B.S. in BIOMEDICAL ENGINEERING (2021 - 2022 Catalog)

Student _____ **UTD ID** _____

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	Integral Calculus or Calculus I	MATH 2414* or 2417*			
4		1,2,3	Calculus of Several Variables or 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	General Chemistry I	CHEM 1311*			
1		1	General Chemistry Laboratory I	CHEM 1111*			
3		1	General Chemistry II	CHEM 1312*			
3		1,5	Introductory Organic Chemistry for Engineers OR Organic Chemistry I + Lab **and** Organic Chemistry II + Lab	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*			
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MAJOR CORE REQUIREMENTS*

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	Statics	BMEN 2320*			
3		1	Linear Algebra for Engineers	ENGR 2300*			
	3	1	Advanced Engineering Math	ENGR 3300*			
	3	1	Probability Theory & Statistics for BMEN	BMEN 3341*			
	2	1	Biomedical Engineering Fundamentals and Design	BMEN 3200*			
	3	1	Signals and Systems	BMEN 3302*			
	3	1	Electrical & Electronic Circuits in BMEN	BMEN 3320*			
	2	1	Biomedical Circuits & Instrumentation Lab	BMEN 3220*			
	3	1	Cell and Molecular Engineering	BMEN 3331*			
	3	1	Quantitative Physiology for Engineers	BMEN 3332*			
	3	1	Thermodynamics & Physical Chemistry in BMEN	BMEN 3315*			
	3	1	Introductory Biomechanics	BMEN 3399*			
	3	1	Feedback Systems in Biomedical Engineering	BMEN 4310*			
	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	Major Prescribed Elective	BMEN 33XX/43XX*			
	3	1,2	Professional & Technical Communication	ECS 3390*			
10	55						

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			
3		4	Social Behavioral Science (Core: 080)	SOC 1301			
24							

ELECTIVES (0 Hours - Requires Approval from Advisor)

0		7	Freshmen Seminar	UNIV 1010			
0		8	Core Curriculum Assessment	UNIV 2020			
73	55		***Total Hours_____ 128 hours required for graduation. Must include 51 hours as Upper Division.****				

1. Major requirement. Must earn C- or better to receive credit. | 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 2324 -or- 2323/2123 and 2325/2125 to satisfy.

6. Incoming freshmen (FTIC) must enroll and complete requirements of UNIV 1010 and the corresponding school-related freshmen seminar course. 7. All students, including transfer students, who complete their core curriculum at UTD must take UNIV 2020.

* Included in Major GPA

***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 courses in the last semester allowed.