

## Biomolecular Track (13-14)

	✓	Freshman Year		✓	Sophomore Year	
<b>Fall</b>		BIOE 1100 – Intro to BIOE	<b>Fall</b>		CHEM 3331 & 3221 – Organic Chemistry I & Lab	
		BIOL 1361 & 1161 –Intro to Biological Science & Lab				*BIOE 2150 – Biosensors I
		CHEM 1331 & 1111 – Fund. of Chemistry & Lab				ENGL 1304 – First Year Writing II
		ENGL 1303– First Year Writing I				MATH 2433 – Calculus III
		MATH 1431 – Calculus I				PHYS 1322 – University Physics II
<b>Spring</b>		*ECE 1331 – Computers & Problem-Solving	<b>Spring</b>		CHEE 2331 – Chemical Processes	
		BIOL 1362 & 1162 – Intro to Biological Science & Lab				ECE 2300 & 2100 – Circuit Analysis & Lab
		CHEM 1332 & 1112 – Fund. of Chemistry & Lab				MATH 3321 – Engineering Math
		MATH 1432 – Calculus II				MECE 3400 – Intro to Mechanics
		PHYS 1321 – University Physics I				HIST 1377 – The US to 1877
		Junior Year			Senior Year	
<b>Fall</b>		Visual & Performing Arts Core	<b>Fall</b>		BIOE 4366 – Biomolecular Engineering Fund.	
		*BIOE 3340 – Quantitative Physiology				BIOE 5323 – Fund. of Tissue Engineering
		HIST 1378 – US History Since 1877				*BIOE 5455 – Bioanalytics
		ENGI 2304 – Technical Communication				*BIOE 4393 – Cellular & Biological Transport Phenom.
		INDE 2333 – Engineering Statistics				POLS 1337 – US Government
<b>Spring</b>		*BIOE 3440 – Biothermodynamics & Biofluids	<b>Spring</b>		*BIOE 5389 – Transport Phenom. In Physiological Syst.	
		*BIOE 3350 – Biosensors II				BIOE Technical Elective
		BIOE Technical Elective				*BIOE 4334 – Capstone Design
		BCHS 3304 – Biochemistry I				Social Science Core Course
		POLS 1336 – US & TX Constitutions				Humanities Core Course

### \*Course Substitutions:

Original Course	Course Substitution	Notes
ECE 1331 - Computers & Problem-Solving	BIOE 1331 - Computers & Problem-Solving	
BIOE 2150 – Biosensors I	BIOE 4197/4115 – Bioinstrumentation Lab	Fall Senior Year Course
BIOE 3340 – Quantitative Physiology	BIOE 3340 & 3140 – Quantitative Physiology & Lab	Beginning F14
BIOE 3440 – Biothermodynamics & Biofluids	BIOE 3341 – Biothermodynamics	Beginning F14
BIOE 3350 – Biosensors II	BIOE 4397/4315 – Bioinstrumentation	Fall Senior Year Course
BIOE 4393 – Cellular & Biological Transport Phenomena	BIOE 5397/5316 – Transport Phenomena Biosystems	
BIOE 5455 – Bioanalytics	BIOE 4397 & 4197 – Genomics and Proteomics & Lab	Beginning Sp14
BIOE 5389 – Transport Phenom. In Physiological Systems	BIOE 4397/6397 – Advanced Biofluid Dynamics	
BIOE 4334 – Capstone Design	BIOE 4336 – Capstone Design II	Beginning Sp 15