## SUGGESTED TIMETABLE BIOENGINEERING CLASS MATRICULATING IN 2019 AND FOLLOWING

### Freshman Year

Credits	Fall Semester [F]	Spring Semester [S]
6	MATH 101 or MATH 105	MATH 102 or MATH 106
	Single Variable Calculus I	Single Variable Calculus II
	PHYS 101 (or PHYS 125)	PHYS 102 (or PHYS 126)
	Mechanics with Laboratory	Electricity and Magnetism with Lab
8	CHEM 121 (with CHEM 123)	CHEM 122 (with CHEM 124)
	General Chemistry I with Lab	General Chemistry II with Lab
3	CAAM 210 [F, S]	
	Introduction to Engineering Computation	
3	FWIS [F,S]	
	First Year Writing Intensive Seminar	
6	Electives	Electives
34	Total credits for freshman year	

# **Sophomore Year**

Credits	Fall Semester [F]	Spring Semester [S]
6	MATH 211	MATH 212
	ODE's and Linear Algebra	Multivariable Calculus
6	CHEM 211	BIOE 391
	Organic Chemistry	Numerical Methods
7	BIOC 201	ELEC 243
	Introductory Biology	Introduction to Electronics
7	BIOE 252	BIOE 322
	Bioengineering Fundamentals	Systems Physiology
1		BIOE 320
		Systems Physiology Laboratory
1	BIOE 440 [F,S] or BIOE 439 [S] (BIOE 439 is the option for pre-meds)	
	Statistics for Bioengineers	
6	Electives	Electives
34	Total credits for sophomore year	

### SUGGESTED TIMETABLE BIOENGINEERING CLASS MATRICULATING IN 2016 AND FOLLOWING

#### Junior Year

Credits	Fall Semester [F]	Spring Semester [S]
6	BIOC 341 or BIOE 341	BIOE 330
	Cell Biology	Bioreaction Engineering
6	Mech 202 [F]	BIOE 372
	Mechanics/Statics	Biomechanics
6	BIOE 383	BIOE 332
	Biomedical Engineering Instrumentation	Thermodynamics
2	BIOE 385	BIOE 342
	Biomedical Eng. Instrumentation Lab.	Tissue Culture Laboratory
3	BIOE 370	
	Biomaterials	
9	Electives	Electives
32	Total credits for junior year	

#### **Senior Year**

Credits	Fall Semester [F]	Spring Semester [S]
2	Two of the following Advanced Bioengineering Labs:	
	BIOE 442 [F], BIOE 443 [F], BIOE 444 [F, S], BIOE 445 [F], BIOE 446 [S], BIOE 447 [F, S], BIOE 449 [F] (Note that different labs are offered in different years.	
7	BIOE 451	BIOE 452
	Bioengineering Design I	Bioengineering Design II
6	BIOE 420	BIOE technical elective
	Biosystems Transport and Reaction Processes	
6	BIOE technical elective	BIOE technical elective
10	Electives	Electives
31	Total credits for senior year	

NOTE: Premedical students need to take additional biology and organic chemistry courses to satisfy pre-medical requirements. Consult Health Professions Advising (https://oaa.rice.edu/specialized-advising/pre-health-professions) for details.