

### Chemical Engineering plan with pre-requisite

Level	Course Code	Course Title	Required or Elective	* Pre-Requisite Courses	Credit Hours
<b>Level 1</b>	101CSC-3	Introduction to computer	Required	-----	3
	101SLM-2	Islamic Culture I	Required	-----	2
	101ENG-6	English 1	Required	-----	6
	101MATH-3	General Mathematics	Required	-----	3
<b>Level 2</b>	102SLM-2	Islamic Culture II	Required	-----	2
	102ENG-6	English 2	Required	101ENG-6	6
	101PHYS-4	General Physics	Required	-----	4
	211MATH-3	Calculus (1)	Required	101MATH-3	3
<b>Level 3</b>	101ARB-2	Arabic Language Skills	Required	-----	2
	CHEM106-4	General Chemistry	Required	-----	4
	MATH228-3	Calculus 2	Required	211MATH-3	3
	PHYS203-3	Physics 2	Required	101PHYS-4	3
	ME131-2	Engineering Drawing	Required	-----	2
	EE111-3	Fundamentals of Electrical Engineering	Required	101PHYS-4	3
<b>Level 4</b>	103SLM-2	Islamic Culture III	Required	-----	2
	CHEM206-3	Chemistry 2	Required	CHEM106-4	3
	MATH319-3	Calculus (3)	Required	MATH228-3	3
	ME132-3	Engineering Design	Required	ME131-2	3
	EngM137-2	Engineering Mechanics	Required	101PHYS-4	2
	CHE111-2	Physical Chemistry	Required	CHEM106-4	2
	CHE112-3	Organic Chemistry	Required	CHEM106-4	3
	102ARB-2	Arabic Writing	Required	-----	2

<b>Level 5</b>	CSC222-3	Programming Language	Required	101CSC-3	3
	MATH336-3	Differential Equations	Required	MATH319-3	3
	ME251-3	Production Engineering & Workshop	Required	ME131-2	3
	CHE213-3	Introduction to Chemical Engineering	Required	CHE111-2	3
	CHE231-3	Momentum Transfer	Required	MATH319-3	3
<b>Level 6</b>	104SLM-2	Islamic Culture IV	Required	-----	2
	STAT 354-3	Statistics & Probability	Required	211MATH-3	3
	CHE214-4	Chemical Industries	Required	CHE112-3	4
	CHE215-3	Material Science	Required	ME251-3	3
	CHE216-3	Chemical Engineering Thermodynamics 1	Required	CHE213-3	3
	CHE232-3	Heat Transfer	Required	CHE231-3	3
<b>Level 7</b>	ENG 357-3	<b>Technical Writing</b>	Required	102ENG-6	3
	IE346-2	Engineering Economy	Required	MATH228-3	2
	CHE317-3	Safety in Chemical Processes Industries	Required	CHE215-3	3
	CHE318-3	Chemical Engineering Thermodynamics 2	Required	CHE216-3	3
	CHE333-4	Mass Transfer	Required	CHE232-3	4
	CHE341-3	Computer Applications	Required	CSC222-3	3
<b>Level 8</b>	MATH410-3	<b>Numerical Methods</b>	Require	MATH228-3 CSC222-3	3
	CHE334-3	Chemical Engineering Laboratory	Required	CHE232-3	3
	CHE335-3	Separation Process	Required	CHE333-4	3
	CHE342-3	Modeling and Simulation	Required	CHE341-3	3
	CHE351-3	Kinetics and Reactor Design	Required	CHE318-3	3
	CHE496-2	Summer Training	Required	ENG357-3 Department Approval	2
	CHE443-3	Process Control	Required	CHE342-3	3

<b>Level 9</b>	CHE461-2	<b>Environmental Engineering</b>	Required	CHEM206-3	2
	CHE462-3	<b>Corrosion Engineering</b>	Required	EE111-3	3
	CHE491-3	Elective Course (1)	Elective	According to each course	3
	CHE498-1	Senior Design Project (1)	Required	ENG357-3 CHE317-3 CHE318-3 CHE333-4 CHE341-3	1
<b>Level 10</b>	CHE452-3	Plant Design and Economics	Required	CHE351-3	3
	CHE471-4	<b>Petrochemical Engineering</b>	Required	CHE334-3 CHE335-3	4
	CHE492-2	Elective Course (2)	Elective	According to each course	2
	CHE 493-2	Elective Course (3)	Elective	According to each course	2
	CHE499-3	Senior Design Project (2)	Required	CHE498-1	3
	Total				160

