

DIPLOMA PROGRAM
CHEMICAL TECHNOLOGY
2014-2015

UNIVERSITY OF NIZWA									
DIPLOMA IN CHEMICAL ENGINEERING									
C – Credit Hours, L – Credit Lecture, P – Credit Practical									
First semester					Second Semester				
CODE	COURSE	C	L	P	CODE	COURSE	C	L	P
Fall Semester					Spring Semester				
ARAB100	Arabic Language I	3	3	0	PHYS101/L	General Physics I	4	3	1
ENGL150	English Language I	3	3	0	ENGL152	English Language II	3	3	0
MATH 116	Pre-Calculus	4	4	0	COMP101/L	Computer Skills	3	2	1
ENGN103	Engineering Drawing	2	0	2	ENGL155	Communication Skill	3	3	0
CHEM107/L	Fundamental Chemistry	4	3	1	MATH 211	Calculus I	4	3	1
		16	13	3			17	14	3
Fall Semester					Spring Semester				
CODE	COURSE	C	L	P	CODE	COURSE	C	L	P
ENGN101	Introduction to Engineering	2	2	0	ARAB101	Arabic Language II	3	3	0
CHPE202	Fundamental of Chemical Engineering I	3	3	0	HIST 150	Islamic Civilization	3	3	0
CHPE207	Fluid Mechanics	3	3	0	CHPE204	Fundamental of Chemical Engineering II	3	3	0
CHPE208	Chemical Engineering Thermodynamics	3	3	0	CHEM265	Organic Chemistry I	4	3	0
CHEM257	Physical Chemistry for Engineering	3	2	1	CHPE305	Mass Transfer	3	3	0
					CHPE307	Fluid Laboratory	1	0	1
		14	13	1			17	15	1
Fall Semester					Spring Semester				
CODE	COURSE	C	L	P	CODE	COURSE	C	L	P
CHPE301	Principle of Heat transfer	3	3	0	CHPE309	Heat Laboratory	1	0	1
CHPE303	Kinetics and Reactor Design	3	3	0	CHPE415	Chemical Process Simulation	3	1	2
CHPE306	Chemical Process Industries	3	3	0	CHPE407	Unit Operation Laboratory II	2	0	2
CHPE401	Separation Processes I	3	3	0	CHPE408	Petroleum Refining and Petrochemicals	3	3	0
CHPE405	Unit Operation Laboratory I	1	0	1	CHPE409	Industrial Safety and pollution Control	2	0	2
		13	12	1			11	4	7
Total No of Credits							88		

Curriculum for Diploma in Chemical and Petrochemical Engineering

Minimum number of credits for graduation in this Diploma plan = 88				
No.	Course code	Course	Credit	Pre-requisite
University requirements = 21 Credits				
1	ARAB100	Arabic Language-I	3(3+0)	None
2	ARAB101	Arabic Language-II	3(3+0)	ARAB100
3	COMP101/L	Computer Skill	3(2+1)	Comp-A, Comp-B (Digital Literacy)
4	ENGL150	English Language-I	3(3+0)	None
5	ENGL152	English Language-II	3(3+0)	ENGL150
6	ENGL155	Communication Skill	3(3+0)	ENGL152
7	HIST150	Islamic Civilization	3(3+0)	None
College requirements = 12 Credits				
1	ENGN101	Introduction to Engineering	2(2+0)	MATH116
2	ENGN103	Engineering Drawing	2(1+1)	None
3	MATH116	Pre-Calculus	4(4+0)	None
4	MATH211	Calculus-I	4(3+1)	MATH116
Department Requirement: Core Course= 55 Credits				
1	CHEM107/ L	Fundamental of Chemistry	4 (4+0)	--
2	CHEM257/ L	Physical Chemistry for Engineering	3 (3+0)	CHEM107/L
3	PHYS101/L	General Physics-I	4 (3+1)	MATH116
4	CHPE202	Fundamental of Chemical Engineering I	3 (3+0)	CHEM107/L, MATH211
5	CHPE204	Fundamental of Chemical Engineering II	3 (3+0)	CHPE202, CHEM257/L
6	CHPE207	Fluid Mechanics	3 (3+0)	MATH211
7	CHPE208	Chemical Engineering Thermodynamics	3 (3+0)	CHEM257/L, MATH211
8	CHEM265	Organic Chemistry I	4 (4+0)	CHEM107/L
9	CHPE301	Principle of Heat transfer	3 (3+0)	CHPE204, Co, CHPE208
10	CHPE305	Mass Transfer	3 (3+0)	CHPE207

11	CHPE306	Chemical Process Industries	3 (3+0)	CHPE204, CHEM265
12	CHPE307	Fluid Laboratory	1(0+1)	CHPE207
13	CHPE309	Heat Laboratory	1(0+1)	CHPE301
14	CHPE303	Kinetics and Reactor Design	3 (3+0)	CHPE202, CHPE208
15	CHPE401	Separation Processes I	3 (3+0)	CHPE301, CHPE305
16	CHPE415	Chemical Process Simulation	3 (1+2)	CHPE306, CHPE401
17	CHPE405	Unit Operation Laboratory I	1(0+1)	CHPE303
18	CHPE407	Unit Operation Laboratory II	2(0+2)	CHPE401, Co- CHPE402
19	CHPE408	Petroleum Refining and Petrochemicals	3 (3+0)	CHEM265, CHPE401, CHPE303
20	CHPE111	Industrial Training	2(0+2)	Completing 60 credit hours