

1. COURSE CODE, TITLE AND STATUS FOR B.ENG. CHEMICAL

1.1 Level 100 Courses

First Semester

Course Code	Course Title	Status/Pre-requisite course(s)	Hour/Semester		Credit Unit
			LH	PH	
GSP1201	Use of English	Core	30	-	2
MTH1301	Elementary Mathematics I	Core	45	-	3
STA1311	Probability I	Core	45	-	3
CSC1201	Introduction to Computer Science	Core	30	-	2
PHY1170	Physics Practical I	Core	-	45	1
PHY1210	Mechanics	Core	30	-	2
PHY1220	Electricity & Magnetism	Core	30	-	2
CHM1231	Inorganic Chemistry	Core	30	-	2
CHM1241	Organic Chemistry	Core	30	-	2
Total Number of Credits			240	45	19

Second Semester

Course Code	Course Title	Status/Pre-requisite course(s)	Hour/Semester		Credit Unit
			LH	PH	
MTH1302	Elementary Mathematics II	Core	45	-	3
MTH1303	Elementary Mathematics III	Core	45	-	3
PHY1230	Behavior of Matter	Core	30	-	2
PHY1180	Physics Practical II	Core	-	45	1
CHM1251	Physical Chemistry	Core	30	-	2
CHM1261	Chemistry Practical	Core	-	90	2
GSP1202	Use of Library, Study Skills & ICT	Cognate	30	-	2
Total Number of Credits			180	135	15

1.2 Level 200 Courses

First Semester

Course Code	Course Title	Status/Pre-requisite course(s)	Hour/Semester		Credit Unit
			LH	PH	
EGR2204	Workshop Practice	Core	30	-	2
EGR2205	Thermodynamics I	Core	30	-	2
EGR2206	Materials Science I	Core	30	-	2
EGR2207	Principles of Electrical Eng. I	PHY1220	30	-	2
EGR2301	Engineering Mathematics I	MTH1301	45	-	3
EGR2304	Laboratory A	Core	-	135	3
EGR2306	Applied Mechanics	Core	45	-	3
CEE2201	Introduction to Chemical Eng. I	Core	30	-	2
GSP2204	Foundation of Nigeria Culture, Government & Economy	Cognate	30	-	2
GSP2206	Peace and Conflict Resolution	Cognate	30	-	2
*GSP2201 ^a	Use of English (DE students only)	Core			2 ^a
Total Number of Credits			300	135	23 (or 25)

*GSP2201 and GSP2202 were formally offered as separate courses; Foundation of Nig. Culture and Nig. Government & Economy respectively. The two courses are now merged as GSP2204 according to the current GSP general guideline.

^aGSP2201 is to be registered only by the DE students making their total credit unit 25.

Second Semester

Course Code	Course Title	Status/Pre-requisite course(s)	Hour/Semester		Credit Unit
			LH	PH	
EGR2101	Engineer in Society I	Core	15	-	1
EGR2103	Experimental Methods & Analysis	Core	15	-	1
EGR2201	Fluid Mechanics	Core	30	-	2
EGR2202	Solid Mechanics I	Core	30	-	2
EGR2203	Engineering Drawing I	Core	15	45	2
EGR2302	Engineering Mathematics II	MTH1302	45	-	3
EGR2208	Principles of Electrical Eng II	PHY1220	30	-	2
EGR2305	Laboratory B	Core	-	135	3
EGR2313	Computer Programming	CSC1201	45	-	3
CEE2202	Introduction to Chemical Eng II	Core	30	-	2
EGR2102	SWEP	Core	-	45	1
GSP2205	Logic and Philosophy	Cognate	30	-	2
GSP2202 ^a	Use of Library, Study Skills & CIT (DE students only)	Core			2 ^a
Total Number of Credits			270	270	24 (or 26)

^aGSP2202 is to be registered only by the DE students making their total credit unit 26.

1.3 Level 300 Courses

First Semester

Course Code	Course Title	Status/Pre-requisite course(s)	Hour/Semester		Credit Unit
			LH	PH	
EGR3301	Engineering Mathematics III	EGR2301	45	-	3
EGR3101	Engineers in Society II	Core	15	-	1
CEE3401	Transport Phenomena I	Core	60	-	4
CEE3403	Biochemical Engineering I	Core	45	-	4
CEE3207	Process Modeling and Simulation	CSC1201	15	45	2
CEE3309	Science of Materials II	Core	45	-	3
CEE3311	Separation Processes I	Core	45	-	3
CEE3213	Process Instrumentation	Core	30	-	2
Total Number of Credits			300	45	22

Second Semester

Course Code	Course Title	Status/Pre-requisite course(s)	Hour/Semester		Credit Unit
			LH	PH	
EGR3102	Technical Writing and Presentations	Core	15	-	1
CEE3302	Chemical Reaction Kinetics	Core	45	-	3
CEE3304	Chemical Eng. Thermodynamics I	Core	45	-	3
CEE3206	Chemical Engineering Laboratory I	Core	-	90	2
EEP3201	Entrepreneurship and Innovation	Core	30	-	2
EGR3203	SIWES I	EGR2102	-	90	2
CEE3312	Polymer Science and Technology	Cognate	45	-	3
EGR3302	Computational Techniques	Core	30	-	3
EGR3311	Computer Applications	Core	45	-	3
Total Number of Credits			255	180	22

1.4 Level 400 Courses

First Semester

Course Code	Course Title	Status/Pre-requisite course(s)	Hour/Semester		Credit Unit
			LH	PH	
EGR4201	Engineering Statistics	Core	30	-	2
CEE4303	Environmental Engineering	Core	45	-	3
CEE4205	Chemical Eng. Thermodynamics II	Cognate	30	-	2
CEE4307	Separation Processes II	CEE3311	45	-	3
CEE4209	Plant Design	Core	30	-	2
CEE4211	Chemical Engineering Lab II	Core	-	90	2
EGR4101	Engineering in Society III (Law)	Cognate	15	-	1
CEE4415	Transport Phenomena II	CEE3401	60	-	4
CEE4217	Chemical Engineering Analysis	Cognate	30	-	2
EEP4201	Venture Creation and Growth	Core	30	-	2
Total Number of Credits			315	90	23

Second Semester

Course Code	Course Title	Status/Pre-requisite course(s)	Hour/Semester		Credit Unit
			LH	PH	
EGR4401	Students Industrial Work Experience Scheme (SIWES II)	EGR3203	-	180	4
Total Number of Credits			-	180	4

1.5 Level 500 Courses

First Semester

Course Code	Course Title	Status/Pre-requisite course(s)	Hour/Semester		Credit Unit
			LH	PH	
CEE5201	Engineering Management	Cognate	30	-	2
CEE5403	Process Control	Core	60	-	4
CEE5305	Process Optimization	Core	45	-	3
CEE5307	Separation Processes III	Core	45	-	3
CEE5209	Chemical Reaction Engineering I	CEE3302	30	-	2
CEE5211	Loss Prevention in Process Industries	Cognate	30	-	2
CEE5309	Polymer Process Engineering	Core	45	-	3
PEE5320	Reservoir Engineering	Core	45	-	3
CEE5119	Chemical Engineering Lab III	Core	-	45	1
Total Number of Credits			330	45	23

Level 500 Second Semester

Course Code	Course Title	Status/Pre-requisite course(s)	Hour/Semester		Credit Unit
			LH	PH	
CEE5202	Chemical Reaction Engineering II	CEE3302	30	-	2
CEE5504	Plant Design Project	CEE4409	15	180	5
CEE5506	Research Project	Core	-	225	5
CEE5308	Biochemical Engineering II	Core	45	-	3
	Engineering Electives	Elect.	135	-	9
Total Number of Credits			225	405	24

Available Electives

CEE5312	Pulp and Paper Technology	3
CEE5314	Fermentation Technology	3
CEE5316	Detergent Technology	3
CEE5318	Sugar Technology	3
CEE5320	Coal Processing Technology	3
CEE5322	Technology of Fossil Fuel Processing	3
CEE5324	Particle Technology	3

1. COURSE CODE, TITLE AND STATUS FOR B.ENG. PETROLEUM

1.1 Level 100 Courses

First Semester

Course Code	Course Title	Status/Pre-requisite course(s)	Hour/Semester		Credit Unit
			LH	PH	
GSP1201	Use of English	Core	30	-	2
MTH1301	Elementary Mathematics I	Core	45	-	3
STA1311	Probability I	Core	45	-	3
CSC1201	Introduction to Computer Science	Core	30	-	2
PHY1170	Physics Practical I	Core	-	45	1
PHY1210	Mechanics	Core	30	-	2
PHY1220	Electricity & Magnetism	Core	30	-	2
CHM1231	Inorganic Chemistry	Core	30	-	2
CHM1241	Organic Chemistry	Core	30	-	2
Total Number of Credits			240	45	19

Second Semester

Course Code	Course Title	Status/Pre-requisite course(s)	Hour/Semester		Credit Unit
			LH	PH	
MTH1302	Elementary Mathematics II	Core	45	-	3
MTH1303	Elementary Mathematics III	Core	45	-	3
PHY1230	Behavior of Matter	Core	30	-	2
PHY1180	Physics Practical II	Core	-	45	1
CHM1251	Physical Chemistry	Core	30	-	2
CHM1261	Chemistry Practical	Core	-	90	2
GSP1202	Use of Library, Study Skills & ICT	Cognate	30	-	2
Total Number of Credits			180	135	15

1.2 Level 200 Courses

First Semester

Course Code	Course Title	Status/Pre-requisite course(s)	Hour/Semester		Credit Unit
			LH	PH	
EGR2204	Workshop Practice	Core	-	90	2
EGR2205	Thermodynamics I	Core	30	-	2
EGR2206	Materials Science I	Core	30	-	2
EGR2207	Principles of Electrical Eng. I	PHY1220	30	-	2
EGR2301	Engineering Mathematics I	MTH1301	45	-	3
EGR2304	Laboratory A	Core	-	135	3
EGR2306	Applied Mechanics	Core	45	-	3
PEE2201	Introduction to Petroleum Eng. I	Core	45	-	2
GSP2204	Foundation of Nigeria Culture, Government & Economy	Cognate	30	-	2
GSP2206	Peace and Conflict Resolution	Cognate	30	-	2
GSP2201	Use of English (DE students only)	Core	30	-	2
Total Number of Credits			285	225	23 (or 25)

*GSP2201 is to be registered only by the DE students making their total credit unit 25.

Second Semester

Course Code	Course Title	Status/Pre-requisite course(s)	Hour/Semester		Credit Unit
			LH	PH	
EGR2101	Engineer in Society I	Core	15	-	1
EGR2103	Experimental Methods & Analysis	Core	15	-	1
EGR2201	Fluid Mechanics	Core	30	-	2
EGR2202	Solid Mechanics I	Core	30	-	2
EGR2203	Engineering Drawing I	Core	15	45	2
EGR2302	Engineering Mathematics II	MTH1302	30	-	3
EGR2208	Principles of Electrical Eng II	PHY1220	45	-	2
EGR2305	Laboratory B	Core	-	135	3
EGR2313	Computer Programming	CSC1201	45	-	3
PEE2202	Introduction to Petroleum Eng II	Core	45	-	2
EGR2102	SWEP	Core	-	45	1
GSP2205	Logic and Philosophy	Cognate	30	-	2
GSP2202 ^a	Use of Library, Study Skills & CIT (DE students only)	Core	30 ^a	-	2 ^a
Total Number of Credits			255	225	24 (or 26)

^aGSP2202 is to be registered only by the DE students making their total credit unit 26.

1.3 Level 300 Courses

First Semester

Course Code	Course Title	Status/Pre-requisite course(s)	Hour/Semester		Credit Unit
			LH	PH	
EGR3302	Engineering Mathematics III	EGR2301	45	-	3
PEE3201	Industrial Studies I	Cognate	60	-	2
PEE3308	Petroleum Geology	Core	45	-	3
PEE3311	Strength of Materials	Core	45	-	3
PEE3305	Fluid Mechanics II	Core	45	-	3
PEE3407	Drilling Fluids Technology	Core	60	-	4
PEE3409	Engineering Analysis I	Core	45	-	4
EGR3101	Engineers in Society II	Core	15	-	1
Total Number of Credits			390	-	23

Second Semester

Course Code	Course Title	Status/Pre-requisite course(s)	Hour/Semester		Credit Unit
			LH	PH	
EGR3102	Technical Writing and Presentations	Core	15	-	1
PEE3302	DrillingTechnology I	Core	45	-	3
PEE3204	Industrial Studies II	Core	60	-	2
PEE3306	Petroleum Production Engineering I	Core	45	-	3
PEE3503	Reservoir Engineering I	Core	75	-	5
EPP3201	Entrepreneurship and Innovation	Core	30	-	2
PEE3310	Engineering Analysis II	Core	45	-	3
EGR3203	SIWES I	EGR2102	-	90	2
EGR3302	Computational Techniques	Core	30	-	3
EGR3311	Computer Applications	Core	45	-	3
Total Number of Credits			390	-	27

1.4 Level 400 Courses

First Semester

Course Code	Course Title	Status/Pre-requisite course(s)	Hour/Semester		Credit Unit
			LH	PH	
EGR4201	Engineering Statistics	Core	30	-	2
PEE4201	Applied Geophysics & Petrol. Exploration	Core	30	-	2
PEE4303	Drilling Technology II	PEE3302	45	-	3
PEE4305	Reservoir Engineering II	PEE3503	45	-	3
PEE4307	Petroleum Production Engineering II	PEE3306	45	-	3
EGR4101	Engineering in Society III (Law)	Cognate	15	-	1
PEE4309	Well Logging	Core	45	-	3
PEE4311	Laboratory Practical Course	Core	-	135	3
PEE4213	Industrial Studies III	PEE3201&3204	30	-	2
EPP4201	Venture Creation and Growth	Core	30	-	2
Total Number of Credits			315	135	24

Second Semester

Course Code	Course Title	Status/Pre-requisite course(s)	Hour/Semester		Credit Unit
			LH	PH	
EGR4401	Students Industrial Work Experience Scheme (SIWES II)	EGR3203	-	180	4
Total Number of Credits			-	180	4

1.5 Level 500 Courses

First Semester

Course Code	Course Title	Status/Pre-requisite course(s)	Hour/Semester		Credit Unit
			LH	PH	
PEE5301	Drilling Technology III	PEE4303	45	-	3
PEE5303	Reservoir Engineering III	PEE4305	45	-	3
PEE5305	Reservoir Modeling and Simulation	CSC1201	45	-	3
PEE5307	Petroleum Production Eng. III	PEE4307	45	-	3
PEE5313	Laboratory Practical course	Core	-	135	3
PEE5415	Heat and Mass Transfer	Core	60	-	4
PEE5317	Oil Pollution and Control	Cognate	60	-	3
CEE5201	Engineering Management	Core	45	-	2
Total Number of Credits			330	135	24

^a Earlier lumped up as one course but now split to two

Second Semester

Course Code	Course Title	Status/Pre-requisite course(s)	Hour/Semester		Credit Unit
			LH	PH	
PEE5202	Petrol. Product Transport & Storage	Cognate	30	-	2
PEE5606	Research Project	Core	-	-	6
PEE5208	Offshore Operations	Core	30	-	2
PEE5310	Natural Gas Processing	Cognate	45	-	3
PEE5212	Process Technology	Restricted Elect.	30	-	2
PEE5314	Petroleum Refining Technology	Core	45	-	3
PEE5316	Enhanced Oil Recovery	Restricted Elect.	30	-	2
PEE5318	Petroleum Eng. Rock Mechanics	Restricted Elect.	30	-	2
PEE5322	Multiple Phase Flow in Pipes	Elective	30	-	2
Total Number of Credits			270	-	24