

المقررات الدراسية لقسم الهندسة النفطية
Academic Courses for Petroleum Engineering

A. Compulsory Petroleum Engineering Courses:

المقررات الهندسية الملزمة لهندسة النفط

Second Year

Third Semester Courses							
No	Course Name	Code	Units	Weekly Hours			Prerequisite
				Lecture	Tutorial	Practical	
1	Strength of Materials	PE200	3	3	1	2	GE140
2	General Geology	PE210	3	2	-	2	-
3	Introduction to Pet. Eng.	PE220	3	3	1	-	-
4	Engineering Workshop	GE244	2	2	1	-	-
5	Mathematics III	GS222	3	2	1	-	GS121
6	Descriptive Geometry	GE243	2	1	-	2	GE142
			16	13	4	6	

Fourth Semester Courses							
No	Course Name	Code	Units	Weekly Hours			Prerequisite
				Lecture	Tutorial	Practical	
1	National Culture	GH214	2	2	1	-	GH110
2	Fluid Mechanics	PE201	3	2	-	-	-
3	Fluid Mechanics Lab	PE201L	1	-	-	2	-
4	Mathematics IV	GS223	3	3	1	-	GS222
5	Computer Science	GS228	3	2	-	2	-
6	Drilling & Production Machinery	PE221	3	3	1	-	PE220-PE200
7	Engineering Thermodynamics	PE202	3	3	1	-	-
8	Sedimentology	PE211	2	2	1	-	PE210

	20	17	6	4
--	----	----	---	---

Third Year

Fifth Semester Courses							
No	Course Name	Code	Units	Weekly Hours			Prerequisite
				Lecture	Tutorial	Practical	
1	Fundamental Of Electrical Engineering	EE201	3	2	1	2	GS121-GS131
2	Drilling & Oil Well Design	PE322	3	3	1	-	PE221
3	Structural Geology	PE312	3	3	1	-	PE211
4	Reservoir Rock Properties	PE350	3	2	1	2	PE220
5	Reservoir Fluids Properties	PE351	3	2	-	2	PE220-PE201
			15	12	4	8	

Sixth Semester Courses							
No	Course Name	Code	Units	Weekly Hours			Prerequisite
				Lecture	Tutorial	Practical	
1	Oil Well Completion	PE330	3	3	1	-	ChE200
2	Petroleum Geology	PE313	3	2	1	2	ChE302
3	Fluid Flow in Porous Media	PE360	3	3	1	-	ChE320
4	Statistics & Probability	GS324	3	3	1	-	ChE320
5	Storage & Transportation of Petroleum	PE380	3	3	1	-	ChE323
6	Surveying	PE304	3	2	1	2	ChE211
			18	16	6	4	

Fourth Year

Seventh Semester Courses							
No	Course Name	Code	Units	Weekly Hours			Prerequisite
				Lecture	Tutorial	Practical	
1	Technical Report Writing	GH418	1	1	1	-	GH113
2	Petroleum Production Eng. I	PE440	3	3	1	-	PE330
3	Drilling Fluids	PE423	3	2	-	2	PE322-PE201
4	Applied Reservoir Engineering	PE461	3	3	1	-	PE360
5	Petroleum Refining Engineering	PE485	3	2	1	2	PE220
6	Applied Geophysics	PE415	3	2	1	2	PE313
			16	13	5	6	

Eighth Semester Courses							
No	Course Name	Code	Units	Weekly Hours			Prerequisite
				Lecture	Tutorial	Practical	
1	Petroleum Production Eng. II	PE441	3	3	1	-	PE440
2	Well Logging	PE431	3	3	1	-	PE415
3	Computer Applications in Petroleum Engineering	PE470	3	2	1	-	GS228-PE461
4	Field Processing of Natural Gas	PE486	2	2	-	2	PE351
5	Oil Well Testing	PE445	3	3	1	-	PE360
			14	13	4	2	

Fifth Year

Ninth Semester Courses							
No	Course Name	Code	Units	Weekly Hours			Prerequisite
				Lecture	Tutorial	Practical	
1	Enhanced Oil Recovery	PE562	3	3	1	-	PE461
2	Drilling Technology	PE524	3	3	1	-	PE423-PE330
3	Geological Charact. of Oil & Gas Res.	PE552	3	3	1	-	PE431
4	Petroleum Engineering Economics	PE571	2	2	-	-	GS324
5	Safety & Lost Prevention	PE506	2	2	-	-	-
6	Engineering Project	PE599	-	-	-	-	-
			13	13	3	0	

Tenth Semester Courses							
No	Course Name	Code	Units	Weekly Hours			Prerequisite
				Lecture	Tutorial	Practical	
1	Seminar	PE590	1	1	-	-	-
2	Reservoir Simulation	PE563	3	2	-	2	PE470
3	Reservoir Management	PE572	2	2	1	-	PE440-PE461
4	Corrosion in Oil Industry	PE507	3	3	1	-	-
5	Final Project	ChE599	4	2	-	4	-
			13	10	2	6	

Elective Courses for Petroleum Engineering Department (one course with 3 units to be selected)

المقررات الهندسية الاختيارية لقسم الهندسة النفطية (يتم اختيار مقرر بـ 3 وحدات)

No.	Course Name	Designation	Units	عنوان المقرر
1.	Corrosion in Oil Industry	PE507	3	التآكل في الصناعة النفطية

2.	Work Over Operations	PE532	3	عمليات إصلاح الآبار
3.	Fuel & Combustion	PE587	3	الوقود والاحتراق
4.	Offshore Drilling	PE525	3	الحفر البحري
5.	Naturally Fractured Reservoirs	PE564	3	المكامن المتشققة طبيعياً
6.	Application to EOR	PE565	3	تطبيقات حقلية لطرق الاسترداد الإضافي
7.	Engineering Management	PE507	3	الإدارة الهندسية
Total			3	إجمالي عدد الوحدات