

Curriculum Plan for 7-yr BS/MD effective Class of 2027

Prematriculation credit for Calculus A (MAT 127), Calculus B (MAT 128), Physics 1 (PHY 201), and Physics 2 (PHY 202) required by AP credit or transfer

First Year

Fall

BME	251	Fundamentals of BME	1
BME	215	Probability and Statistics for BME	0.5
ENG	144	Fundamentals of Engineering	0.5
ENG	272	Advanced Engineering Math I	1
ENG	212	Circuit Analysis	1
FYS	16X	First Year Seminar	1
ENG	95	Introduction to Engineering	0
			5

Spring

BME	222	Introduction to Mechanics	1
BME	145	Introduction to BME	0.5
IDS	252	Society, Ethics and Technology	1
BIO	201	Foundations of Biological Inquiry	1
MAT	229	Multivariable Calculus	1
CSC	216	Comp Sci for Engineering - C++	1
			5.5

Summer

CHE 201- General Chemistry I & CHE 202 - General Chemistry II (if not meet with AP credit)

Second Year

BME	311	Physiological Systems	1
BME	313	Instrument/Measurements Lab	0.5
BME	343	Biomechanics	1
		Engineering Elective 3xx or 4xx	1
BIO	211	Cell Biology and Biochemistry	1
		College Core Elective	1
ENG	93	Engineering Seminar III	0
			5.5

BME	371	Physiological Systems II & lab	1
BME	323	Introduction to Biomaterials	1
ELC	321	Signals and Systems	1
BME	350	Biofluid Mechanics	1
		College Core Elective	1
ENG	94	Engineering Seminar IV	0
			5

Third Year

BME	495	Senior Project I	0.5
BME	473	Bioinstrumentation & lab	1
BME	450	Mass and Heat Biotransport	1
		Biomedical Engineering Elective	1
CHE	331	Organic Chemistry I	1
		College Core Elective	1
ENG	99	Senior Professional Seminar	0
			5.5

BME	496	Senior Project II	0.5
		Biomedical Engineering Elective	1
BME	480	Physiologic Modeling	1
		College Core Elective	1
CHE	332	Organic Chemistry II	1
			4.5