

UNIIVERSITY OF THE DISTRICT OF COLUMBIA SCHOOL OF ENGINEERING AND APPLIED SCIENCES

Department of Mechanical Engineering BACHELOR OF SCIENCE IN BIOMEDICAL ENGINEERING Effective Fall 2019

Student	Student ID#	

First Semester			Second semester				
Course #	Course Name	Credits	Grade	Course #	Course Name	Credits	Grade
IGED-110	Found Writ Arts & Hum	3		IGED-111	Found Writ Soc. & Nat Sc.	3	
IGED-130	Found Oral Comm.	3		IGED-140	Found Ethics & Values	3	
CHEM-111	General Chemistry I Lec	3		MATH-152	Calculus II Lec	3	
CHEM-113	General Chemistry I Lab	1		MATH-156	Calculus II Lab	1	
MATH-151	Calculus I Lec	3		PHYS-201	University Physics I Lec	3	
MATH-155	Calculus I Lab	1		PHYS-205	University Physics I Lab	1	
CCEN-101	Intro to Engineering	2		BMEG-101	Survey of Biomedical Engineering	3	
	Total	16			Total	17	
	Third semester			Fourth semester			
Course #	Course # Course Name Cr		Grade	Course #			Grade
PHYS-202	University Physics II Lec	3		MATH-254	Differential Eq. (or 260)	3	
PHYS-206	University Physics II Lab	1		CVEN-202			
CVEN-201	Engineering Mechanics I	3		BIOL-101	Biological Science Lec	3	
MECH-107	ME Computer Graphics	3		BIOL-103	Biological Science Lab	1	
BMEG-235	Engineering Software & Prog.	3		MECH-208	Thermodynamics		
ELEC-225	Electric Circuits Lec	3		BMEG-301	Bioinstrumentation Lec		
ELEC-226	Electric Circuits Lab	1		BMEG-300	Bioinstrumentation Lab	1	
	Total	17			Total	17	
	Fifth semester				Sixth semester		
Course #	Course Name	Credits	Grade	Course #	Course Name	Credits	Grade
IGED-210	Discov Expos Writing	3		MATH-253	Calculus III Lec	3	
CVEN-308	Appl. Num Analysis	3		MATH-255	Calculus III Lab	1	
MECH-381	Microcontrollers in ME	3		MECH-351	Heat Transfer Lec	3	
MECH-321	Fluid Mechanics Lec	3		BMEG-302	Prof. Issues in Biomed. Eng.	3	
BIOL-111	Human Anatomy and Physiology Lec	3		BMEG-371	Analysis of Physio. Sys. Lec	3	
				BMEG-373	Analysis of Physio. Sys. Lab	1	
				BMEG-304	Biomechanics	3	
	Total	15			Total	17	
Seventh Semester			Eighth semester				
Course #	Course Name	Credits	Gade	Course #	Course Name	Credits	Grade
IGED-280	Discov Civ/Ser/Team	3		BMEG-492	Capstone Sr. Design Pr. II*	3	
MECH-406	Engineering Economics	3		BMEG-xxx	BMEG Technical Elective**	3	
MATH-381	Probability & Statistics	3		BMEG-xxx	BMEG Technical Elective**	3	
BMEG-491	Capstone Sr. Design Proj I*	3		IGED-270	Discov Loc/Glob Cul	3	
BMEG-405	Biomed. Research & Clinical Exp.	3					
	Total	15			Total	12	
					GRAND TOTAL CREDITS	126	

Advisor Signature [Date	Student Signature	Date
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- 1. *Contains intensive writing component
- 2. **BMEG Technical Electives: BMEG 405, BMEG 402 and/or BMEG 495, and up to one of the following: MECH 302, MECH 465, MECH 473, MECH 478, MECH 483, or MECH 484.
- 3. A completed copy of this form must accompany each student's Graduation Clearance Form

BIOMEDICAL ENGINEERING COURSE Co/Pre-Requisite List

Course No	Course Name	Co-Req	Pre-Requisite
CVEN-201	Engineering Mechanics-I	Ī-	PHYS-201
CVEN-202	Engineering Mechanics-II	-	CVEN-201
BIOL-101	Biological Science Lec	BIOL 103	-
BIOL-103	Biological Science Lab	BIOL 101	-
MECH-208	Thermodynamics	-	PHYS-201
ELEC-225	Electrical Circuits	ELEC-226	PHYS-201
BMEG-301	Bioinstrumentation Lec	BMEG-300	ELEC-225/226 or by permission of instructor
BMEG-300	Bioinstrumentation Lab	BMEG-301	-
BMEG-302	Professional Issues in Biomedical Engineering	-	Junior standing, or by permission of instructor.
BMEG-304	Biomechanics	-	CVEN-201, CVEN-202
MECH-381	Microcontrollers in ME	-	ELEC-225, jr standing
BIOL-111	Human Anatomy and Physiology Lec	BIOL 113 (waived)	
MECH-321	Fluid Mechanics Lec	MECH-322 (waived)	MATH-254 or 260 MECH-208
CVEN-308	Applied Numerical Analysis for Engineers	<u> </u>	MATH-254 or 260
MECH-351	Heat Transfer Lec	-	MECH-321 MATH-254 or 260
BMEG-371	Analysis of Physio. Sys. Lec	BMEG-373	MATH 151/155, MATH 152/156, and MATH 254, or by permission of instructor
BMEG-373	Analysis of Physio. Sys. Lab	BMEG-371	-
MECH-406	Engineering Economics	-	Senior Standing
BMEG-491/492	BME Capstone Sr. Design Proj I/II	Ī-	Senior Standing
BMEG-402	Biomedical Imaging Systems and Signal Processing	-	Junior standing, or by permission of instructor
BMEG-405	Biomedical Research & Clinical Experience	-	Senior Standing
BMEG-495	Special Topics in Biomedical Engineering	-	Senior Standing and permission of instructor
MECH-302	Res Exp & Tech Comm	-	CCEN-101
MECH-465	Advanced Manufacturing	-	
MECH-473	Microelectromechanical Systems (MEMS)	-	MECH-205, MECH-321 or by permission of instructor
MECH-478	Mechatronics	-	MECH-381, Senior Standing
MECH-483	Robot Mechanics and Control	-	MECH-341, MECH-371, or by permission of instructor
MECH-484	Design of Robot Mechanisms		MECH-483