

Engineering Plus Biomedical + Pre-Medical Curriculum Course Plan (2018-19)

While many course plans are designed to fit in 4 years, we have intentionally designed this as a 5 year plan. Students should plan their schedules so that they can earn a recommending GPA (often ~3.5 and higher). In addition, this plan includes all of the recommended pre-medical curricula for an MD or DO program. Students should consult with the College of Health Sciences Advising Unit about applying for professional programs.

1st YEAR	FALL		SPRING	
	MATH 170: Calculus I (DLM)	4	MATH 175: Calculus II	4
	ENGL 101: Introduction to College Writing	3	UF 100: Intellectual Foundations*	3
	CHEM 111/111L: General Chemistry I & Lab	4	CHEM 112/112L General Chemistry II and Lab	4
	ENGR 120: Intro to Engineering (3 credits) or ENGR 130: Intro to Engineering Applications (4 credits) (FN)	3-4	ME 105 Mechanical Engineering Graphics*	3
	Semester Total	14-15	Semester Total	14

* We recommend taking one of these courses in the summer term to reduce maximum semester hours to 15.

2nd Year	FALL		SPRING	
	MATH 275: Multivariable and Vector Calculus	4	MATH 333: Diff Equations w/ Matrix Theory	4
	ENGL 102: College Writing and Research*	3	ENGR 210: Engineering Statics	3
	CS 117: C++ for Engineers (3 credits) or CS 121: Intro to CS (4 credits)	3-4	BIOL 191: Intro to Cell and Molecular Biology	4
	PHYS 211/211L: Physics I with Calculus and Lab	5	PHYS 212/212L: Physics II with Calculus and Lab	5
	Semester Total	15-16	Semester Total	16

3rd Year	FALL		SPRING	
	BIOL 192: Intro to the Diversity of Life & Lab	4	ENGR 280: Engineering Design I	3
	MATH 360: Engineering Statistics or MATH 361: Probability and Statistics I	3	CHEM 307 and 308 Organic Chemistry I and Lab	5
	MSE 245/245L: Introduction to Material Science Engineering	4	ME 112 Intro to Biomedical Engineering	1
	ENGR 220 Engineering Dynamics	3	UF 200: Civic & Ethical Foundations	3
			ME 271 Intro to Computation for Engineers	1
	Semester Total	14	Semester Total	13

4th Year	FALL		SPRING	
	<i>It is highly recommended that students allow time for an internship, research experience, or community service</i>			
	MSE 308 Thermodynamics of Materials	3	CHEM 350 Fundamentals of Biochemistry	3
	BIOLOGY 310 Genetics	3	ENGR 380: Engineering Design II (CID)	3
	CHEM 309 AND 310 Organic Chemistry II and Lab	5	BIOL 228 Human Anatomy and Physiology II and Lab	4
	BIOL 227 Human Anatomy and Physiology I and Lab	4	PSYC 101 (FS)	3
	Semester Total	15	Semester Total	13

See other side

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5 th Year	FALL		SPRING	
	<i>It is highly recommended that students allow time for an internship, research experience, or community service.</i>			
	ENGR 240: Electrical and Electronic Circuits or ECE 210: Introduction to Electrical Circuits I	3	ENGR 480: Engineering Design III (FF)	4
	MSE 488 Environmental Degradation of Materials	3	Visual and Performing Arts (E+ Pathway related choice) (FA)	3
	ME/MSE 477 Bio Materials	3	ME 356 Intro to Solid Biomechanics	3
	World Language (FH)	3-4	SOC 101 (FS)	3
	Semester Total	12-13	Semester Total	13

TOTAL PROGRAM CREDITS: **139-142**

Note: This degree plan demonstrates combining Biomedical Engineering with the pre-medical requirements to earn an Engineering, B.S. and pre-medical required courses recommended for medical school entry. Other engineering courses may be substituted to complete 45 engineering credits with a total of 40 upper division university-wide credits.