

B.S. in BIOMEDICAL ENGINEERING (2022 - 2023 Catalog)

Student _____ UTD ID _____

MAJOR PREPARATORY REQUIREMENTS*

LD	UD	NOTES	COURSE TITLE	COURSE #	GRADE	SEM	INFO
3		1,5	Math 2413 ² or Major Prescribed Elective	Math 2413 or BMEN 3/4XXX			
4		1,2,5	Integral Calculus or Calculus I	MATH 2414 or 2417			
4		1,2,5	Calculus of Several Variables or Calculus II	MATH 2415 or 2419			
4		1, 5	Differential Equations w/ Applications	MATH 2420			
3		1,2,5	Mechanics	PHYS 2325			
1		1,2,5	Physics Laboratory I	PHYS 2125			
3		1,2,5	Electromagnetism and Waves	PHYS 2326			
1		1,5	Physics Laboratory II	PHYS 2126			
3		1,5	General Chemistry I	CHEM 1311			
1		1,5	General Chemistry Laboratory I	CHEM 1111			
3		1,5	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		1,5	Intro to Modern Biology I	BIOL 2311			
1		1,5	Intro to Modern Biology Workshop I	BIOL 2111			
2		1,5	Introductory Biology Laboratory	BIOL 2281			
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MAJOR CORE REQUIREMENTS*

1		1,3,5	Introduction to Engineering and Computer Science	ECS 1100			
1		1,3,5	Introduction to Bioengineering I	BMEN 1100			
2		1,5	Introduction to Bioengineering II	BMEN 1208			
3		1,5	Introduction to Programming for Biomedical Engrs	BMEN 1300			
3		1,5	Statics	BMEN 2320			
3		1,5	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	1,2	Professional & Technical Communication	ECS 3390			
13	52						

REMAINING CORE CURRICULUM

3		1,5	Communication (Core: 010)	RHET 1302			
3		5	Government/ Political Science (Core: 070)	GOVT 2305			
3		5	Government/ Political Science (Core: 070)	GOVT 2306			
3		5	American History (Core: 060)	click to view options			
3		5	American History (Core: 060)	click to view options			
3		5	Language, Philosophy and Culture (Core: 040)	click to view options			
3		5	Creative Arts (Core: 050)	click to view options			
3		5	Social Behavioral Science (Core: 080)	click to view options			
24							

ELECTIVES (0 Hours)

0		3	Freshmen Seminar	UNIV 1010			
0		4	Core Curriculum Assessment	UNIV 2020			
76	52		Total Hours _____ 128 hours required for graduation. Must include 51 hours as Upper Division. ***				

N O T E S	1. Major requirement. Must earn C- or better to receive credit.	2. Course meets both Major and Core requirements.	* Included in Major GPA
	3. Incoming freshmen (FTIC) must enroll and complete requirements of UNIV 1010 and the corresponding school-related freshmen seminar course. Transfer students may be required to complete an additional upper level (3000 or 4000) BMEN course substitution.		
	4. All students, including transfer students, who complete their core curriculum at UTD must take UNIV 2020.		
	5. Most lower division (LD) coursework can be taken at a community college and transferred. See the online transfer plan for course equivalents.		
	***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.		