

Preparatory Year											
COURSE		TITLE	LT	LB	CR	COURSE		TITLE	LT	LB	CR
ENGL	01-xx	Prep. English I (First Quarter)	15	5	4	ENGL	03-xx	Prep. English III (Third Quarter)	15	5	4
ENGL	02-xx	Prep. English II (Second Quarter)			4	ENGL	04-xx	Prep. English IV (Fourth Quarter)			4
MATH	001	Prep. Math I	3	1	4	MATH	002	Prep. Math II	3	1	4
PYP	001	Prep. Physical Science	2	0	2	PYP	002	Prep. Computer Science	0	2	1
PYP	003	University Study Skills	0	2	1	PYP	004	Prep. Eng. Technology	0	2	1
PE	001	Prep. Health and Physical Educ. I	0	2	1	PE	002	Prep. Health and Physical Educ. II	0	2	1
			20	10	16				18	12	15
Total credits required in the Preparatory-Year Program: 31											
First Year (Freshman)											
COURSE		TITLE	LT	LB	CR	COURSE		TITLE	LT	LB	CR
ENGL	101	Introduction to Acad. Disc.	3	0	3	CHEM	101	General Chemistry I	3	4	4
GEOL	101	Principles of Geology	2	3	3	ENGL	102	Introduction to Report Writing	3	0	3
MATH	101	Calculus I	4	0	4	GEOP	102	Essentials of Geophysics	2	0	2
PE	101	Health & Phys. Education I	0	2	1	MATH	102	Calculus II	4	0	4
PETE	101	Int. to the Petroleum Industry	2	0	2	PE	102	Health & Phys. Education II	0	2	1
PHYS	101	General Physics I	3	3	4	PHYS	102	General Physics II	3	3	4
			14	8	17				15	9	18
Summer Session I CPG 199 Summer Camp (0-0-1)											
Second Year (Sophomore)											
COURSE		TITLE	LT	LB	CR	COURSE		TITLE	LT	LB	CR
CE	202	Stat. & Strength of Materials	3	0	3	CHE	204	Transport Phenomena I	3	0	3
GS	xxx	General Studies Elective I	3	0	3	ENGL	214	Acad. & Professional Comm.	3	0	3
IAS	101	Practical Grammar	2	0	2	GS	xxx	General Studies Elective II	3	0	3
ICS	103	Comp. Programming in C	2	3	3	IAS	111	Belief & its Consequences	2	0	2
MATH	201	Calculus III	3	0	3	MATH	202	Elem. of Differential Equations	3	0	3
PETE	202	Phase Behavior	3	0	3	PETE	206	Rock & Fluid Properties	3	3	4
			16	3	17				17	3	18
Summer Session II PETE 499 Summer Training (0-0-1)											
Third Year (Junior)											
COURSE		TITLE	LT	LB	CR	COURSE		TITLE	LT	LB	CR
GEOL	305	Structural Geology	2	3	3	GEOL	345	Integ. Petroleum Geology	3	3	4
IAS	201	Writing for Professional Needs	2	0	2	MATH	371	Int. to Numerical Computing	3	0	3
IAS	212	Professional Ethics	2	0	2	PETE	302	Well Completion	3	0	3
PETE	301	Reservoir Engineering	3	0	3	PETE	306	Well Testing	3	0	3
PETE	311	Drilling Engineering	3	3	4	PETE	315	Reservoir Description	3	3	4
PETE	313	Well Logging	3	0	3						
			15	6	17				15	6	17
Summer Session II PETE 499 Summer Training (0-0-1)											
Fourth Year (Senior)											
COURSE		TITLE	LT	LB	CR	COURSE		TITLE	LT	LB	CR
CPG	498	Integrated Design I	0	3	1	CPG	499	Integrated Design II	0	6	2
GEOP	xxx	Geophysics Elective	3	0	3	IAS	322	Human Rights in Islam	2	0	2
IAS	301	Oral Communication Skills	2	0	2	PETE	403	Pet. Production Engineering	3	0	3
PETE	402	Reservoir Simulation	2	3	3	PETE	408	Seminar	0	2	1
PETE	407	Petroleum Economics	3	0	3	PETE	4xx	PETE Elective II	3	0	3
PETE	4xx	PETE Elective I	3	0	3	XE	xxx	Technical Elective	3	0	3
			13	6	15				11	8	14

Total credits required for BSc degree: 135

Requirements for the B.Sc. Degree in Petroleum Engineering

a) General Education Courses (55 Credit Hours)

		Credit Hours
Chemistry	CHEM 101	4
Physics	PHYS 101, 102	8
Mathematics	MATH 101, 102, 201, 202, 371	17
English	ENGL 101, 102, 214	9
Physical Education	PE 101, 102	2
Information and Computer Science	ICS 103	3
Islamic and Arabic Studies: 12 credits hours	IAS 101, 111, 201, 212, 301, 322	12
TOTAL		55

b) Core Courses (60 Credit Hours)

Statics and Strength of Materials	CE 202	3
Transport Phenomena I	CHE 204	3
Integrated Design I	CPG 498	1
Integrated Design II	CPG 499	2
Principles of Geology	GEOL 101	3
Structural Geology	GEOL 305	3
Integrated Petroleum Geology	GEOL 345	4
Essentials of Geophysics	GEOP 102	2
Introduction to the Petroleum Industry	PETE 101	2
Phase Behavior	PETE 202	3
Rock and Fluid Properties	PETE 206	4
Reservoir Engineering	PETE 301	3
Well Completion	PETE 302	3
Well Testing	PETE 306	3
Drilling Engineering	PETE 311	4
Well Logging	PETE 313	3
Reservoir Description	PETE 315	4
Reservoir Simulation	PETE 402	3
Petroleum Production Engineering	PETE 403	3
Petroleum Economics	PETE 407	3
Seminar	PETE 408	1
TOTAL		60

c) Elective Courses (18 Credit Hours)

General Studies	GS xxx	6
Geophysics	GEOP xxx	3
Petroleum Engineering	PETE 4xx	6

Technical Elective	XE xxx	3
TOTAL		18

d) Summer Sessions (2 Credit Hours)

Summer Camp	CPG 199	1
Summer Training	PETE 499	1
TOTAL		2

The total credit hours required for the program: 135

e) Petroleum Engineering Elective Courses

Improved Oil Recovery	PETE 406	3
Natural Gas Engineering	PETE 410	3
Formation Damage	PETE 412	3
Surface Facilities	PETE 417	3
Rock Mechanics	PETE 424	3
Reservoir Management	PETE 431	3
Water Flooding	PETE 432	3
Production Logging	PETE 453	3
Special Topics in Petroleum Engineering I	PETE 490	3
Special Topics in Petroleum Engineering II	PETE 491	3
Directed Undergraduate Research	PETE 495	3