

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



Proposed Study Plan

For

The Chemical Engineering Department

College of Engineering

King Khalid University

1440/1439

Courses distribution and credit hours over the program academic levels

First Level

Course Code	Course Title	Credit Hours				Prerequisites
		Lectures	Lab/ Tutorials	Total	Contact	
011-ENG-6	Intensive English Program-1	-	6	6	12	--
107-CHEM-4	General Chemistry	3	1	4	5	--
119-MATH-3	Differentiation & Integration -1	3	-	3	3	--
111-IC1-2	The Entrance to the Islamic Culture	2	-	2	2	--
201-ARAB-2	Language Skills	2	-	2	2	--
Total Number of Hours		10	7	17	24	
Second Level						
012-ENG-6	Intensive English Program-2	-	6	6	12	011-ENG-6
104-CS-2	Computer Science	1	1	2	3	--
219-MATH-3	Differentiation & Integration -2	3	-	3	3	119-MATH-3
129-PHYS-4	Physics-1	3	1	4	5	--
112-IC1-2	Islamic Culture-2	2	-	2	2	--
Total Number of Hours		9	8	17	25	
Third Level						
111-GE-3	Engineering Drawing	-	3	3	6	--
211-CHEM-3	Organic Chemistry	3	-	3	3	107-CHEM-4
211-GE-2	Learning Skills	2	-	2	2	--
202-ARAB-2	Arabic Writing	2	-	2	2	--
329-MATH-3	Linear Algebra	3	-	3	3	--
211-CHE-3	Chemical Engineering Principles-1	2	1	3	4	--
Total Number of Hours		12	4	16	20	107-CHEM-4
Fourth Level						
221-CHE-3	Chemical Engineering Principles-2	2	1	3	4	211-CHE-3
218-ME-3	Static and Dynamic	2	1	3	4	329-MATH-3
113-ICI-2	Islamic Culture-3	2	-	2	2	--
221-GE-2	Creativity and Innovation	2	-	2	2	--
231-CHEM-2	Physical Chemistry	2	1	3	4	107-CHEM-4
XXX	Free Course	3	-	3	3	--
Total Number of Hours		13	3	16	19	
Fifth Level						
319-MATH-3	Differential Equations	3	-	3	3	219-MATH-3

311-CHE-3	Chemical Engineering Thermodynamics-1	2	1	3	4	231-CHEM-3, 211-CHE-3
312-CHE-3	Fluid Mechanics	2	1	3	4	221-CHE-3
114-ICI-2	Islamic Culture-4	2	-	2	2	--
313-CHE-3	Mass Transfer-1	2	1	3	4	221-CHE-3
314-CHE-2	Chemical Process Technology	2	-	2	2	--
Total Number of Hours		13	3	16	19	
Sixth Level						
321- ENG -2	Technical Report Writing	2	-	2	2	012-ENG-6
321-CHE-3	Chemical Engineering Thermodynamics-2	2	1	3	4	311-CHE-3
322-CHE-3	Mass Transfer-2	2	1	3	4	313-CHE-3
323-CHE-3	Particle Technology	2	1	3	4	312-CHE-3
324-CHE-3	Chemical Reactions Engineering-1	2	1	3	4	311-CHE-3
325-CHE-3	Heat Transfer	2	1	3	4	221-CHE-3
Total Number of Hours		12	5	17	22	
400-CHE-0	Summer Training	0	0	0	0	Completion of 95 Cr. Hrs.
Seventh Level						
242-CHEM-3	Quantitative Analytical Chemistry	2	1	3	4	--
419-MATH-3	Numerical Analysis	3	-	3	3	319-MATH-3
411-CHE-3	Materials Science and Engineering	2	1	3	4	--
412-CHE-3	Separation Processes	2	1	3	4	313-CHE-3
411-GE-2	Professional Ethics and Practice	2	-	2	2	--
329-STAT-2	Principles of Statistics and Probabilities	2	-	2	2	--
Total Number of Hours		13	3	16	19	
Eighth Level						
421-CHE-3	Plant Design and Economics	2	1	3	4	322-CHE-3, 325-CHE-3
422-CHE-2	Reactors Design	2	-	2	2	311-CHE-3, 324-CHE-3
423-CHE-3	Modeling & Simulation	2	1	3	3	419-MATH-3, 322-CHE-3 , 325-CHE-3
424-CHE-3	Industrial Pollution Control	2	1	3	4	--
425-CHE-3	Industrial Safety and Occupational Health	2	1	3	4	--
Total Number of Hours		10	4	14	17	
Ninth Level						

511-GE-2	Entrepreneurship and Venture Engineering	2	-	2	2	--
511-CHE-3	Chemical Process Control	2	1	3	4	423-CHE-3
512-CHE-2	Computer Applications in Chemical Engineering	2	1	3	4	423-CHE-3
513-CHE-2	Graduation Project -1	2	-	2	2	Passing 119 Cr Hrs
514-CHE-3	Chemical Engineering Elective in Energy and Environment	3	-	3	3	--
Total Number of Hours		11	2	13	15	
Tenth Level						
521-CHE-2	Graduation Project -2	2	-	2	2	513-CHE-2
411-IE-2	Engineering Management	2	-	2	2	--
522-CHE-3	Chemical Engineering Elective in Chemical and Petrochemical Industries	3	-	3	3	--
523-CHE-3	Chemical Engineering Elective in Bioengineering	3	-	3	3	--
XXX	Free Course	2	-	2	2	--
Total Number of Hours		12	0	12	12	