

Chemical and Biomolecular Engineering B.S. - 4 Year Degree Plan

2026-2027

Lamar University's **Bachelor of Science in Chemical Engineering** prepares you to apply the principles of chemistry, biology, physics and math to solve problems that involve the production or use of chemicals, fuel, drugs, food and many other products. Chemical engineers design processes and equipment for large-scale manufacturing, plan and test production methods and byproducts treatment and direct facility operations. – Contact UAC at advising@lamar.edu, 409-880-8822, lamar.edu/findadvisor

NOTE: Degree plans may change over a four-year period. This may not be the most current list of course requirements for your program. It is always advised that you check Degree Audit in Banner Self-Serv or your advisor for the most up-to-date degree requirements and to track your progress toward a degree.

FIRST YEAR	Fall		Hours	Grade	Spring		Hours	Grade
	MATH 2413	Calculus and Analytical Geometry I	4	_____	MATH 2414	Calculus and Analytical Geometry II	4	_____
	Communication		3	_____	CHEM 1312 and CHEM 1112	General Chemistry II and General Chemistry II Laboratory	4	_____
	CHEM 1311 and CHEM 1111	General Chemistry I and General Chemistry I Laboratory	4	_____	PHYS 2425	University Physics I	4	_____
	CHEN 1301	Introduction to Chemical Engineering	3	_____	ENGL 1301	Composition I	3	_____
	HIST 1301	U.S. History I 1763-1877	3	_____				_____
	Hours	17	_____		Hours	15	_____	
SECOND YEAR	Fall		Hours	Grade	Spring		Hours	Grade
	MATH 2415	Calculus III	4	_____	CHEM 3401	Quantitative Analysis	4	_____
	PHYS 2426	University Physics II	4	_____	MATH 2320	Ordinary Differential Equations	3	_____
	CHEM 3311 and CHEM 3111	Organic Chemistry I and Organic Chemistry I Lab	4	_____	PHIL 2306 or PHIL 1370	Ethics or Philosophy of Knowledge	3	_____
	CHEN 2140	Professional Seminar	1	_____	CHEN 3340	Process Analysis	3	_____
	CHEN 2300	Chemical Engineering Applied Mathematics	3	_____	CHEN 2374	Thermodynamics I	3	_____
	Hours	16	_____		Hours	16	_____	
THIRD YEAR	Fall		Hours	Grade	Spring		Hours	Grade
	CHEN 3330	Thermodynamics II	3	_____	CHEN 3320	Heat Transfer	3	_____
	CHEN 3311	Momentum Transfer	3	_____	CHEN 4410	Reaction Kinetics	4	_____
	POLS 2301	Intro to American Government I	3	_____	POLS 2302	Intro/American Government II	3	_____
	INEN 2373	Engineering Economics	3	_____	Technical Elective		3	_____
	MATH 3370	Introduction to the Theory of Statistical Inference	3	_____	HIST 1302	U.S. History II Since 1877	3	_____
	Technical Elective	3	_____				_____	
	Hours	18	_____		Hours	16	_____	

FOURTH YEAR	Fall		Hours	Grade	Spring		Hours	Grade
	CHEN 4331	Process Control I	3	_____	CHEN 4332	Process Control II	3	_____
	CHEN 4320	Mass Transfer	3	_____	CHEN 4150	Process Control Laboratory	1	_____
	CHEN 4310	Laboratory I	3	_____	CHEN 4340	Plant Design II	3	_____
	CHEN 4360	Plant Design I	3	_____	CHEN 4350	Advanced Analysis	3	_____
	Technical Elective		3	_____	Creative Art Core		3	_____
				_____	Technical Elective		3	_____
	Hours		15	_____	Hours		16	_____

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