

# CULLEN COLLEGE OF ENGINEERING TECHNOLOGY DIVISION

## Bachelor of Science, Biotechnology

### Four-Year Academic Map 2025-2026

YEAR 1	Semester 1 Fall			Semester 2 Spring			Total
	ENGL 1301	First Year Writing I	3	ENGL 1302	First Year Writing II	3	
	MATH 2413	Calculus I	4	MATH 1342	Elem Statistical Methods	3	
	BIOL 1306/1106	Biology for Science Majors I	4	BIOL 1307/1107	Biology for Science Majors II	4	
	CHEM 1311/1111	General Chemistry I & Lab	4	CHEM 1312/1112	General Chemistry II & Lab	4	
				HIST 1301	U. S. to 1877	3	
	Semester Hours		15	Semester Hours		17	32

YEAR 2	Semester 1 Fall			Semester 2 Spring			Total
	BIOL 2321/2121	Microbiology Science Majors & Lab	4	BTEC 1322	Intro to Biotechnology	3	
	CHEM 2323/2123	Fund of Organic Chemistry & Lab	4	BCHS 3304	General Biochemistry	3	
	PHIL 1305	Introduction to Ethics	3	Core Course	Creative Arts	3	
	PHYS 1301	College Phys I	3	HIST 1302	U. S. since 1778	3	
	GOVT 2305	US Government	3	GOVT 2306	US & Texas Constitution & Politics	3	
	Semester Hours		17	Semester Hours		15	32

YEAR 3	Semester 1 Fall			Semester 2 Spring			Total
	*BTEC 2322	Introduction to Biopython	3	*BTEC 3301	Intro to Bioinformatics	3	
	*BTEC 3317	Biotech Regulatory Environment	3	*BTEC 3200	Biotech Research Methods & Apps	2	
	Core Course	Social & Behavioral Sciences	3	*BTEC 3302	Molecular Genetics & Biotech	3	
	Approved elective	See advisor	3	*BTEC 3321	Current Good Manufacturing Prac	3	
	*TLIM 3363	Technical Communication	3	*TLIM 3340	Organizational Leadership & Super	3	
	Semester Hours		15	Semester Hours		14	29

YEAR 4	Semester 1 Fall			Semester 2 Spring			Total	
	*BTEC 4249	Biotechnology Capstone I	2	*BTEC 4350	Biotechnology Capstone	3		
	*BTEC 4301/4101 or *BTEC 4300/4100	Prin of Bioprocessing & Lab <b>OR</b> Applied Bioinformatics & Lab	3	*BTEC 4319 or *ELET 4350	Microbial Biotechnology <b>OR</b> Computational Health Informatics	3		
	*BTEC 4320 or Approved elective	Intro to QA/QC in BTEC <b>OR</b> See advisor	3	*ELET 4356 or *CIS 2334	Information Visualization or Information Systems App	3		
				Approved elective	See advisor	3		
	Free Elective	Free Elective	3	Free Elective	Free Elective	3		
	Semester Hours			12	Semester Hours		15	27
								120

Courses in Bold are important prerequisites and should be taken as early as students are able.

\*Courses taught in Sugar Land

Students should meet with their academic advisor to formulate their own plan.