## First Year

		Semester I				Semester II							
Subject	Subject	Hour / Week				Subject							
Symbol		Theoretical	Practical	Tutorial	Unit	Symbol	Subject	Theoretical	Practical	Tutorial	Unit		
PE111	English Language	1	2	1	2	PE141	Principle of PT	2			2		
PE121	Calculus I	2		1	2	PE125	Calculus II	2		1	2		
PE122	Analytical Chemistry	2	2		3	PE126	Organic Chemistry	2	2		3		
PE123	Physics	3			3	PE134	Mechanics	2		2	2		
PE124	General Geology I	2	2		3	PE127	General Geology II	2	2	 	3		
PE131	Engineering Drawing	1	2		2	PE135	Engineering Practices	2		1	2		
PE132	Engineering Ethics	2			2	PE128	Computer Programming (visual baisc)	1	2		2		
PE133	Workshop		4		2	PE136	Workshop		4		2		
Total	Total		12	2	19		Total	13	10	4	18		
Total hr/w	veek		27			Total hr/week 27							
Total Unit	Total Units		37										

Key of Subject Symbol: PE : Petroleum Engineering

First No.: Year of Study

Second No.: Order of Subject within Specification

Specifications
1: Human Subject
2: Scientific Subject

3 : Basic Engineering Subject

4 : Specialized Subject

Third No.: The sequence number of subject of one type

## **Second Year**

Semester I							Semester II						
Subject	Subject	Hour / Week				Subject		Hour / Week					
Symbol		Theoretical	Practical	Tutorial	Unit	Symbol	Subject	Theoretical	Practical	Tutorial	Unit		
PE221	Ordinary Differential Equations	3		1	3	PE224	Partial Differential Equations	3		1	3		
PE222	Structural Geology	2	2		3	PE225	Petroleum Geology	2		1	2		
PE231	Fluid Mechanic I	2		1	2	PE233	Fluid Mechanic II	2	2		3		
PE241	Crude oil and products properties	1	2		2	PE234	Probability and Statistical	2	1		3		
PE242	Reservoir Petrophysics	2	2	1	3	PE235	Strength of Material	2	2		3		
PE232	Thermodynamic	2		1	2	PE226	Environmental Pollution	2			2		
PE223	Computer Programming (3DAutoCAD)	1	2		2	PE227	Computer Programming (Matlab)	2	2		3		
PE211	Human Rights	1			1	PE212	Democracy	1			1		
Total	Total		8	4	18		Total	16	7	2	20		
Total hr/	Total hr/week		26				Total hr/week	25					
Total Un	Total Units		38										

## Third Year

Semester I							Semester II						
Subject Symbol	Subject	Hour / Week				Subject		Hour / Week					
		Theoretical	Practical	Tutorial	Unit	Symbol	Subject	Theoretical	Practical	Tutorial	Unit		
PE341	Drilling I	3		1	3	PE348	Drilling II	3		1	3		
PE342	Well logging	2		1	2	PE349	Formation evaluation	2	2	1	3		
PE343	Drilling Mud I	1	2		2	PE3410	Drilling Mud II	1	2		2		
PE344	Well completion and stimulation	2		1	2	PE331	Hazard and Safety	2			2		
PE321	Geophsysics	2		1	2	PE3411	Artificial Lift and well performance	2		1	2		
PE345	Reservoir Fluid	2	2	1	3	PE3412	Gas and Oil Transportation	2			2		
PE346	Gas Reservoirs	2		1	2	PE3413	Field Measurements and Surface Production	1	2	1	2		
PE347	Rock mechanics	2			2	PE332	Numerical Analysis	2			2		
Total	Total		4	6	18		Total	15	6	4	18		
Total hr/	Total hr/week		26				Total hr/week	25					
Total Un	Total Units		36										

## **Fourth Year**

Semester I							Semester II							
Subject Symbol	Subject	Hour / Week			<b>T</b> I	Subject		Hour / Week						
		Theoretical	Practical	Tutorial	Unit	Symbol	Subject	Theoretical	Practical	Tutorial	Unit			
PE441	Petroleum Reservoir Engineering	3		1	3	PE448	Directional Drilling	3	2	1	4			
PE442	Drilling Engineering	3		1	3	PE449	Engineering Project	2			2			
PE443	Engineering Project	2			2	PE4410	Well Monitoring and work- over	2		1	2			
PE444	Well Testing	2		1	2	PE432	Engineering management	2			2			
PE445	Integrated Field Development and Management I	2		1	2	PE4411	Integrated Field Development and Management II	2		1	2			
PE431	Optimization	2			2	PE4412	Petroleum Economics	2			2			
PE446	Reservoir Simulation	3		1	3	PE4413	Natural Gas Engineering	3		1	3			
PE447	Risk analysis	2			2	PE4414	Enhanced Oil Recovery	2		1	2			
Total		19		5	19		Total	18	2	5	19			
Total hr/week		24					Total hr/week		25					
Total Units		38												