				
Course		Variance/Elective/Substitution	Semester Completed	
ChBE 2100	Chemical Process Principles	3		
MATH 2300	Multivariable Calculus	3		
BSCI 1510/1510L	Introduction to Biological Sciences and Lab	4		
PHYS 1602/1602L	General Physics II and Lab	4		
CHEM 2221/2221L	Organic Chemistry and Lab	4		
Total Hours for Fall		18		

Spring				
Course		Variance/Elective/Substitution	Semester Completed	
BME 2301	Systems Physiology I	3		
BME 2900W	Biomedical Engineering Lab I	1		
ChBE 2200	Thermodynamics	3		
MATH 2400	Differential Equations with Linear Algebra + Recitation	4		
EECE 2112	Circuits I	3		
CHEM 2222/2222L	Organic Chemistry and Lab	4		
Total Hours for Spring		18		

Third Year				
Fall				
Course		Variance/Elective/Substitution	Semester Completed	
BME 2302	Systems Physiology II	3		
BME 2100	Introductory Biomechanics	3		
BME 2400	Quantitative Methods I	3		
ChBE 3200	Phase Equilibria and Stage-Based Separations	3		
ChBE 3300	Fluid Mechanics and Heat Transfer	3		
LAC	LAC Elective	3 LAC		
Total Hours for Fall		18		

Spring				
Course		Variance/Elective/Substitution	Semester Completed	
BME 3301	Biomedical Instrumentation I	4		
BME 3400	Quantitative Methods II	3		
BME 3500	Biomaterials	3		
BME 3900W	Biomedical Engineering Lab II	1		
ChBE 3250	Chemical Reaction Engineering	3		
ChBE 3350	Mass Transfer and Rate-Based Separations	3		
Total Hours for Spring		17		

Fourth Year				
Fall				
Course		Variance/Elective/Substitution	Semester Completed	
BME 3302	Biomedical Instrumentation II	4		
LAC	LAC Elective	3 LAC		
BME 4959	Design Seminar	1		
ChBE 4900W	Chemical Laboratory II	3		
ChBE 4950W	Chemical Engineering and Process and Product Design	4		
ChBE 4959	Professional Practice of Safety in ChE Design	1		
Total Hours for Fall		16		

Spring				
Course		Variance/Elective/Substitution	Semester Completed	
ChBE 4951W	ChE Design	3		
BME/ChBE	BME/ChBE Elective	3 BME/ChBE		
LAC	LAC Elective	3 LAC		
LAC	LAC Elective	3 LAC		
LAC	LAC Elective	3 LAC		
Total Hours for Spring		15		

BME with Engineering Management Minor

First Year				
Fall				
Course	Variance/Elective/Substitution	Semester Completed		
CHEM 1601/1601L	General Chemistry (Lecture, Lab, Recitation)	4		
MATH 1300	Accelerated Single-Variable Calculus I + Recitation	4		
LAC	LAC Elective	3 LAC		
ES 1401/2/3	Introduction to Engineering Modules	3		
Total Hours for Fall		14		

Spring				
Course				
Course	Variance/Elective/Substitution	Semester Completed		
CHEM 1602/1602L	General Chemistry (Lecture, Lab, Recitation)	4		
MATH 1301	Accelerated Single-Variable Calculus II + Recitation	4		
CS 1103/1101/1104	Introductory Programming	3		
PHYS 1601/1601L	General Physics I and Lab	4		
BME 1015	Innovations and Careers in BME	1 OPEN		
Total Hours for Spring		16		

Second year				
Fall				
Course	Variance/Elective/Substitution	Semester Completed		
BME 2301	Systems Physiology I	3		
MATH 2300	Multivariable Calculus	3		
BSCI 1510/1510L	Introduction to Biological Sciences and Lab	4		
PHYS 1602/1602L	General Physics II and Lab	4		
ENGM 2210	Technology Strategy	3 TECH		
Total Hours for Fall		17		

Spring				
Course				
Course	Variance/Elective/Substitution	Semester Completed		
BME 2302	Systems Physiology II	3		
BME 2100	Introductory Biomechanics	3		
BME 2400	Quantitative Methods I	3		
BME 2900W	Biomedical Engineering Lab I	1		
MATH 2400	Differential Equations with Linear Algebra + Recitation	4		
EECE 2112	Circuits I	3		
Total Hours for Spring		17		

Third Year				
Fall				
Course	Variance/Elective/Substitution	Semester Completed		
BME 3000	Physiological Transport Phenomena	3		
BME 3301	Biomedical Instrumentation I	4		
BME 3400	Quantitative Methods II	3		
BME 3900W	Biomedical Engineering Lab II	1		
ENGM 2440	Applied Behavioral Science	3 LAC		
LAC	LAC Elective	3 LAC		
Total Hours for Fall		17		

Spring				
Course				
Course	Variance/Elective/Substitution	Semester Completed		
BME 3302	Biomedical Instrumentation II	4		
BME 3500	Biomaterials	3		
BME	BME Elective	3 BME		
BME	BME Elective	3 BME		
ENGM 3000 or ENGM 3010	Enterprise Systems Design or Systems Engineering	3 TECH		
Total Hours for Spring		16		

Fourth Year				
Fall				
Course	Variance/Elective/Substitution	Semester Completed		
BME 4901W	Biomedical Engineering Lab III	1		
BME 4950	BME Design	2		
BME 4959	Design Seminar	1		
LAC	LAC Elective	3 LAC		
BME	BME Elective	3 BME		
BME 3700	Program & Project Management	3 TECH		
Open	Open Elective	2 OPEN		
Total Hours for Fall		15		

Spring				
Course				
Course	Variance/Elective/Substitution	Semester Completed		
BME 4951	BME Design	3		
BME	BME Elective	3 BME		
LAC	LAC Elective	3 LAC		
LAC	LAC Elective	3 LAC		
Open	website to see list of potential elective courses)	3 OPEN		
Total Hours for Spring		15		