

ACADEMIC PLAN

Fall / 2025

PROGRAM : Undergraduate
DEGREE: Bachelor of Engineering
CURRICULUM: Chemical Engineering
COLLEGE: Engineering

Faculty Core Requirements [8-8 Courses / 20 Cr.]	CLASSIFICATION	COURSE	COURSE NAME	COURSE Cr.	Minimum Grade	Required
	FACULTY CORE REQUIREMENTS [8 Course(s)/20Cr.]	CSC 200	Introduction to Computer & Software Tools	3.000	D	N
		CSC 201	Computer Programming I - C++	3.000	D	N
		LAW 230	Law & Ethics for Engineers	3.000	D	N
		MGT 225	Engineering Economics & Financial Management	3.000	D	N
		PHY 200	Engineering Mechanics - Dynamics	3.000	D	N
		PHY 202	General Physics LAB	1.000	D	N
		PHY 204	Electric Circuits	3.000	D	N
		PHY 205	Electric Circuits LAB	1.000	D	N
General Education University Requirement [6-6 Courses / 18 Cr.]	CLASSIFICATION	COURSE	COURSE NAME	COURSE Cr.	Minimum Grade	Required
	Business & Management [1 Course(s)/3Cr.]	MGT 223	Project Management for Engineers	3.000	D	N
	Citizenship and Social Responsibility [1 Course(s)/3Cr.]	LAW 210	Fighting Corruption	3.000	D	N
	Computer Literacy [1 Course(s)/3Cr.]	MIS 210	Computer Skills for Business	3.000	D	N
	Job Readiness [1 Course(s)/3Cr.]	HRM 245	Work Ready Now	3.000	D	N
	Language & Communication [1 Course(s)/3Cr.]	EGN 216	Communication and Scientific Cultures	3.000	D	N
		ENG 200	Writing Skills	3.000	D	N
	Religious Diversity [1 Course(s)/3Cr.]	ESC 205	Judaïsme, Christianité et Islam	3.000	D	N
		ESC 225	Enseignement Social de l'Eglise	3.000	D	N
Major Core Requirements [26-26 Courses / 62 Cr.]	CLASSIFICATION	COURSE	COURSE NAME	COURSE Cr.	Minimum Grade	Required
	Major Core Requirements [26 Course(s)/62Cr.]	CME 200	Introduction to Chemical Engineering	2.000	D	Y
		CME 301	Materials Sciences	3.000	C	Y
		CME 302	Principles of Chemical and Biofood Engineering	3.000	C	Y

Major Core Requirements [26-26 Courses / 62 Cr.]	Major Core Requirements [26 Course(s)/62Cr.]	CME 303	Physical Chemistry - Spectroscopy	3.000	C	Y
		CME 334	Chemical Eng Kinetic&Reactor Design	3.000	C	Y
		CME 399	Work Experience:Technical Internship CME	0.000	C	Y
		CME 400	Chemical Engineering Thermodynamics	3.000	C	Y
		CME 402	Safety and Environment in Chemical Industry	3.000	C	Y
		CME 410	Fluid Mechanics	3.000	C	Y
		CME 420	Mass Transfer in Chemical Engineering	3.000	C	Y
		CME 440	Energy and Heat Transfer	3.000	C	Y
		CME 441	Fluid and Thermal LAB	1.000	C	Y
		CME 499	Internship I for Chemical Engineering	0.000	C	Y
		CME 502	Process Engineering LAB	1.000	C	Y
		CME 510	Unit Operations in Chemical Engineering I	3.000	C	Y
		CME 511	Unit Operations in Chemical Engineering I Lab	1.000	C	Y
		CME 520	Separative and Spectroscopic Analysis	3.000	C	Y
		CME 530	Chemical Reaction Engeneering	3.000	C	Y
		CME 540	Formulation Chemistry I	3.000	C	Y
		CME 548	Process Simulation LAB	1.000	C	Y
		CME 550	Process Design and Control	3.000	C	Y
		CME 561	Introduction to petroleum Engineering	3.000	C	Y
		CME 698	Final Year project for Chemical engineering	3.000	C	Y
		CME 699	Internship II for Chemical Engineering	2.000	C	Y
		CTE 444	Engineering graphing and Software Applications	3.000	C	Y
		MCE 408	Linear Control Systems for Chemical Engineering	3.000	C	Y
Science and Math Requirements [15-15 Courses / 39 Cr.]	CLASSIFICATION	COURSE	COURSE NAME	COURSE Cr.	Minimum Grade	Required
	Science and Math Requirements [15 Course(s)/39Cr.]	CHM 200	General Chemistry I	3.000	D	N
		CHM 201	General Chemistry I LAB	1.000	D	N
		CHM 202	General Chemistry II	3.000	D	N

Science and Math Requirements [15-15 Courses / 39 Cr.]	Science and Math Requirements [15 Course(s)/39Cr.]	CHM 300	Organic Chemistry	3.000	D	N
		CHM 301	Organic Chemistry LAB	1.000	D	N
		CHM 403	Applied Organic Chemistry	3.000	D	N
		CHM 404	Applied Organic Chemistry LAB	1.000	D	N
		MAT 201	Calculus for Engineers I	3.000	D	N
		MAT 202	Algebra for Engineers I	3.000	D	N
		MAT 211	Calculus for Engineers II	3.000	D	N
		MAT 212	Algebra for Engineers II	3.000	D	N
		MAT 302	Probability and Statistics for engineers	3.000	D	N
		MAT 321	Calculus for Engineers III	3.000	D	N
		MAT 331	Numerical Analysis	3.000	D	N
		PHY 340	Thermodynamics	3.000	D	N
Technical Electives [6-6 Courses / 16 Cr.]	CLASSIFICATION	COURSE	COURSE NAME	COURSE Cr.	Minimum Grade	Required
	Technical Electives [6 Course(s)/16Cr.]	CME 501	Polymer Science	3.000	C	N
		CME 545	Formulation Chemistry II	3.000	C	N
		CME 560	Catalytic Processes	3.000	C	N
		CME 562	Reservoir Engineering	3.000	C	N
		CME 563	Petroleum Refining Techniques	3.000	C	N
		CME 564	Purification of Petroleum Products	3.000	C	N
		CME 565	Quality, hygiene and safety LAB	1.000	C	N
		CME 566	Petroleum Characterization Lab	1.000	C	N
		CME 571	Analysis of Petroleum Products LAB	1.000	C	N
		CME 572	Introduction to Petroleum Geology	3.000	C	N
		CME 573	Industrial Engineering	3.000	C	N
		CME 575	Process Design for Pollution Control	3.000	C	N
		CME 576	Water and Waste Treatment	3.000	C	N
		CME 577	Midstream Oil and Gas Fundamentals	3.000	C	N
		CME 578	Modeling for process industry	3.000	C	N

Technical Electives [6-6 Courses / 16 Cr.]	Technical Electives [6 Course(s)/16Cr.]	CME 579	Organic Chemistry in Drug Design	3.000	C	N
		CME 580	Reservoir Characterization and simulation	3.000	C	N
		CME 581	Chemistry and Environment	3.000	C	N
		CME 582	Drinking Water and Wastewater Systems	3.000	C	N
		CME 583	Analytical Chemistry in Cosmetics Industry	3.000	C	N
		CME 584	Fluid Rheology	3.000	C	N
		CME 586	Industrial air and water pollution	3.000	C	N
		CME 587	Conversion of Petroleum Products	3.000	C	N
		CME 599	Industrial visit for Chemical Engineering	1.000	C	N