

# Bachelor of Science in Biomedical Engineering

2018-2019

## Suggested Plan of Study – Fall 2018 Transfer Admission

Term	CR	Course	Offered	Alt courses/Prerequisites and Corequisites
Term 5		<i>Fall</i>		
BME1008	1	Introduction to Biomedical Engineering	F, S	
BME3060	3	Biomedical Fundamentals	F, S	Prereq: CHM2046 or CHM2096 and MAC2313 with min grades of C; Coreq: PHY2049, MAP2302, and BME1008
CHM2211*	3	Organic Chemistry 2	F, S, Su	Prereq: CHM2210 with a min grade of C
COP2271	2	Computer Programming for Engineers (Matlab or C++)	S, F, Su	Alt course: COP3275/COP3502/others (with approval)
COP2271L	1	Computer Programming for Engineers Lab (same language)	S, F, Su	Alt course: COP3275/COP3502/others (with approval)
EEL3003	3	Elements of Electrical Engineering	F, S, Su	Prereq: MAC2313 and PHY2049
Term Credits	13			
Term 6		<i>Spring</i>		
BME3053C	2	Computer Applications for BME	F, S	Prereq: COP2271 and COP2271L or equivalent and MAC2312 with min grades of C
EGM2511	3	Engineering Mechanics: Statics	F, S, Su	Prereq: PHY2048; Coreq: MAC2313
ENC3246	3	Professional Communication for Engineers	F, S, Su	Prereq: ENC1101 or ENC1102
PCB3713C	4	Cellular and Systems Physiology	S	Prereq: BSC2010 and CHM2046, CHM2047, or CHM2096 and PHY2048 or PHY2060 with min grades of C; Coreq: PHY2049 or PHY2061
Term Credits	12			
Term 7		<i>Fall</i>		
BME3101	3	Biomedical Materials	F	Prereq: BME3060 with min grade of C and CHM3217 or CHM2210 and CHM2211
BME3508	3	Biosignals and Systems	F	Prereq: EEL3003 or EEL3111C and MAC2313 with min grades of C
BME4311	3	Molecular Biomedical Engineering	F	Prereq: BSC2010, PCB3713C and CHM3217 or CHM2210 with min grades of C
BME4503	3	Biomedical Instrumentation	F, S	Prereq: MAC2313, MAP2302, PHY2049, and EEL3003 or EEL3111C with min grades of C; Coreq: BME3508
BME4503L	1	Biomedical Instrumentation Lab	F, S	Prereq: MAC2313, MAP2302, PHY2049, and EEL3003 or EEL3111C with min grades of C; Coreq: BME3508 and BME4503
Term Credits	13			
Term 8		<i>Spring</i>		
BME3012	3	Clinically-Inspired Engineering Design	S	Prereq: BME3060, PCB3713C, and ENC3246 with min grades of C and junior standing; Coreq: EMA3010 and EGM2511
BME3323L	3	Cellular Engineering Lab	F, S	Prereq: PCB3713C or instructor permission; Coreq: BME4311 or instructor permission
BME4632	3	Biomedical Transport Phenomena	S	Prereq: BME3060 with min grade of C
BME Elective	3		Varies	
STA3032	3	Engineering Statistics	F, S, Su	Prereq: MAC2311
Term Credits	15			

Term	CR	Course	Offered	Alt courses/Prerequisites and Corequisites
Term 9		<i>Fall</i>		
BME4409	3	Quantitative Physiology	F, S	Prereq: BME3060, PCB3713C, BME3508, and BME3053C with min grades of C; Coreq: BME4503 and BME4503L
BME4621	3	Biomedical Thermodynamics and Kinetics	F	Prereq: CHM3217 or CHM2210 and CHM2211 with min grades of C, BME3060 and BME4311
BME4882	3	Senior Design, Professionalism and Ethics 1	F	Prereq: BME3012 and senior standing
BME Elective	6		Varies	
Term Credits	15			
Term 10		<i>Spring</i>		
BME4531	3	Medical Imaging	S	Prereq: MAC2313, BME3508, BME3053C, and PHY2049 with min grades of C
BME4883	3	Senior Design, Professionalism and Ethics 2	S	Prereq: BME4882 and senior standing
BME Elective	6		Varies	
Term Credits	12			
<b>Upper Div</b>	<b>80</b>			

\*Effective January 2018, CHM2211 (Organic Chemistry II) is no longer required prior to the submission of transfer application to UF BME. Transfer students who do not complete CHM2211 (Organic Chemistry II) prior to arrival at UF are required to complete CHM2211 (Organic Chemistry II) with a C or higher within the first two semesters of enrolling at UF. Completion of Organic Chemistry I and Organic Chemistry II (or the equivalent as defined by the UF course catalog) is a mandatory prerequisite for BME courses and a degree program requirement.

BME Electives: A total of 15 credits of 3000/4000-level courses (9 credits of engineering electives and 6 credits technical electives, both of which must be selected from an approved list).

***Please note: Due to the required course sequence and number of credits required for the BME major, it is not possible for transfer students to graduate in less than 3 years. Students are not permitted to complete the curriculum out of sequence (i.e. take prerequisites as corequisites).***

## Suggested Plan of Study – Spring 2019 Transfer Admission

Term	CR	Course	Offered	Alt courses/Prerequisites and Corequisites
Term 5		<i>Spring</i>		
BME1008	1	Introduction to Biomedical Engineering	F, S	
BME3053C	2	Computer Applications for BME	F, S	Prereq: COP2271 and COP2271L or equivalent and MAC2312 with min grades of C
BME3060	3	Biomedical Fundamentals	F, S	Prereq: CHM2046 or CHM2096 and MAC2313 with min grades of C; Coreq: PHY2049, MAP 2302, and BME1008
COP2271	2	Computer Programming for Engineers (Matlab or C++)	S, F, Su	Alt course: COP3275/COP3502/others (with approval)
COP2271L	1	Computer Programming for Engineers Lab (same language)	S, F, Su	Alt course: COP3275/COP3502/others (with approval)
PCB3713C	4	Cellular and Systems Physiology	S	Prereq: BSC2010 and CHM2046, CHM2047, or CHM2096 and PHY2048 or PHY2060, all with min grades of C; Coreq: PHY2049 or PHY2061
Term Credits	13			
Term 6		<i>Summer</i>		
CHM2211*	3	Organic Chemistry 2	F, S, Su	Prereq: CHM2210 with a min grade of C
EEL3003	3	Elements of Electrical Engineering	F, S, Su	Prereq: MAC2313 and PHY2049
EGM2511	3	Engineering Mechanics: Statics	F, S, Su	EGM2511 Prereq: PHY2048; Coreq: MAC2313
ENC3246	3	Professional Communication for Engineers	F, S, Su	Prereq: ENC1101 or ENC1102
Term Credits	12			
Term 7		<i>Fall</i>		
BME3101	3	Biomedical Materials	F	Prereq: BME3060 with min grade of C and CHM3217 or CHM2210 and CHM2211
BME3508	3	Biosignals and Systems	F	Prereq: EEL3003 or EEL3111C and MAC2313 with min grades of C
BME4311	3	Molecular Biomedical Engineering	F	Prereq: BSC2010, PCB3713C and CHM3217 or CHM2210 with min grades of C
BME4503	3	Biomedical Instrumentation	F, S	Prereq: MAC2313, MAP2302, PHY2049, and EEL3003 or EEL3111C with min grades of C; Coreq: BME3508
BME4503L	1	Biomedical Instrumentation Lab	F, S	Prereq: MAC2313, MAP2302, PHY2049, and EEL3003 or EEL3111C with min grades of C; Coreq: BME3508 and BME4503
Term Credits	13			
Term 8		<i>Spring</i>		
BME3012	3	Clinically-Inspired Engineering Design	S	Prereq: BME3060, PCB3713C, and ENC3246 with min grades of C and junior standing; Coreq: EMA3010 and EGM2511
BME3323L	3	Cellular Engineering Lab	F, S	Prereq: PCB3713C or instructor permission; Coreq: BME4311 or instructor permission
BME4632	3	Biomedical Transport Phenomena	S	Prereq: BME3060 with min grade of C
BME Elective	3		Varies	
STA3032	3	Engineering Statistics	F, S, Su	Prereq: MAC2311
Term Credits	15			

Term 9		<i>Fall</i>		
BME4409	3	Quantitative Physiology	F, S	Prereq: BME3060, PCB3713C, BME3508, and BME3053C with min grades of C; Coreq: BME4503 and BME4503L
BME4621	3	Biomedical Thermodynamics and Kinetics	F	Prereq: CHM3217 or CHM2210 and CHM2211 with min grades of C, BME3060 and BME4311
BME4882	3	Senior Design, Professionalism and Ethics 1	F	Prereq: BME3012 and senior standing
BME Elective	6		Varies	
Term Credits	15			
Term 10		<i>Spring</i>		
BME4531	3	Medical Imaging	S	Prereq: MAC2313, BME3508, BME3053C, and PHY2049 with min grades of C
BME4883	3	Senior Design, Professionalism and Ethics 2	S	Prereq: BME4882 and senior standing
BME Elective	6		Varies	
Term Credits	12			
<b>Upper Div</b>	<b>80</b>			

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