

Four Years Curriculum (Total: 140 credits)

Year One

First Semester

Course Code	Course Title	Credit
CHEM 100	Introduction to Chemistry I	3
ISLM 101	Islamic Cultural Studies	3
ENGL 101	English Communication Skills I	3
MATH 112	Introduction to Calculus I	3
PHYS 100	Introduction to Physics I	3

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Second Semester

Course Code	Course Title	Credit
CHEM 102	Introduction to Chemistry II	3
CSIS 206	Principles of Programming	3
ENGL 102	English Communication Skills II	3
GENG 101	Introduction to the Engineering Discipline and Ethics	1
MATH 113	Introduction to Calculus II	3
PHYS 102	Introduction to Physics II	3

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Year Two

Third Semester

Course Code	Course Title	Credit
CHEM 202	Basic Chemistry	3
CHEM 203	Basic Chemistry Laboratory	1
CHEN 212	Chemical Engineering I	3
CHEN 215	Materials Science and Engineering	3
ENGL 203	English Communication Skills III	3
MATH 200	Calculus	3
MECH 232	Thermodynamics	3

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Fourth Semester

Course Code	Course Title	Credit
CHEM 242	Organic Chemistry I	3
CHEN 206	Instrumentation Lab and Research Methods	1
CHEN 312	Mass Transfer	3
CHEN 377	Chemical Engineering Thermodynamics II	3
MATH 211	Applied Linear Algebra	3
MATH 270	Applied Differential Equations	3
OR		
MATH 230	Numerical Analysis I	3
MECH 243	Fluids Mechanics	3

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Year Three**Fifth Semester**

Course Code	Course Title	Credit
CHEM 244	Organic Chemistry II	3
CHEM 245	Organic Chemistry Lab I	1
CHEM 262	Physical & Chemical Kinetics	3
CHEN 222	Process simulation and Modeling	1
CHEN 325	Chemical Reactions and Reactor Design	3
SOCL 201	UAE Studies	3
ENGL 204	Language, Society and Culture	3
LISP 200	Library Use and Research methods	1

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Sixth Semester

Course Code	Course Title	Credit
CHEN 303	Unit Operations	3
CHEN 324	Petroleum Engineering Lab	1
CHEN 333	Food Chemistry and Technology Principles	3
CHEN 357	Gas Engineering	3
ENTR 201	Entrepreneurship and Innovation	3
GENG 311	Engineering Management & Economics	3
MATH 240	Probability and Statistics	3

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Summer 3rd year

Course Code	Course Title	Credit
GENG380	Field Training	0

Year Four**Seventh Semester**

Course Code	Course Title	Credit
CHEN 327	Chemical Engineering Lab I	1
CHEN 336	Separation Processes	3
CHEN 322	Petroleum Refinery Engineering	3
CHEN 369	Continuous-Time Process Control Systems	3
CHEN 370	Process-Modeling and Control Lab	1
GENG 390	Fundamentals of Engineering Project Design	2
MECH 321	Heat Transfer	3

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Eighth Semester

Course Code	Course Title	Credit
CHEN 323	Plant and Environmental Safety	3
CHEN 328	Chemical Engineering Lab II	1
CHEN 380	Chemical Process Synthesis and Design	3
CHEN 398	Advanced Chemical Reactor Design	3
CHEN 399	Advanced Transport Phenomena	3
GENG 391	Capstone Design Project	2
CHEN 397	Industrial Catalytic Processes	3

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