Department : Chemical Eng Tech

**Program: Refinery Operating Technology** 

Major	Core	Courses (42 Cre	dits)					
Code	No.	Course Name	Cr.	Hrs.	Theo.	Lab.	Field	Pre-req.
75	117	General Chemistry	3	5	1	4	0	
82	125	Physical Properties	1	3	0	3	0	
82	131	Physical Chemistry	1	3	0	3	0	82/125
82	169	Introduction to Computers	2	3	1	2	0	
81	255	Transport Phenomena	3	5	1	4	0	82/125, 56/113
82	183	Chemical Eng. Calculations	3	3	3	0	0	75/117, 76/105
81	283	Thermodynamics	3	3	3	0	0	82/131, 82/183
81	280	Unit Operations	3	5	1	4	0	81/255
81	293	Reactor Technology	3	3	3	0	0	82/183, 76/106
82	282	Computer App. in Chem. Eng.	3	3	3	0	0	81/283, 81/280
81	304	Pet. Refinery Processes	4	5	3	2	0	81/293,81/273
81	273	Petroleum Prod. and Testing	3	5	1	4	0	76/106, 82/169
81	395	Refinery Operat. and Safety	3	3	3	0	0	81/304, 81/295
81	295	Measurement and Control	3	5	1	4	0	81/293
81	399	Field Training	4	16	0	0	16	81/293,82/282, 30/162
		•	42	70	24	30	16	

### **General Core Courses** (19 Credits)

Code	No.	Course Name	Cr.	Hrs.	Theo.	Lab.	Field	Pre-req.
76	105	Mathematics (1)	3	3	3	0	0	
76	106	Mathematics (2)	3	3	3	0	0	76/105
56	113	Basic Physics	3	4	2	2	0	
30	99	Remedial English	0	5	0	0	0	
30	102	Technical English	3	3	3	0	0	PEN Or 30/99
30	162	Technical Writing	3	3	3	0	0	30/102
30	171	Comminucation Skills	3	3	3	0	0	30/102
			18	19	17	2	0	

# **PROGRAM MAJOR SHEET**

New

### **Major Elective Courses** (6 Credits)

Code	No.	Course Name	Cr.	Hrs.	Theo.	Lab.	Field	Pre-req.
81	295	Air Pollution	3	3	3	0	0	81/293
81	192	Polymer Engineering	3	3	3	0	0	82/183
81	163	Oil and Natural Gas	3	3	3	0	0	82/183
81	285	Chemical Eng Thermodyn	3	3	3	0	0	81/283
81	288	Catalysis	3	3	3	0	0	81/293
82	289	Topics in Chemical Eng.	3	3	3	0	0	82/282
82	288	Optimization	3	3	3	0	0	82/282
82	223	Chem. Eng. Calculations (2)	3	3	3	0	0	82/183
82	277	Waste water treatment	3	3	3	0	0	81/273
81	278	Water Desalination	3	3	3	0	0	81/273
82	264	Industrial Corrosion	3	3	3	0	0	81/293
81	305	Project	3	3	3	0	0	81/304

### **General Elective Courses** (3 Credits)

Code	No.	Course Name	Cr.	Hrs.	Theo.	Lab.	Field	Pre-req.
15	114	Industrial Psychology	2	2	2	0	0	
10	104	Library and Research	1	2	2	0	0	
66	135	Energy and Water conservation	3	3	3	0	0	
8	110	Physical Education	1	2	2	0	0	
7	141	Art Education (1)	1	2	2	0	0	
7	142	Art Education (2)	1	2	2	0	0	07/ 141
13	151	Music Education	1	2	2	0	0	
21	164	Accounting	2	2	2	0	0	
25	166	Industial Economics	2	2	2	0	0	
22	104	Small Projects Management	2	2	2	0	0	
57	102	Intr. Contracts and Specifications	3	3	3	0	0	
64	268	Design and Creativity in Tech.	2	2	2	0	0	
65	205	Automotive Mechanics	3	3	3	0	0	
3	112	Work Ethics & Loyalty	3	3	3	0	0	

## General Compulsory Courses (6 Credits)

Code	No.	Course Name	Cr.	Hrs.	Theo.	Lab.	Field	Pre-req.
01	101	Islamic Culture	2	2	2	0	0	
81	290	Introduction to Env. Studies	2	3	1	2	0	81/270, 30/171
81	270	Industrial Safety	2	3	1	2	0	30/162
			6	8	4	4	0	

Total	Cr.	Hrs.
	75	106