B.S. in BIOMEDICAL ENGINEERING (2019-2020 Catalog)

Student _____ **UTD ID** _____

Advisor:_____
__Fast Track
__Minor_____
__Dbl Major/Degree
_____

Other:

MAJOR PREPARATORY REQUIREMENTS

LD	UD	NTS	COURSE TITLE	COURSE #	GRADE	SEM	INFO
3		1	Introduction to Programming for Biomedical Engrs	CS 1324			
4		1,2,3	Calculus I	MATH 2414 or 2417			
4		1,2,3	Calculus II	MATH 2415 or 2419			
4		1	Differential Equations w/ Applications	MATH 2420			
3		1,2	Mechanics	PHYS 2325			
1		1,2	Physics Laboratory I	PHYS 2125			
3		1,2	Electromagnetism and Waves	PHYS 2326			
1		1	Physics Laboratory II	PHYS 2126			
3		1,4,5	General Chemistry for Engineers OR General Chemistry I AND General Chemistry II	CHEM 1301 OR CHEM 1311/1111 and CHEM 1312/1112			
3		1,4,5	Introductory Organic Chemistry for Engineers OR Organic Chemistry I AND Organic Chemistry II	CHEM 2324 OR CHEM 2323/2123 and CHEM 2325/2125			
3		1	Intro to Modern Biology I	BIOL 2311			
1		1	Intro to Modern Biology Workshop I	BIOL 2111			
2		1	Introductory Biology Laboratory	BIOL 2281			
35							

MAJOR CORE REQUIREMENTS* *(*Courses in this block used to calculate major GPA)*

1		1,6	Introduction to Engineering and Computer Science	ECS 1100*			
1		1	Introduction to Bioengineering I	BMEN 1100*			
2		1	Introduction to Bioengineering II	BMEN 1208*			
3		1	Linear Algebra for Engineers	ENGR 2300*			
3		1	Statics	BMEN 2320*			
	3	1	Advanced Engineering Math	ENGR 3300*			
	4	1	Signals and Systems	BMEN 3402*			
	3	1	Electrical & Electronic Circuits in BMEN	BMEN 3320*			
	1	1	Biomedical Circuits & Instrumentation Lab	BMEN 3120*			
	3	1	Engineering Physiology of the Human Body	BMEN 3330*			
	1	1	Engineering Physiology Lab	BMEN 3130*			
	3	1	Probability Theory & Statistics	ENGR 3341*			
	3	1	Biomedical Component & System Design	BMEN 3350*			
	1	1	Biomedical Engineering Lab	BMEN 3150*			
	3	1	Thermodynamics & Physical Chemistry in BMEN	BMEN 3315*			
	3	1	Introductory Biomechanics	BMEN 3399*			
	3	1	Feedback Systems in Biomedical Engineering	BMEN 4310*			
	1	1	Biomedical Feedback Systems Lab	BMEN 4110*			
	3	1	Biomaterials and Medical Devices	BMEN 4360*			
	3	1	Senior Design Project I	BMEN 4388*			
	3	1	Senior Design Project II	BMEN 4389*			
	3	1	Major Prescribed Elective	BMEN 33XX/43XX*			
	3	1	Major Prescribed Elective	BMEN 33XX/43XX*			
	3	1	Major Prescribed Elective	BMEN 33XX/43XX*			
3		1,2	Social Issues and Ethics in Science & Technology	ECS 2361*			
	3	1,2	Professional & Technical Communication	ECS 3390*			
13	53						

REMAINING CORE CURRICULUM

3		1	Rhetoric	RHET 1302			
3			American National Government	GOVT 2305			
3			State and Local Government	GOVT 2306			
3		4	US History Survey to Civil War (Core: 060)	HIST 1301			
3		4	US History Survey From Civil War (Core:060)	HIST 1302			
3		4	Exploration of the Humanities (Core: 040)	HUMA 1301			
3		4	Exploration of the Arts (Core: 050)	ARTS 1301			
21							

ELECTIVES (0 Hours – Requires Approval from Advisor)

0		6	Freshman Seminar	UNIV 1010			
0		7	Core Curriculum Assessment	UNIV 2020			
0	0						
69	53	***Total Hours_____***		***122 hours required for graduation. Must include minimum 51 hours as Upper Division.******			

NOTES

1. Major requirement. Must earn C- or better.* **2.** Course meets both Major and Core requirements. **3.** Must take Math 2413/2414/2415 or Math 2417/2419.

4. Other course options available. See Advisor for details **5.** Must take Chem 1301/2324 or Chem 1311/1111, 1312/1112, 2323/2123, and 2325/2125 to satisfy.

6. Incoming freshman (FTIC) must enroll and complete requires of UNIV 1010 and the corresponding school-related freshman seminar course.

7. All students, including transfer students, who complete their core curriculum at UTD must take UNIV 2020.

***Must have a minimum cumulative 2.0 GPA in all UTD coursework and a cumulative 2.0 GPA in all Major Requirements to graduate. Students must also complete 45 hours in residence and complete 24 of the last 30 hours at UTD. No off-campus coursework in the last semester is allowed.