

# COLLEGE OF ENGINEERING

## BACHELOR DEGREE IN PETROLEUM ENGINEERING

### FRESHMAN SEMESTER 1

NO.	COURSE CODE	TITLE	CREDIT HRS.	REQUIREMENT	PREREQUISITES
1	COMM1301	Intro to Communication	3	GE - Communications	
2	MATH1321	Calculus I	3	GE- Quantitative Literacy	
3	CSIT1301	Computer Literacy	3	GE - IT Literacy	
4	PENG1204	Introduction to Petroleum Engineering	2	Program course	
5	PENG1205	Physical Geology	2(1TH+1PRAC)	Program course	
			13 CH		

### FRESHMAN SEMESTER 2

1	MATH1311	Statistics I	3	GE-Quantitative Literacy	
2		SOCIAL SCIENCES	3	GE-Social Science	
3	CHEM1401	Chemistry & Lab	4 (3TH+1PRAC)	GE - Natural Sciences	
4	MATH1322	Calculus II	3	Program course	MATH1321
5	PENG1310	Petroleum Exploration Engineering	3	Program course	PENG1205
			16CH		

## SOPHOMORE SEMESTER 3

NO.	COURSE CODE	TITLE	CREDIT HRS.	REQUIREMENT	PREREQUISITES
1	COMM2301	Academic Writing	3	GE-Communications	
2	PHYS2302	Statics	3	Program course & GE- Natural Sciences	
3		HUMANITIES or ARTS	3	GE – Hum or Arts	
4	MATH2304	Numerical Analysis	3	Program course	MATH1322
5	CHEM2205	Organic Chemistry	2	Program course	CHEM1401
	GENG2211	Introduction to Health, Safety and Environment	2	Program course	CHEM1401
			16 CH		

## SOPHOMORE SEMESTER 4

1		HUMANITIES	3	GE – Hum	
2	MGMT1314	Principles of Management	3	GE-Social Science	
3	PHYS2303	Dynamics	3	Program course	PHYS2302
4	MATH2323	Calculus III- Multiple Integral and Fourier Series	3	Program course	MATH 1322
5	PENG2409	Reservoir Fluids and Rock Properties	4(3TH+1PRAC)	Program course	CHEM2205, PENG1205
6	PENG2310	Drilling Systems I	3	Program course	PENG1205
			19 CH		

## JUNIOR SEMESTER 5

NO.	COURSE CODE	TITLE	CREDIT HRS.	REQUIREMENT	PREREQUISITES
1		HUMANITIES OR ARTS	3	GE - Hum or Arts	
2	MATH3202	Linear Algebra for Engineers	2	Program course	
3	GENG3303	Mechanics of Materials	3	Program course	MATH1322
4	PENG3304	Fundamentals of Reservoir Engineering	3	Program course	PENG2409
5	PENG3205	Thermodynamics for Petroleum Engineers	2	Program course	PHYS2303
6	PENG3206	Statistical Applications for Petroleum Engineers	2	Program course	MATH 1311, PENG2409
7	PENG3207	Fluid Mechanics	2	Program course	PHYS2303
			17CH		

## JUNIOR SEMESTER 6

1	INDS3301	Interdisciplinary Seminar	3	GE - Seminar	
2	PENG3308	Processes in Petroleum Production	3	Program course	PENG2409
3	PENG3409	Formation Evaluation	4	Program course	PENG2409
4	MATH3324	Advanced Engineering Mathematics	3	Program course	MATH 2323
5	PENG3311	Drilling Systems II	3(2TH+1PRAC)	Program course	PENG2310
6	PENG3288	Internship for Petroleum Engineers	2	Program course	
			18CH		

## SENIOR SEMESTER 7

NO.	COURSE CODE	TITLE	CREDIT HRS.	REQUIREMENT	PREREQUISITES
1	PENG4390	Capstone Project-I	3(1TH+2PRAC)	Program course	PENG3304 ,PENG3308 and PENG3311
2	PENG4202	Drilling Engineering	2	Program course	PENG2310
3	PENGxxxx	Elective Course-I	3	Program course	
4	PENG4304	Reservoir Simulation	3(2TH+1PRAC)	Program course	PENG3304
5	PENG4205	Well Testing and Analysis	2	Program course	PENG3304,PENG3308
6	PENG4206	Petroleum Production systems	2	Program course	PENG3308
			15CH		

## SENIOR SEMESTER 8

1	PENG4307	Enhanced Oil Recovery	3	Program course	PENG3304
2	PENGxxxx	Elective Course II	3	Program course	
3	PENG4309	Integrated Reservoir Modelling	3(2TH+1PRAC)	Program course	PENG4304
4	PENG4391	Capstone Project-II	3(0TH+3PRAC)	Program course	PENG4390
5	PENG4211	Artificial Lift	2	Program course	PENG3308
			14CH		

**TOTAL CH = 128**