



College Of Engineering Chemical Engineering Study Plan

139 Total Credit Hours
Spring, 2026

Freshman			Sophomore			Junior			Senior			
First Semester 18H			First Semester 17H			First Semester 16H			First Semester 17H			
3H	COMM 1321: Oral Comm.	← IELTS/APTIS	COMM 1322	→	3H	COMM 2321: Tech. & Prof. Comm.	2H	ASSE 3211: Learning Outcome Asse. II	← ASSE 2111 & Junior Level	CHEN 3394 CHEN 3322	→ 4H	CHEN 4493: Reaction Engineering
2H	UNIV 1211: Prof. Devt & Competences	← PRPC/PRPW/PREE 0061 or equi	UNIV 1212	→	2H	UNIV 1213: Leadership & Teamwork	3H	GEEN 3311: Intro. to Fluid Mechanics	← GEEN 2313	CHEN 3494 CHEN 3333	→ 4H	CHEN 4492: Process Control
4H	MATH 1422: Calculus I	← PRPM 0022	MATH 1423	→	3H	MATH 1324: Calculus III	3H	GEEN 3314: Electrical Circuits & Electronics	← PHYS 1422 & Junior level Standing (> 60 Cr)	CHEN 3494 CHEN 3333	→ 3H	CHEN 4320: Process Simulation
4H	CHEM 1421: Chemistry For Engineers 1	← PRPM 0022	CHEM 1421	→	3H	CHEN 2391: Organic Chemistry	2H	UNIV 2221 Future Skills	← UNIV 1221	CHEN 3494 CHEN 3322	→ 3H	CHEN 4396: Chem. Eng. Senior Design I
4H	PHYS 1421: Physics for Engineers I	← PRPM 0022	MATH 1423 GEEN 1211	→	2H	GEEN 2211: Eng. Computing	3H	CHEN 3313: Biology	← CHEN 2391	Select from list.	→ 3H	CHEN XXXX: Chemical Technical Elective I
1H	PHED 1111: Active Living Lifestyle	← PRPC/PRPW/PREE 0061 or equiv	Sophomore Standing	→	1H	ASSE 2111: Learning Outcome Assmt. I	3H	CHEN 3315: Physical Chemistry	← CHEM 1422			
			MATH 1422 PHYS 1421	→	3H	CHEN 2311: Principles of Chemical Engineering						

Second Semester 18H			Second Semester 18H			Second Semester 17H			Second Semester 15H					
2H	ISLM 1221: Islamic Cul., Val. & Soci.		CHEM 1421	→	3H	CHEN 2312: Materials Engineering	4H	CHEN 3494: Separation Process	←	GEEN 3311 CHEN 3315 CHEN 2311	UNIV 2221	→	2H	UNIV 2222 Systems Thinking for Future Innovations
3H	COMM 1322: Written Comm.	←	COMM 1321		3H	GEEN 2313: Thermodynamics I	3H	CHEN 3333: Heat Transfer	←	GEEN 3311	CHEN 4320	→	4H	CHEN 4422: Plant Design
2H	GEEN 1211: Intro. to Engineering	←	PRPM 0022		3H	MATH 2332: Differential Equations	3H	CHEN 3343: Probability & Statistics	←	MATH 1324	CHEN 4396	→	3H	CHEN 4397: Chem. Eng. Senior Design I
2H	UNIV 1212: Critical Thinking & Prob. Solving	←	UNIV 1211		4H	PHYS 1422: Physics for Engineers II	3H	CHEN 3322: Thermodynamics II	←	CHEN 3315 GEEN 3311	CHEN 4396	→	3H	GEEN 4311: Engineering Economy
4H	MATH 1423: Calculus II	←	MATH 1422		3H	COMM 2322: Writing & Research	1H	CHEN 3111: Thermofluids & Energy Lab	←	GEEN 3311 CHEN 3333	Select from list.	→	3H	CHEN XXXX: Chemical Technical Elective I
4H	CHEM 1422: Chem. for Engineers II	←	CHEM 1421		UNIV 1211	→	2H	UNIV 1221: Generative AI Prompt Eng. Basics						
1H	PHED 1112: Healthy Behaviors & Mgmt	←	PHED 1111						←	Select one from list				

Summer Semester 3H

3H CHEN 3301: Internship

End of Junior Year or 90 Cr. Hours

How to read study plan:

The dotted-lined square indicates a pre-requisite class

Social Science Elective: Choose one - BSTW 1311 Behavioral Sciences in 3D World, GEGR 1311 World Regional Geography, SERV 1311 Introduction to Service Learning and Volunteering,

FURS 1311 Introduction to Futures Skills, FUTR 1311 Introduction to Futures Studies, PSYC 1311 Introduction to Psychology, FREN 1311 Introduction to French Language,

HIST 1311 World Civilizations, SPAN 1311 Introduction to Spanish Language, SUST 1311 Introduction to Sustainability, SYST 1311 Introduction to Systems Thinking

CHEN Technical Electives: CHEN 4312 Polymer Engineering, CHEN 4315 Catalysis, CHEN 4332 Refinery Engineering, CHEN 4351 Environmental Engineering,

CHEN 4352 Petrochemical Technology, CHEN 4355 Quality Control, CHEN 4360 Plant Safety Engineering

- (Pre-requisites) CHEN 3494: Separation Process; CHEN 3333: Heat Transfer

CHEN 4344 Corrosion Engineering - (Pre-requisite) CHEN 2312: Material Engineering; CHEN 3333: Heat Transfer