

First Year

No.	Subject Code	Semester I				Subject Code	Semester II						
		Subject Name	L	T	P		C	Subject Name	L	T	P	C	
1	CHPR110	Organic Chemistry	2	-	3	3	CHPR 120	Petroleum Chemistry	2	-	3	3	
2	CHPR 111	Analytical Chemistry	2	-	3	3	CHPR 121	Mass and Energy Balance	3	1	-	3	
3	CHPR 112	Principles of Chemical Processes	3	1	-	3	MATH121	Calculus II	3	1	-	3	
4	MATH110	Calculus I	3	1	-	3	GEN120	Engineering Mechanics	3	1	3	4	
5	GEN110	Physics	2	-	3	3	GEN121	Arabic	2	-	-	2	
6	GEN111	Engineering Drawing I	1	-	3	2	GEN122	Engineering Drawing II	1	-	3	2	
7	GEN112	English for Chemical Engineering I	2	-	-	2	GEN123	English for Chemical Engineering II	2	-	-	2	
Total			15	2	12	19	Total			16	3	9	19

Second Year

No.	Subject Code	Semester I				Subject Code	Semester II						
		Subject Name	L	T	P		C	Subject Name	L	T	P	C	
1	CHPR 210	Physical Chemistry I	2	-	3	3	CHPR 220	Physical Chemistry II	2	-	3	3	
2	CHPR 211	Environmental Pollution	2	-	-	2	CHPR 221	Industrial Safety	2	-	-	2	
3	CHPR 212	Principles of Process Design I	2	1	-	2	CHPR 222	Principles of Process Design II	-	-	3	1	
4	MATH210	Engineering Mathematics I	3	1	-	3	CHPR 223	Petroleum Fluid Mechanics	3	1	3	4	
5	GEN210	Fluid Mechanics	3	1	-	3	GEN220	Computer Programing	2	-	3	3	
6	GEN211	Electrical Technology	2	-	3	3	GEN221	Human Rights	2	-	-	2	
7	GEN212	Strength of Material	2	-	3	3	MATH220	Engineering Mathematics II	3	1	-	3	
Total			16	3	9	19	Total			14	2	12	18

Third Year

No.	Subject Code	Semester I				Subject Code	Semester II						
		Subject Name	L	T	P		C	Subject Name	L	T	P	C	
1	CHPR 310	Mass Transfer Operations I	3	1	-	3	CHPR 320	Mass Transfer Operations II	3	1	-	3	
2	CHPR 311	Heat Transfer I	3	1	-	3	CHPR 321	Heat Transfer II	3	1	3	4	
3	CHPR 312	Chemical Industries	2	-	-	2	CHPR 322	Petroleum Industries	2	-	-	2	
4	CHPR 313	Engineering Analysis	3	1	-	3	CHPR 323	Numerical Methods	2	-	3	3	
5	CHPR 314	Chemical Engineering Thermodynamics I	3	1	-	3	CHPR 324	Chemical Engineering Thermodynamics II	3	1	-	3	
6	CHPR 315	Catalysts in Refinery Processes	2	1	-	2	CHPR 325	Industrial Organization and Management	2	-	-	2	
7	GEN310	Statistics	2	-	-	2	CHPR 326	Natural Gas Technologies	2	-	-	2	
8	CHPR 316	Chemical Engineering Economics	2	1	-	2	CHPR 327	Optimization	2	1	-	2	
Total			20	6	-	20	Total			19	4	6	21

Fourth Year

No.	Subject Code	Semester I				Subject Code	Semester II						
		Subject Name	L	T	P		C	Subject Name	L	T	P	C	
1	CHPR 410	Unit Operations I	3	1	3	4	CHPR 420	Unit Operations II	3	1	3	4	
2	CHPR 411	Equipment Design I	3	1	-	3	CHPR 421	Equipment Design II	3	1	-	3	
3	CHPR 412	Process Dynamic & Control I	3	1	3	4	CHPR 422	Process Dynamic & Control II	3	1	3	4	
4	CHPR 413	Chemical Reactors Design I	3	1	-	3	CHPR 423	Chemical Reactors Design II	3	1	-	3	
5	CHPR 414	Petroleum Refining Engineering	2	1	3	3	CHPR 424	Design Project II	2	-	-	2	
6	CHPR 415	Design Project I	2	-	-	2	CHPR 425	Process Integration	3	1	-	3	
Total			16	5	9	19	Total			17	5	6	19

قسم هندسة البوليمرات والبتر وكيمياويات

First Year

SEMESTER I	TITLE	LT	LB	CR	SEMESTER II	TITLE	LT	LB	CR
MATH101	Calculus I	3	0	3	MATH102	Calculus II	3	0	3
GNEN101	Physics	2	3	3	PPEG105	Physical Chemistry	2	3	3
PPEG102	Organic Chemistry	2	3	3	GNUN101	English	2	0	2
PPEG103	Analytical Chemistry I	2	3	3	PPEG106	Engineering Mechanics	2	3	3
PPEG104	Introduction to Polymer Engineering	2	3	3	PPEG107	Introduction to Petrochemical Processes	4	0	4
GNEN102	Engineering Drawing I	1	3	2	GNEN103	Engineering Drawing II	1	3	2
TOTAL/WEEK		12	15	17	TOTAL/WEEK		14	9	17

Second Year

SEMESTER I	TITLE	L T	L B	C R	SEMESTER II	TITLE	L T	L B	C R
PPEG201	Petroleum and Petrochemical Products	3	0	3	PPEG206	Polymer Physics	3	0	3
PPEG202	Polymer Materials, Additives & Blending	3	0	3	PPEG207	Thermodynamic II	3	0	3
PPEG203	Fluid Mechanics I	3	0	3	PPEG208	Fluid Mechanics II	2	3	4
PPEG204	Thermodynamic I	3	0	3	PPEG209	Polymer Processing	2	3	3
PPEG205	Process Design I	1	3	2	PPEG210	Process Design II	1	3	2
GNEN201	Computer Programming & Applications	2	2	3	PPEG211	Mechanics of Materials	2	3	3
MATH201	Advanced Mathematics I	3	0	3	MATH202	Advanced Mathematics II	3	0	3
TOTAL/WEEK		18	5	20	TOTAL/WEEK		16	12	21

Third Year

SEMESTER I	TITLE	LT	LB	CR	SEMESTER II	TITLE	LT	LB	CR
PPEG301	Mass Transfer I	4	0	4	PPEG308	Mass Transfer II	4	0	4
PPEG302	Heat Transfer I	4	0	4	PPEG309	Heat Transfer II	4	3	5
PPEG303	Polymer Composites	3	0	3	PPEG310	Fuels & Combustion	2	3	3
PPEG304	Safety and Risk Management	2	0	2	PPEG311	Environmental Engineering	2	0	2
PPEG305	Numerical Methods	3	3	4	PPEG312	Applied Statistics	2	0	2
PPEG306	Engineering Economics	3	0	3	PPEG313	Industrial Organization and Management	3	0	3
PPEG307	Natural Gas Engineering	3	0	3	PPEG314	Utilities and Water Treatment	3	0	3
TOTAL/WEEK		22	3	23	TOTAL/WEEK		20	6	22

Fourth Year

SEMESTER I	TITLE	LT	LB	CR	SEMESTER II	TITLE	LT	LB	CR
PPEG401	Polymer Reaction Engineering I	3	0	3	PPEG407	Advance Polymer Engineering	3	0	3
PPEG402	Process Dynamic & Control I	2	3	3	PPEG408	Process Dynamic & Control II	2	3	3
PPEG403	Introduction to Catalysts	3	0	3	PPEG409	Separation Processes	2	3	3
PPEG404	Process Equipment Design I	3	0	3	PPEG410	Process Equipment Design II	3	0	3
PPEG405	Introduction to Corrosion Engineering	2	3	3	PPEG411	Process Optimization	3	0	3
PPEG406	Design Project	2	3	3	PPEG412	Design Project	2	3	3
TOTAL/WEEK		15	9	18	TOTAL/WEEK		15	9	18

Total Credit-hours: 156

قسم هندسة النفط والغاز

	Subject Code	Semester I					Subject Code	Semester II				
		Subject Name	L	T	P	C		Subject Name	L	T	P	C
First Year	GEN110	General Chemistry I	2	1	2	3	GEN120	General Chemistry II	2	1	2	3
	GEN111	English I	2	-	-	2	GEN121	English II	2	-	-	2
	MATH110	Calculus I	4	-	-	4	MATH120	Calculus II	4	-	-	4
	GEN112	Engineering Drawing	2	-	3	3	GEN122	General Geology II	2	1	2	3
	GEN113	Arabic	2	1	-	2	PETE120	Petroleum Properties	2	-	3	3
	GEN114	General Physics I	2	-	3	3	GEN125	General Physics II	2	-	3	3
	GEN115	General Geology I	2	1	2	3						
		Total		16	3	10	20	Total	14	2	12	18

	Subject Code	Semester I					Subject Code	Semester II				
		Subject Name	L	T	P	C		Subject Name	L	T	P	C
Second Year	GEN210	Fluid Mechanics	3	1	2	4	GEN220	Technical Report Writing	2	-	-	2
	GEN211	Geophysics	2	1	3	3	GEN221	Economic and Safety	2	1	2	3
	GEN212	Static and Dynamic	3	1	-	3	GEN222	Human Rights	2	-	-	2
	MATH210	Calculus III	3	1	-	3	MATH220	Elementary. Differ. Equations	3	1	-	3
	GEN213	Thermodynamics I	3	2	-	4	PETE220	Drilling Fluids	2	1	2	3
	PETE210	Introduction to Petroleum Eng.	2	1	-	2	PETE221	Reservoir Fluid Properties	2	1	2	3
	PETE211	Reservoir Rock Properties	2	1	2	3	GEN223	Circuits and Electronics	2	1	3	3
		Total	18	8	7	22	Total	15	5	9	19	

	Subject Code	Semester I					Subject Code	Semester II				
		Subject Name	L	T	P	C		Subject Name	L	T	P	C
Third Year	MATH310	Numerical Methods	2	-	3	3	GEN320	Pollution	3	1	-	3
	GEN310	Petroleum Geology	2	1	2	3	PETE323	Drilling Engineering II	3	2	2	4
	GEN311	Engineering Economics Analysis	3	-	2	3	GEN321	Communication Skills	2	-	-	2
	PETE310	Formation Evaluation & Well Logging I	2	2	1	3	PETE320	Formation Evaluation & Well Logging II	2	2	1	3
	PETE311	Reservoir Engineering	3	2	-	4	PETE321	Well Testing	2	1	-	2
	PETE312	Subsurface Prod. Eng.	3	-	-	3	GEN322	Prob. & Stat. for Engin	2	3	-	3
	PETE313	Drilling Engineering I	3	2	-	4	PETE324	Natural Gas Engin	3	2	2	4
		Total	18	7	8	23	Total	17	11	5	21	

	Subject Code	Semester I					Subject Code	Semester II				
		Subject Name	L	T	P	C		Subject Name	L	T	P	C
Fourth Year	PETE410	Reservoir Management	2	-	3	3	PETE421	Enhanced oil Recovery	3	1	-	3
	PETE411	Water flooding	3	1	-	3	PETE420	Reservoir Description	3	2	-	4
	PETE412	Seminar	2	-	3	3	PETE422	Reservoir Simulation	2	-	3	3
	PETE413	Project Design	1	-	6	3	PETE423	Production Facilities Design	2	-	3	3
	PETE414	Horizontal Drilling	3	-	1	3	PETE424	Project management	3	1	-	3
	PETE415	Stimulation operations & Artificial Lift	3	1	-	3	PETE425	Petroleum Economics	2	-	-	2
		Total	14	2	13	18	Total	15	4	6	18	